

1.0 INDIAN INSTITUTE OF TECHNOLOGY (BHU) VARANASI

The Indian Institute of Technology (Banaras Hindu University) owes its existence to Mahamana Pandit Madan Mohan Malaviya Ji - the founder of the first residential university of modern India, the Banaras Hindu University, who could foresee the important role of technical education in strengthening independent India economically.

The three colleges of BHU, namely BENCO, MINMET and TECHNO, were merged to form the Institute of Technology (IT-BHU) in 1968 to provide an integrated educational base. The IT-BHU has been admitting students through the JEE conducted by the IITs since 1972, and has been consistently ranked amongst the top ten engineering institutions of the country inspite of its relatively meagre funding. IT-BHU became IIT (BHU) in June 2012 by an act of Parliament.

After the changeover to IIT, the Institute engaged itself in taking up the mammoth task of putting many of the procedures and practices similar to the IIT. In July 2014, the Institute has appointed five Deans to shoulder various academic and administrative responsibilities along with the Director. Ordinances governing the UG, PG and PhD programmes have been drafted and passed by the Senate, by suitably adapting the best practices of IIT Kanpur.

The Institute has had and continues to have outstanding faculty members and turned out luminary engineers and administrators who served the nation with great distinction. The current faculty strength of the Institute is 233 (as against a sanctioned strength of about 502) while the number of technical & non-technical staff is 541 and Research Associates is 08. At present, the Institute comprises 13 Departments and 3 interdisciplinary schools and a Humanities Section. Central facilities in the Institute include National Electron Microscopy Facility (NELMIF), Institute Main Workshop, Institute Library, Training and Placement Cell, and Industrial Consultancy & Testing Services.

The first and second convocation of the Institute was held on 10th July, 2013 and 9th November, 2013 in a serene & dignified ceremony and degrees and medals were given away to the graduands of 2010, 2011 & 2012, and 2013 respectively.

In line with the new traditions, the Institute has adopted the method of organizing meetings and workshops to formulate administrative and academic procedures by involving all stake-holders in policy making along with external inputs as well. Academic Ordinances Workshop, Teaching Learning Workshop, Moodle Workshop, Harmony Workshop and Brain-storming Workshop on Humanities are highlights of some of the recent efforts. Proactive efforts are being made to strengthen the Humanities and Social Sciences area by creating a department of Humanities at the Institute.

A UG Curriculum Review Committee has been constituted to formulate an entirely new curriculum structure for undergraduate programmes that is modeled on learner centric structure. The existing system of course credits, examination, evaluation and grading have already been replaced to keep in consonance with those practiced by other IITs. Approach paper has been drafted by the Committee and disseminated for wide discussions. The First Semester courses were conducted for this academic year on the basis of the new structure recommended by the UG-CRC. A portal has also been launched on the Intranet for the new Course structure recently.

A new cell named as “Teaching-Learning Cell” (T-L-C) was initiated by the Institute on 12 July 2013 to strengthen the Teaching environment of the institute by way of initiating several programs to enhance teaching-learning processes at IIT(BHU). It covers all aspects of teaching, pedagogy, laboratory projects, assessment covering the following areas but not limited to it.

An Academic Automation Coordination Committee which also includes a Tabulation Committee has been constituted this year to put academic procedures on a digital platform on the intranet. At

present, registration attendance records and grades have been deployed in this portal. We hope to declare all the results on portal this Semester. It is also planned to enlarge the scope of the Academic Portal to cover all other activities.

Academic Activities

The academic year 2013-14 has had a successful run. The number of students at the postgraduate and Ph.D. level has seen a significant increase. The enrollment in the Doctoral programme as well as the publication record of the faculty and students for the academic year has witnessed considerable improvement in the recent past. In the last year, faculty and students have published 406 research papers in journals and over 100 conferences/ workshops/ symposium proceedings (published), 15 books & 22 book chapters and have filled 8 patents. About 63 papers have been presented without publications in conferences/ workshops/ symposiums. About 70 invited talk/ discussions have been delivered by our faculty members.

Research & Development Activities

Sponsored research projects form the life-line of the R&D activities of the Institute. Highly qualified faculty and talented research scholars are active in frontier areas of research and their efforts are supported by Govt. research sponsoring agencies and many reputed industries such as TISCO, HINDALCO, ONGC, SAIL, BHEL, MECON, UPSEB, FCI, Coal India etc. The total financial supports for the ongoing projects around 44 in the Departments and Schools is nearly Rs. 12.87 crores including FIST/UGC-SAP funding/ steel technology centre.

It is noteworthy to mention that the Department of Metallurgical Engineering is participating department along with other departments in the University (IMS and Physics) in DST supported research project on Nano-science & Nano-technology. An Advanced Research Centre for Iron & Steel is granted by the Ministry of Steel, Govt. of India with about Rs. 6.7 crores funding. Department of Chemical Engineering and Technology participates in MRES, UGC and AICTE supported research project on hydrogen energy. A Scanning Electron Microscope facility is being established by DST, Govt. of India under its FIST Level II Scheme in Department of Chemical engineering and technology.

During the last year 2013-14, 24 sponsored research projects amounting 5.91 crores were sanctioned to our faculty. Extension of our expertise and laboratory facilities to the industries of this region is an important service activity of the Institute. All the major Departments of the Institute have been actively engaged in providing industrial consultancy and testing services to a large number of industries and entrepreneurs of the region and also to large industrial houses. During this year several consultancy and testing projects valued at over approximately Rs.5.96 crores were completed successfully.

The Departments and Schools of the Institute have also been active in organizing seminars and symposia, summer/winter schools and co-curricular and extra-curricular activities of the students, etc. A major event had been the organization of NMD-ATM 2013 of Indian Institutes of Metals in which about 800 out-station delegates took part. Our alumni have generously contributed to the organization of all such activities.

Alumni have also come forward to support scholarships for needy students and supporting projects that have social relevance. We record our gratefulness to them.

Infrastructure Development

During the year 2013-14, IIT (BHU) strengthened its relations with various National and International institutes and organizations through research projects and collaborations. The

Institute also signed six MoUs and four are in progress. During the year, the various institutes/universities/organizations have joined hands with IIT (BHU) Varanasi for joint research work in the diverse fields of science and technology.

The Institute strives to provide state-of-the-art equipment to its faculty, students and staffs to facilitate cutting edge research and development in the frontier areas of science, engineering and technology. Annual non-plan expenditure of the Institute is around Rs. 98.03 crores. In addition it received a plan grant of Rs.71.25 crores last year, out of which a Central Facility consisting of many sophisticated equipment for research with versatile utility is being created. The Departments/Schools and Units have been given moderate grants to revitalize the teaching laboratories and also sprouting grant to faculty.

The Institute maintains library system consists of a Main Library, and five departmental libraries, which collectively support teaching, research and extension programs of the institute. The library, besides having an excellent print collection of over 1,20,000 volumes of books, journals, theses, reports, standards, pamphlets, it also provides access to over 13,000 electronic journals and more than 30,000 of electronic books and databases in science, engineering and technology.

During the Year Four new Hostels that came in function as: (i) Guru Ravindra Nath Tagore Memorial apartment (ii) S. N. Bose Boys Hostel (iii) S. Ramanujam boys hostel and (iv) Gandhi Smriti Girls hostel extension were repaired and further extended for better facilities.

Awards and Honours

The Institute has played a significant role in pushing the frontiers of knowledge. Our faculty, students and staff have created a niche for the institute in the world of science and technology. This has been duly recognized in the form of various awards and honors to the faculty including fellowships of professional societies, editorships of international journals and best paper awards to the students. This year over 19 awards and honors were bestowed upon our faculty members.

Students' Activities

We aim to create future leaders of the profession in our students, and not just technically accomplished individuals. The Institute strongly believes that an abiding social and humane engagement is the hallmark of its student body. To translate such thinking into reality, the Institute nurtures social, cultural and sporting activities pursued by the students' gymkhana and other student groups. There are four councils in Student Gymkhana, namely, Science and Technology Council, Cultural Council, Sports Council and Film and Media Council. The Institute Gymkhana organizes and provides infrastructural facilities for a large number of activities through its cultural, sports & games and co-curricular activities wings. The Gymkhana also has a well equipped fitness centre. The artistic and creative talents of students are encouraged through various competitions like dramatics, debates, music, visual arts etc. and clubs like Radio, Audio, Photography, Automobile, Aero-Modeling, Cine and Computer Club.

IIT-Blue is the highest recognition that the Gymkhana bestows on its student in addition to other recognitions to the students for various gymkhana activities. Students are also involved in social work with underprivileged sections of society through Kashi Utkarsh.

The Institute's Science and Technology Team participated in "Techkriti-13" at IIT Bombay Jan 2014, Games and Sports Council Team participated in Udgosh at IIT Kanpur September 2013, and Cultural Team went to Bits Pillani, IIT Kanpur Antargni and Mood Indigo at IIT Mumbai. The Film and Media council team also participated in "Mood Indigo" at IIT Bombay.

Institute Sports festival Spardha was celebrated from 23 Jan to 27 Jan 2014. Colonel Rajyavardhan Singh Rathore Indian shooter, Silver Medalist in Men's Double Trap at the 2004

Summer Olympics in Athens inaugurated the Function. 35 engineering colleges participated in this meet. Vangipurapu Venkata Sai Laxman, commonly known as V.V.S. Laxman, Padmshri, is a former Indian cricketer was the chief guest in the closing function. IIT (BHU) Gymkhana is organizing its Annual Techno-Management festival, Technex'14 from 7th March to 9th March, 2014. Following eminent personalities delivered lectures to the students. Dr. Rabindra D. Mehta, Branch Chief, NASA Sports Aerodynamics Dr. Peter Jenni, ATLAS Expt. Head, LHC, CERN, France Experimental Physicist Kashi-Yatra was organized from 23-25th January 2014 with usual fanfare and it was followed by Kavi Sammelan in the evening. A record no of 25 outstation teams participated in the KY-14.

For the First Time IIT(BHU) participated in the Inter IIT meet at 49th IIT Guwahati during Dec 13-22, 2013 and stood seventh in the meet. Miss Ishu Bansal and Mr. Gaurav Tyagi stood Third in Discuss throw event (W) and Men categories. The Cricket, Basketball, Volleyball, TT teams reached up to quarterfinal stage. Our performance in Aquatics was poor requires further improvement. The Staff team also participated in the 23rd Staff meet from 23-28th December 2013 at IITG and gained experience Six students participated in the prestigious “Jagriti Yatra” organized by Jagriti Seva Foundation, Mumbai from 24 December 2013 - 8 January 2014.

The Institute has so far produced **26,004** B.Tech./B.Pharm., **321** Dual Degree (IDD), **87** Integrated Masters degree (IMD), **4,889** M.Tech./M.Pharm and **966** Ph.D. degree holders.

In Brief, this year about 15 books, about 22 book chapters have been published. About 19 awards & recognitions including 9 editorials and 24 projects have also been sanctioned as given below. Total of 9 MOUs have been signed, 19 awards were given to students, 10 significant level events held during the year and many new equipments have been procured in different departments and schools of IIT (BHU) during the year 2013-14.

In conclusion, IIT (BHU) is in transition. As the new emerges from the old, building on its strengths, but transforming it to meet challenges of the future, we look forward to a glorious future of IIT (BHU).

BOOKS PUBLISHED

1. S N Kaoul, D N Saini, B N Rai and A K Biswas, Environmental Science, APH Publishing Corporation, New Delhi, (2013).
2. S N Kaul, B N Rai, D R Saini & Y C Sharma, Environmental Science and Engineering, Daya Publishing House, New Delhi, (2013).
3. S N Kaul, D N Saini, B N Rai & Prateek Kaul Pollution Abatement and Control, Daya Publishing House (A Division of Astral International Private Limited), New Delhi, (2014).
4. S.N. Kaul, D.R. Saini, Y.C. Sharma, Prateek Kaul, Bio-Energy from Waste waters, ISBN 9789351301103 , (2014).
5. Rajeev Srivastava, S. K. Singh, K. K. Shukla (Editors). Research Developments in Computer Vision and Image Processing: Methodologies and Applications. IGI Global, USA, (2013).
6. Rajeev Srivastava, S. K. Singh, K. K. Shukla (Editors). Research Developments in Biometrics and Video Processing Techniques. IGI Global, USA, (2013).
7. Shashi Tiwari, Arun Kumar Singh, S. K. Balasubramanian, W. Takashima, Keiichi Kaneto, And Rajiv Prakash, "Poly-3-hexylthiophene (P3HT)/Graphene Nanocomposite Field-Effect-Transistor as Ammonia Detector", (2014).
8. B. R. Vishvakarma, R. U. Khan, and M. K. Meshram, Microwave Circuits Theory and Applications, AXIOE Books, India, (2013).
9. B. R. Vishvakarma, R. U. Khan, and M. K. Meshram, Introduction to Microwave Measurements, AXIOE Books, India, (2012).
10. S.K. Shukla, Atul Dwivedi and Ali Abdulruda Farhan, "Passive building designs & CFD Applications" Lambert Academic Publishing, Germany, (2013).
- 11 S.K. Shukla and Prachi Rai, "Desiccant Cooling System-Performance Studies and Applications", Lambert Academic Publishing, Germany, (2013).
12. V. P. Singh, "Mechanics of Solids"; ACME Press, (2014).
13. S.K.Shukla, "Advances in Energy Engineering", Excel Publications, New Delhi, (2013).
14. S K Sinha, "Engineering Mechanics", Pearson Education Pub., New Delhi, (2014).
15. Yadav, K.D., Reddy, K.R.C., Kumar, V. Brahmi Ghrita, Sneha kalpana in Mental Disorders. LAP Lambert Academic Publishing AG& Co. KG, Saarbrücken, Germany (2013).

BOOK CHAPTERS

1. Kiran Singh, R S Singh, B N Rai and S N Kaul, "Biofiltration", Pollution Abatement and Control, Daya Publishing House (A Division of Astral International Private Limited), New Delhi, (2014), pp 58-80.
2. Kiran Singh, R S Singh, B N Rai, S N Upadhyay and S N Kaul, "Biofiltration of Xylene Using Wood Charcoal as Biofiler Media",in Pollution Abatement and Control, Daya Publishing House (A Division of Astral International Private Limited), New Delhi, (2014), pp 81-94.
3. R.S. Singh, B.N. Rai, Kiran Singh and S.N. Upadhyaya, "Removal of Toluene Vapour from Air Stream Using a Biofilter packed with Polyurethane Foam", in Environmental Science and Engineering, Daya Publishing House, New Delhi, (2013), pp 439-456.
4. B.N. Rai, Kiran Singh and R.S. Singh, "A Review of Aqueous Phase Catalytic Oxidation for Environmental Application," in Environmental Science and Engineering, Daya Publishing House, New Delhi, (2013), pp 439-456.
5. Kumar A. & Prasad R. Diesel soot oxidation by spinel based MCo_2O_4 catalysts. in Advances in Chemical Engineering (Eds. Amit Keshav, P. K. Chaudhari and B. Mazumdar), Ch 10, Apple Academic Press, CRC Press, Taylor & Francis Group, (2013).
6. I. Sinha, Liquid Phase Synthesis of Ag-Cu Alloy/ Bimetallic Nanoparticles (Vol. 2) (ISBN: 1-62699-002-6) Studium Press LLC, P.O. Box 722 200, Houston, TX 77072-USA (2013).

7. I. Sinha, "Fundamentals, Synthesis and Characterization" (Vol.8, Set on NANOTECHNOLOGY (Series ISBN: 1-62699-000-X), (2013).
8. Bhaskar Singh, Yun Liu, Yogesh C. Sharma, Biotechnological Applications of Microalgae: Biodiesel and value-added products, CRC Press (Taylor & Francis Group), USA, (2013).
9. Sushmita Banerjee, Uma, Yogesh Chandra Sharma, An economically viable removal of methylene blue(MB) by adsorption on raw saw dust(RSD), Environmental Science (Editors: S.N. Kaul, D.R. Saini, B.N. Rai, A.K. Biswas), APH Pub Corp, New Delhi (2013).
10. Sushmita Banerjee, Uma and Yogesh Chandra Sharma, Adsorption studies of Orange G from aqueous solutions by unmodified saw dust (USD), in Environmental Education (Editors: S.N. Kaul, D.R. Saini, B.N. Rai, A.K. Biswas) APH Pub Corp, New Delhi (2013).
11. V. Kumar, R. Kumar, C. Ashish & N. Kumar, "Properties of Recycled Aggregate Concentrate with Micro-silica as Partial Cement Replacement" in Pollution Abatement and Control, Daya Publishing House (Division of Astral International Pvt.Ltd. (2013).
12. Shailendra Tiwari and Rajeev Srivastava, "Research and Developments in Medical Image Reconstruction Methods and its Applications,"in Research Developments in Computer Vision and Image Processing: Methodologies and Applications, R. Srivastava, S. K. Singh, K. K. Shukla (Indian Institute of Technology, (BHU), India) Eds. IGI Global, USA, Chapter No. 14, (2013), pp. 274-312.
13. Rajesh Kumar and Rajeev Srivastava, "Detection of Cancer from Microscopic Biopsy Images Using Image Processing Tools" in Research Developments in Computer Vision and Image Processing: Methodologies and Applications, R. Srivastava, S. K. Singh, K. K. Shukla (Indian Institute of Technology, (BHU), India) Eds. IGI Global, USA, Chapter No. 10, (Sept, 2013),pp. 175-194.
14. Alok Kumar Singh and Rajeev Srivastava, "Recognition of Humans and Their Activities for video Surveillance," in Research Developments in Computer Vision and Image Processing: Methodologies and Applications, R. Srivastava, S. K. Singh, K. K. Shukla (Indian Institute of Technology, (BHU), India) Eds. IGI Global, USA, Chapter No. 9, (July, 2013), pp. 183-198
15. Santwana Mukhopadhyay, Shweta Kothari and Roushan Kumar, "Dual phase-lag thermoelasticity", Encyclopedia of Thermal Stresses, R.B. Hetnarski (Ed.), Springer Science +Buisness Media, Dordrecht, (2014).
16. R. K. Gautam, Manvandra Kumar Singh, Anita Mohan, Sunil Mohan, "Recent Advances in Composite Materials", Bloomsbury Publishing India Pvt. Ltd., (2013).
17. Santosh Kumar, "Metal Extrusion" in Metal Forming: Technology and Process Modeling (Edited by U.S. Dixit, R.G. Narayanan), Published by Tata McGraw Hill Education, (2013).
18. S. K. Shukla, "Applications of Solar Distillation and Solar Drying Technologies with Phase Change Material Storage" in Modern Mechanical Engineering, Springer (2013).
19. Mishra B and Yadav SK, Novel approaches for brain targeted drug delivery, recent trends in novel drug delivery (Eds: Udupa N and Mutalik Srinivas). Chapter 14, Prism Books Pvt. Ltd., Bengaluru, India, (2014) pp 349-382.
20. B. N. Dwivedi, "Lecture Notes on Maxwell's Equations", LAMBERT Academic Publishing, (2013).
21. R. K. Gautam, Manvandra Kumar Singh, Anita Mohan and Sunil Mohan, Book Chapter on "Development of Copper Based Tungsten Carbide (WC) Nano -Composite and their Mechanical and Tribological Properties" in "Recent Advances in Composite Materials"(Ed. V.K.Srivastava), Bloomsbury Publishing India Pvt. Ltd., (2013), pp. 301-309.

22. Sanjeev K. Pandey, Chandana Halder, Dinesh K. Patel and Pralay Maiti, *Advances in Polymer Sciences*; (Eds: P.K. Dutta and Joydeep Dutta) Publisher: Springer (2013), pp 169–202.
23. B. N. Dwivedi, “Lecture Notes on Maxwell's Equations”, LAMBERT Academic Publishing, (2013).
24. R. K. Gautam, Manvandra Kumar Singh, Anita Mohan and Sunil Mohan, Book Chapter on "Development of Copper Based Tungsten Carbide (WC) Nano -Composite and their Mechanical and Tribological Properties" in “Recent Advances in Composite Materials”(Ed. V.K.Srivastava), Bloomsbury Publishing India Pvt. Ltd., (2013), pp. 301-309.
25. Sanjeev K. Pandey, Chandana Halder, Dinesh K. Patel and Pralay Maiti, *Advances in Polymer Sciences*; (Eds: P.K. Dutta and Joydeep Dutta) Publisher: Springer (2013), pp 169–202.

AWARDS/RECOGNITIONS

1. Pralay Maiti, Nira Misra, Govinda Kapusetti, “National award for technology innovation-2013 by Ministry of Chemicals & Petrochemicals, Govt. of India.”, 2013.
2. Vaibhav Chalishgaonkar and et al, “The paper entitled “Studies on in vitro bioactivity of SiC/Bioactive glass composites” presented at the 77th Annual Session of Indian Ceramic Society was selected 1st and awarded as the best paper award.”, Jamshedpur, 19-20 Dec., 2013.
3. Sinha A S K, IT BHU Global Alumni -2013 Award for Publications (Cash of Rs. 5000/- and Certificate).
4. M.A. Quraishi, “NIGIS Award for Excellence in Corrosion Science & Technology”, New Delhi, 2013.
5. M.A. Quraishi, “Best publication award under the category of star performance for publishing highest number of publications among the applicants by IIT (BHU) Global Association (USA)”, IIT (BHU) Varanasi, 2013.
6. M.A. Quraishi, “awarded Fellow Royal Society of Chemistry”, U.K., 2013-14.
7. Rajeev Srivastava, “2014 IIT BHU Publication Award” From IIT BHU Global Alumni Association, USA. Award Declared in March, 2014. Received at IIT BHU, Varanasi by Director, IIT-BHU on 21st April, 2014.
8. Rajiv Prakash, Awarded Fellowship Asia Pacific Academy of materials (Elected in 2013)
9. Rajiv Prakash, Best poster award in the International Conference in Asia of International Union of Materials Research Society (IUMRS-ICA 2013), held at IISc, Bangalore during December 16-20 2013..
10. S. Das, received 2013 IIT-BHU Publication Award under 1st Prize category for the faculty presented by IT-BHU Global Alumni Association.
11. S Das, received 2014 IIT-BHU Publication Award under Star Prize category for the faculty presented by IIT-BHU Global Alumni Association.
12. S. K. Shukla, GYTIA2013 Reviewer in Gandhian Young Technological Innovation Award 2013, IIM Ahmedabad.
13. S. K. Shukla *VidyaUdyamSetu Award 2014*, National Award for Building Bridges in Academia & Industry by PGK Mandal's H.V.Desai College Pune, University of Pune and Rotary Club of Pune.
14. B K Shrivastva, “Dr Rajendra Prasad Memorial Prize”, 2013.
15. Rajesh Rai, “Dr Rajendra Prasad Memorial Prize”, 2013.
16. B. Mishra, 2014 IIT (BHU) Publication Award (1st Prize under faculty category), IIT-BHU, 2014.
17. Sanjay Tiwari and Brahmeshwar Mishra, “Gandhian Young Technological Innovation (GYTI) awards – 2014, under Technology Edge category for innovative research work on “Inhalable multiparticulate carrier systems for sustained and targeted delivery of isoniazid”, IIM-Ahmedabad, 2014.

18. Pramila Chaubey and Brahmeshwar Mishra, “Gandhian Young Technological Innovation (GYTI) awards – 2014, under Technology Edge category for innovative research work on “Macrophage-specific targeting of mannose functionalized biodegradable polymeric nanoparticles of some anti-leishmanial drugs – development. Characterization and efficiency evaluation”, IIM-Ahmedabad, 2014.
19. Sanjay Singh, “IIT (BHU) publication award by IIT (BHU) global alumni association”, Varanasi, 2014.

EDITORSHIPS FOR FACULTY

1. D. Pandey, Co-editor, Journal of Applied Crystallography (2014 onwards)
2. D. Pandey, Bulletin of Materials Science (Member Editorial Advisory Board 2013-2015)
3. A.S.K. Sinha (CHE)- Member, Editorial Board, Frontier in Energy, Springer.
4. Santosh Kumar (MEC), Member, Editorial Board, Scientific Journal (Journal of Modeling and Simulation in Design and Manufacturing, ISSN -0976-7827), RRL Bhopal.
5. R.K. Mandal (MET), Member, Editorial Board, CMC-Transtech.
6. N.K. Mukhopadhyay (MET), Member, International Advisory Board, Int. Conf. Quasicrystals, (ICQ12) Poland.
7. N.K. Mukhopadhyay (MET), Key-Reader (Editorial Board) Metallurgical and Materials Transactions A (USA), Editor in Journal of Institution of Engineers- Metallurgy and Materials Series D (Springer)
8. Vikas Jindal (MET), Managing Editor, Banaras Metallurgist.
9. Dr Santwana Mukhopadhyay (MATH), Editor in (i) Mathematics and Mechanics of Solids (From August 2012-till date), (ii) International Journal of Thermoelasticity (From August 2012-till date), (iii) Computational Methods in Science and Technology (CMST)- from 2012 till date.

MAJOR PROJECTS SANCTIONED FOR THE YEAR 2013-14

1. Devendra Kumar, , Om Parkash, & M.M. Singh, “Exploring the Effect of Processing Parameters on the Corrosion Behavior of Iron - Alumina/Zirconia Metal Matrix Nanocomposites (MMNC)”, CSIR, Rs. 13,64,000.00.
2. Hiralal Pramanik, “Development of Air Breathing Microfluidic Fuel Cell for the Direct Use of Ethanol as fuel for Power Generation”, SERB, Rs. 24,69,000.00.
3. S. N. Upadhyay (Emeritus Professor), “DAE-Raja Ramanna Fellow”, DAE, Rs. 6,00,588.00.
4. Rajeev Kumar Singh, , R. K. Mishra, & D. Singh, , “A Versatile Bidirectional Optimal Battery Charger”, SERB, Rs. 20,54,400.00.
5. Santosh Kumar Singh, “Design, Development and Performance Analysis of Silicon Carbide Converter for Aerospace Application”, SERB, Rs. 23,92,000.00.
6. P. K. Jain, & M. Thottappan, “Analysis, Design and Simulation of an S-Band MILO, DRDO, Rs. 45,85,000.00.
7. Subir Das, “Fractional Calculus approached Solutions for Two Dimensional Ground Water Contamination in Unsaturated Porous Media” BRNS, BARC, Mumbai, Rs. 22,95,750.00.
8. Sandeep Kumar, , U. S. Rao, & Amit Tyagi, “Study of Tool Wear in Diamond Turn Machining & Micro Machining Processes”, BRNS, BARC, Mumbai, Rs. 24,05,800.00.
9. Santosh Kumar, “Development of Sheet Hydro-forming Process for missile Components”, DRDL, Rs. 9,80,000.00.
10. Santosh Kumar, “Technology and Fabrication of Tabletop CNC Machine for Micro-Tubular Hydroforming Setup”, BRNS, BARC, Mumbai, Rs. 49,32,000.00.

11. Mohd. Zaheer Khan Yusufzai, "Assessment of residual stress upon friction stir welding of steel", SERB, Rs. 45,00,000.00.
12. Bratindranath Mukherjee, DST-INSPIRE Fellow, DST, Rs.19,00,000.00.
13. Prof.Vakil Singh, & G. S. Mahobia, "Effect of Mean Stress on High Cycle Fatigue (HCF) Properties of GTM-SU-718 Alloy", DRDO, Rs. 9,06,000.00
14. S.K. Singh, "DST/INSPIRE Faculty Award (IFA-12-PH-21)", DST, Rs. 19,00,000.00.
15. Sunil Kumar Mishra, "IFA-12 Ph-22 DST/INSPIRE FACULTY Award/2012 INSPIRE FACULTY AWARD", DST, Rs. 19,00,000.00.
16. Prabhakar Singh, "Development of new Electrolyte materials with optimized electrical/ionic conductivity for Solid Oxide Fuel Cells", NRB, DRDO, Rs. 24,72,360.00.
17. Sandip Chatterjee, "A Systematic Study on the Correlation Between Structural, Magnetic and Electrical Properties of Multiferroic $Cd_{1-x}AxV_2O_4$ and $Bi(Mn_{1-x}Ax)_3$ [A=Fe, Co, Ni]", BRNS-DAE, Rs. 16,30,250.00.
18. Amit Kumar, "Award of Ramanujan Fellowship", SERB, Rs. 73,00,000.00.
19. Amit Kumar, "DST-INSPIRE Faculty Award "Andreev Transport in Low Dimensional (1D/2D) Systems", DST, Rs. 19,00,000.00.
20. Pralay Maiti, "Synthesis and Characterization of Novel Segmented Polyurethane-Graphene Nanocomposites for Biomedical Applications", CSIR, Rs.12,01,667.00.
21. N. S. Rajput, "R&D and Technology Extension Laboratory for Networked Communication & Computation", Institute Project (Seed Money), 15,00,000.00.
22. Sanjeev Kumar Mahto, "Development of microfluidic tool for neuromuscular synaptogenesis and nanotoxicological studies", DST, Rs. 35,00,000.00.
23. Pradeep Srivastava," Development and evaluation of an innovative poly herbal Bi layer would dressing material", DRDO, Rs. 32,03,200.00.
24. Prabhaker Singh," Dynamic of Ions in Tellurite Glasses of Variable Composition", CSIR, Rs. 9,00,000.00

MoUS WITH VARIOUS ORGANIZATIONS

- Power Grid Corporation of India Ltd.
- Electrical Department, Indian Railways
- Deakin University.
- Emerging Technologies Pvt. Ltd., Punjab.
- American Society for Quality India Pvt.Ltd. (ASQ India).
- WWF-India
- Cybermotion Technologies Pvt. Ltd., Hyderabad, India.
- CSIR-IIP
- between CSIR-NEERI

STUDENTS' RECOGNITION

Institute Blue, highest award was awarded to two students: Mr.Rahul Ajay Deshpande, B.Tech. Pt. IV Mechanical Engg. for IIT-Blue for Technical Activities and Mr.Ashok Ratan, B.Tech Pt. IV Electrical Engg. for IIT-Blue for Volleyball.

For Film and Media Council Awards given four IIT Color students 2013-14

1. Mr. L Lakshman Teja, IDD Pt. IV Ceramic Engg. for Photography
2. Ms. Sheema Usmani, IMD Pt. IV Mathematical Sciences for Cinematic Activities
3. Mr. Anuruddh Mishra, B.Tech Pt. III Electronics Engg. for Photography
4. Mr. Niresh Jain, B.Tech Pt. III Ceramic Engg. for Creative Designing

For Science and Technology Council Awards given three IIT Color students 2013-14

1. Mr. Praveen Kumar Sharma, IDD Pt. IV Bio.Chemical for Robotics
2. Mr. Sritam Rout, B.Tech Pt. IV Metallurgical Engg. for Technical Model

3. Mr. Himadri Roy, IDD Pt. V Electrical Engg. for Technical Activities

Games and Sports Council Awards given twelve IIT Color students 2013-14

1. Mr. Rahul Kumar Meena, B.Tech Pt. IV Mechanical Engg. for Athletics
2. Mr. Rajat Jain, B.Tech Pt. IV Chemical Engg. for Football
3. Mr. Abhishek J. Jain, B.Tech Pt. IV Chemical Engg. for Cricket
4. Mr. Pranay Khandelwal, B.Tech Pt. III Ceramic Engg. for Volleyball
5. Mr. Rahul Kumar, B.Tech Pt. IV Metallurgical Engg. for Tae-Kwon-Do
6. Mr. Shivam Gupta, B.Tech Pt. III Metallurgical Engg. for Basketball
7. Mr. Shubham Singh, B.Tech Pt. IV Civil Engg. for Badminton
8. Mr. Omprakash Jat, B.Tech Pt. IV Electrical Engg. for Volleyball
9. Mr. Gaurav Tyagi, B.Tech Pt. III Electrical Engg. for Athletics
10. Mr. Praveen Kumar, B.Tech Pt. III Electronics Engg. for Chess
11. Mr. Mayank Thakur, B.Tech Pt. III Mining Engg. for Table Tennis
12. Mr. Abhishek Mani, IMD Pt. III Mathematical Sciences for Cricket IIT(BHU) given twelve Significant achievements (2013-14)

Significant Events (2013-14)

1. SPIC MACAY, IIT (BHU) Chapter was revived with the initiative taken by our Director organized under VIRASAT (Musical Concert) Kabir Vani, Padma Shree Swami G.C.D. Bharti.
2. ICCR and IIT(BHU) organized a musical Event of Artist from Bangla Desh in 3.10.2013
3. Bhartiya Lok Kala Mandl, Udaipur, An Internationally renowned Puppet Theatre on 30 and 31st Jan. 2014 in Sengupta Hall.
4. In September a 10 day "Sukshma Yoga Camp" was conducted by Swami Kalki Ji Maharaj.
5. For the First time a Natinal Service Unit was formed in IIT(BHU) with mr. Rotik Kumar as student coordination and J.V. Triky as Teacher In charge.
6. Gymkhana conducted two Physical Fitness camps for first year students.
7. Under the auspices of Gymkhana M.tech students Distributed Blankets to poor in the Chili Winter.
8. Six students went on expedition with Indian army in Kashmir in the summer.
9. Partial Lighting facilities were created for Kho- Kho, Hockey, Football, Badminton and Hand ball.
10. Marathon race was organized on 29th August to mark the birth day of major Dhyan Chand.

LIST OF SOME MAJOR EQUIPMENT PROCURED DURING 2013-14

- X- Ray Photoelectron Spectrophotometer
- X-Ray Diffractometer
- Thermal analyzer (DTA/ TG) and High Performance Liquid Chromatograph.
- Blains Permeability apperatus
- Universal Testing Machine (100 kN Digital)
- Direct Shear Test Apparatus with Microprocessor loading Unit electronic
- Acoustic Doppler Velocity Meter-(01 Set)
- Fully Automatic Double Beam Atomic Absorption Spectrophotometer
- Computerised Multi-stations Hydrostatic Pressure Testing Machine
- Multi Hightemperature Calorimeter 96EVO
- DSC 404F3 Pegasus Apparatus,
- Portable Surface Roughness Tester
- Universal shear Testing Machine
- Rotop sieve shaker

- Binocular microscope
- Distilled water plant and Compound Microscopes
- Environmental X control Orbital Shaker
- UV-Visible Spectrophotometer
- PCB Prototype LPKF Protomat S103
- SPM (NTEGRA Prima)
- SQUID Magnetometer Evercool System (Magnetic Property Measurement System)
- Tribometer (Friction and Water Testing)

2. ABOUT ORGANIZATION

Members of IIT Council

1. Hon'ble Dr. M. M. Pallam Raju
Government of India
Minister of Human Resource Development
New Delhi - 110 001
2. Dr. Anil Kakodkar
Chairman, Board of Governors, IIT Bombay
& Chairman, Atomic Energy Commission
& Secretary, Department of Atomic Energy
Anushakti Bhawan, CSM Marg,
Mumbai – 400 001
3. Dr. Vijay P. Bhatkar,
Chairman, BOG, IIT, Delhi
34A, Vrindavan Society
Panchvati, Pashan Road
Pune - 411 008 (M.H.)
4. Dr. R. P. Singh
Chairman, Board of Governors
Indian Institute of Technology, Guwahati
Guwahati – 781 039
5. Prof. M. Anandkrishnan
Chairman, Board of Governors, IIT Kanpur
8/15, Fifth Main Road,
Madan Apartments
Kasturibai Nagar, Adyar
Chennai – 600 020, Tamil Nadu
6. Prof. M. M. Sharma,
Chairman, Board of Governors, IIT Madras
3, Jaswant Baug (Runwal Park),
Behind Akbarallys, Chembur Naka
Mumbai - 400 071 (M.H.)
7. Shri Shiv Nadar,
Chairman, Board of Governors, IIT, Kharagpur
& Chairman, HCL Technologies Ltd.,
A-10/11, Sector-3,
Noida - 201 301 (U.P.)
8. Shri Analjit Singh
Chairman, Board of Governors, IIT Roorkee
& Chairman, Max India Ltd.
Max House, Okhla,
1, Dr. Jha Marg, Okhla (Phase-III),
New Delhi -110 020
9. Dr. P. Rama Rao
Chairman, Board of Governors, IIT Bhubaneswar
Bhubaneswar (Orissa)
10. Dr. R. A. Mashelkar, FRS

- Chairman, Board of Governors, IIT Gandhinagar
CSIR Bhatnagar Fellow, National Chemical Laboratory
Dr. Homi Bhabha Road
Pune - 411 008 (M.H.)
11. Shri Ajai Choudhary
Chairman, Board of Governors, IIT Hyderabad
Founder-HCL & Chairman, HCL Infosystems Ltd.,
E-4, 5, 6, Sector-XI, Noida-201 301 (U.P.)
 12. Prof. Goverhan Mehta
Chairman, Board of Governors,
Indian Institute of Technology, Jodhpur
Jodhpur
 13. Shri Ajay Parimal
Chairman, Board of Governors
Indian Institute of Technology, Indore
Indore (M.P.)
 14. Shri M. Natarajan
Chairman, Board of Governors
Indian Institute of Technology, Mandi
Mandi (H.P.)
 15. Dr. T. Ramasami
Chairman, Board of Governors, IIT Ropar
& Secretary, Department of Science & Technology
Technology Bhawan, New Mehrauli Road
New Delhi – 110 016
 16. Dr. Lalji Singh
Chairman, Board of Governors
Indian Institute of Technology (BHU)
Varanasi – 221 005 (U.P.)
 17. Dr. Devang V Khakhar
Director, Indian Institute of Technology, Bombay
Powai, Mumbai – 400 076
 18. Prof. R. K. Shevgaonkar,
Director, Indian Institute of Technology, Delhi
Hauz Khas, New Delhi – 110 016
 19. Prof. Indranil Manna
Director, Indian Institute of Technology, Kanpur
Kanpur- 208016
 20. Prof. Sankar Kumar Som
Director (Officiating)
Indian Institute of Technology, Kharagpur
Kharagpur – 721 302
 21. Prof. Bhaskar Ramamurthi,
Director, Indian Institute of Technology, Madras
Chennai – 600 036
 22. Prof. Gautam Barua
Director, Indian Institute of Technology, Guwahati
Guwahati – 781 039

23. Prof. Pradipta Banerji,
Director, Indian Institute of Technology, Roorkee
Roorkee – 247 667 (Uttarakhand)
24. Prof. Prem Kumar Kalra
Director, IIT Jodhpur
IIT Rajasthan Camp Office
Deptt. of CSE, MBM Engineering College
Jodhpur – 342 011 (Rajasthan)
25. Prof. Sudhir K. Jain
Director, IIT Gandhinagar
Vishwakarma Govt. Engg. College (VGEC) Campus
Chandkheda, Visat-Gandhinagar Highway
Ahmedabad – 382 424
26. Prof. Anil K. Bhowmick
Director, IIT Patna
Govt. Polytechnic, Pataliputra Colony
Patna – 800 013
27. Prof. U. B. Desai
Director, IIT Hyderabad
Ordnance Factory Estate
Yeddumailaram, -502 205 (Andhra Pradesh)
28. Prof. M. K. Surappa
Director, IIT Ropar
Nangal Road, Rupnagar
Punjab – 140 001
29. Prof. Madhusudan Chakraborty
Director, IIT Bhubaneswar
Samantpuri (Rear side of Hotel Swosti Plaza)
Jaydev Vihar, Bhubaneswar – 751 013 (Odisha)
30. Prof. Timothy Gonsalves
Director, IIT Mandi
PWD Rest House, 2nd Floor
Near Bust Stand, Mandi -175 001 (H.P.)
31. Prof. Pradeep Mathur
Director, IIT Indore
Institute of Engineering & Technology
DAVV Campus, Khandwa Road
Indore – 452 017
32. Prof. Rajeev Sangal
Director, IIT (BHU)
Banaras Hindu University
Varanasi - 221 005 (U.P.)
33. Prof. Ved Prakash
Chairman (Actg.)
University Grant Commission
Bahadurshah Zafar Marg
New Delhi -110 002
34. Samir K. Brahmachari
Director General (DG),

Council of Scientific and Industrial Research (CSIR),
Anusandhan Bhawan, 2 Rafi Marg, New Delhi-110001

35. Padmanabhan Balaram
Indian Institute of Sciences,
Bangalore 560 012, India
36. Dr. B.B. Ahuja
Deputy Director
College of Engineering, Pune
Shivajinagar, Pune 41005.
37. Shri Deepender Singh Hooda
Hon'ble Member of Parliament (Lok Sabha)
9, Pandit Pant Marg,
New Delhi - 110 011
38. Shri Janardhana Swamy
Government of India
Hon'ble Member of Parliament (Lok Sabha)
137, South Avenue,
New Delhi - 110 011
39. Smt. Vasanthi Stanley,
Hon'ble Member of Parliament (Rajya Sabha)
106, South Avenue,
New Delhi -110 011
40. Smt. Amita Sharma
Addl. Secretary (Technical Education), MHRD
41. Shri R.P. Agrawal
Secretary Department of Higher Education, MHRD
42. Ms. Sushma Nath
Secretary Department of Higher Education, MHRD

3.0 Members of the Board of Governors

(Circulated vide Notification No. IIT(BHU)/60/L, Dated : August 1, 2013)

1. Dr. Lalji Singh, Vice-Chancellor, BHU, ex-officio - Chairman
2. Prof. Rajeev Sangal, Director, IIT(BHU), ex-officio - Member
3. Prof. Narendra Ahuja - Member
Room No. 3299, Electronic Niketan (ITRA, Media Lab Asia),
6-CGO Complex, New Delhi-110003
(IIT Council's Nominee; from 9.7.2013 to 8.7.2014)
4. Shri Ganesh Bagaria - Member
Manviya Shiksha Sanskar Sansthan,
Opp. Vanakhandeshwar Mandi, Mandhana, Kanpur – 209217
(IIT Council's Nominee; from 5.7.2013 to 4.7.2014)

- | | |
|--|-----------|
| 5. Dr. P. M. Bhargava -
Member, Executive Council, BHU ex-officio
Padam Bhushan, Furquam Cottage, 12-13-100, Lane 1,
Street No. 3Tarnaka Hyderabad – 500017
(Nominee of Executive Council, BHU; from 10.9.2012 to 9.9.2015) | Member |
| 6. Dr. T. V. Ramakrishnan -
Member, Executive Council, BHU ex-officio
Fellow of Royal Society,
London (FRS), Distinguished Associate,
Centre of Condensed Matter Theory,
Department of Physics, Indian Institute of Science,
Bangalore – 560012
(Nominee of Executive Council, BHU; from 10.9.2012 to 9.9.2015) | Member |
| 7. Prof. K. K. Srivastava -
Department of Chemical Engineering & Technology, IIT(BHU)
(Senate Nominee; upto 31.12.2014) | Member |
| 8. Prof. Om Prakash -
Department of Ceramic Engineering, IIT(BHU)
(Senate Nominee; upto 31.12.2014) | Member |
| 9. The Registrar, IIT(BHU) - | Secretary |

4.0 Institute Advisory Committee

(Circulated vide Notification No.IIT(BHU)/IIT/ACD/2013-14/38/L Dated : February 18, 2014)

- | | |
|--|----------|
| 1. Prof. Rajeev Sangal, Director, IIT(BHU) - | Chairman |
| 2. Prof. Surendra Kumar, Deen, Academic Affairs, IIT(BHU) - | Member |
| 3. Prof. S. K. Sharma, Professor In-charge, Student Affairs &
Chief Counselor, Gymkhana, IIT(BHU) - | Member |
| 4. Prof. B. N. Dwivedi, Professor In-charge, Faculty &
Alumni Affairs, IIT(BHU) - | Member |
| 5. Prof. A. K. Kapoor, Professor In-charge, RP&G, IIT(BHU) - | Member |
| 6. Prof. Rajiv Prakash, Professor In-charge, R&D, IIT(BHU) - | Member |
| 7. Prof. K. K. Srivastava, Senate Nominee to Board of Governor,
IIT(BHU) - | Member |
| 8. Prof. Om Prakash, Senate Nominee to Board of Governor, IIT(BHU) - | Member |
| 9. Prof. A. K. Ray, Coordinator, School of Biomedical Engineering &
Chairman, JEE, IIT(BHU) - | Member |
| 10. Prof. A. K. Agarwal, Head, Deptt. of Mechanical Engg. &
Professor In-charge, TPC, IIT(BHU) - | Member |
| 11. Prof. G.V.S. Sastry, Head, Deptt. of Metallurgical Engg., IIT(BHU) - | Member |
| 12. Prof. M. A. Quraishi, Head, Deptt. of Chemistry, IIT(BHU) - | Member |
| 13. Prof. B. Mishra, Head, Deptt. of Pharmaceutics, IIT(BHU) - | Member |
| 14. Prof. Sunil Mohan, Chairman, Council of Wardens,
IIT Hostel, IIT(BHU) - | Member |
| 15. Prof. S. P. Singh, Head, Deptt. of Electrical Engg., IIT(BHU) - | Member |

16. Prof. Aarif Jamal, Head, Deptt. of Mining, IIT(BHU) -	Member
17. Prof. O. P. Singh Head, Deptt. of Mathematical Science, IIT(BHU) -	Member
18. Prof. R.M. Banik, Coordinator, School of Biochemical Engg., IIT(BHU) -	Member
19. Prof. Ram Pyare, Head, Deptt. of Ceramic Engg., IIT(BHU) -	Member
20. Prof. P. Maiti, Coordinator, School of Materials Science & Tech., IIT(BHU) -	Member
21. Prof. A. S. K. Sinha, Head, Deptt. of Chemical Engg. & Tech., IIT(BHU) -	Member
22. Prof. P. K. Jain, Head, Deptt. of Electronics Engg., IIT(BHU) -	Member
23. Prof. A. K. Jha, Chairman, IIT(BHU) Main Workshop, Deptt.of Mechanical Engg. IIT(BHU) -	Member
24. Prof. B. N. Sarma, Professor In-charge, Senate Library Committee, IIT(BHU) -	Member
25. Prof. Devendra Mohan, Head, Deptt. of Civil Engg., IIT(BHU) -	Member
26. Dr. Dhanesh Tiwary, In-charge, UGD/IDD/IMD Part – 1, IIT(BHU) -	Member
27. Dr. D Giri, Head, Deptt. of Physics, IIT(BHU) -	Member
28. Prof. S. Jit, Chairman, SUGC, IIT(BHU) -	By Invitation
29. Prof. A. K. Mukharjee, Chairman, SPGC, IIT(BHU) -	By Invitation
30. Dr. N. S. Rajput, Deptt. of Electronics Engg., IIT(BHU) -	By Invitation
31. Mr. J. Roy Choudhari, Computer Centre, BHU -	By Invitation
32. Dr. S. P. Mathur, Registrar, IIT(BHU) -	Member & Convener

5.0 Members Finance Committee

(Circulated vide Notification No. IIT(BHU)/898/L, Dated : May29/30, 2013)

1. Dr. Lalji singh, Vice-Chancellor, BHU & Chairman, BOG, IIT(BHU) -	Chairman
2. Prof. Rajeev Sangal, Director IIT(BHU) -	Member
3. Additional Secretary to the Govt. of India, Technical Education, MHRD (Department of Higher Education), New Delhi -	Member
4. Joint Secretary & Financial Adviser to the Gov. of India, Integrated Finance Division, Ministry of MHRD (Department of Higher Education), New Delhi -	Member
5. Prof. T. V. Ramakrishnan, Distinguished Associate (Center for Condensed Matter Theory, Department of Physics, IISc, Bangalore) -	Member
6. Prof. Om Parkash, Deptt. of Ceramic Engg., IIT(BHU) -	Member
7. The Registrar, IIT(BHU) -	Secretary

6.0 Members of Building & Works Committee

1. Prof. Dhananjai Pandey Director, IIT (BHU), Varanasi - Chairman
2. Prof. A. K. Jain Head, Department of Civil Engg., IIT Delhi, New Delhi- 110016 – Member
3. Prof. Pradeep Bhargawa Department of Civil Engg. IIT Roorkee, Roorkee-247667 - Member
4. Prof. Manoj Mathur, Head Industrial Design SPA and Architect (Nominee of Director, School of Planning & Architecture) 4 – Block – B, Indraprastha Estate, New Delhi – 110002. - Member
5. Sri N. Nanjappa (Ex-Senior Superintending Engineer, CCMB, Hyderabad) Flat No. 202, “Grand Residency”, No. 4-7-102/18 Lane No. 2, Sai Enclave, Habsiguda, Hyderabad – 500007. - Member
6. Prof. R. Mahanty, Department of Electrical Engg., IIT (BHU), Varanasi - Member
7. Dr. S. P. Mathur, Offtg. Registrar, IIT (BHU), Varanasi -Member Secretary

7.0 SENATE COMPOSITION DEPARTMENTWISE & OTHER DETAILED

Members of Senate

1. Dr. R. K. Dube
Former Professor
Plot No. 15, Lane No. 2,
Ravindrapuri Extension, Durgakund,
Varanasi – 221005.
2. Dr. Harsih Karnik
Professor
Deptt.of Computer Science & Engg.,
IIT Kanpur.
3. Dr. P. K. Mukhopadhyay
Former Professor
Deptt.of Philosophy,
Jadavapur.
4. Prof. M. S. Srinivasan
Professor Emeritus
Deptt.of Geology, BHU.
5. Prof. Anand Kumar,
Deptt.of General Surgery,
IMS, BHU.
6. Prof. Kamal Sheel
Deptt.of Foreign Languages,
Faculty of Art, BHU.
7. Dr. Subir Das
Deptt.of Mathematical Science,
IIT(BHU).
8. Dr. A. Senthil Raja
Deptt.of Pharmaceutics,
IIT(BHU).
9. Dr. S. S. Mondal
Deptt.of Mechanical Engg.,
IIT(BHU).
10. Dr. Chandan Upadhyay
SMST, IIT(BHU).
11. Dr. Anurag Ohri
Deptt.of Civil Engg.,
IIT(BHU).
12. Dr. Indrajit Sinha
Deptt.of Chemistry
IIT(BHU).
13. Dr. P. R. Maiti
Deptt.of Civil Engg.,
IIT(BHU).

Senate Members from various Departments/Schools

Department of Ceramic Engineering

1. Prof. Devendra Kumar
2. Prof. Om Parkash
3. Prof. S.P. Singh
4. Prof. Ram Pyare

Department of Chemical Engineering

1. Prof. S. Kumar
2. Prof. K.K. Srivastava
3. Prof. A.K. Verma
4. Prof. A.S.K. Sinha
5. Prof. Ram Prasad
6. Prof. B.N. Rai
7. Prof. Pradeep Kumar Mishra
8. Prof. Pradeep Ahuja

Department of Civil Engineering

1. Prof. Veerendra Kumar
2. Prof. Goutam Banerjee (Lien or EOL for two years w.e.f. 19.08.2013)
3. Prof. Devendra Mohan
4. Prof. Prabhat Kumar Singh
5. Prof. Prabhat Kumar Singh Dixit

Department of Computer Science & Engineering

1. Prof. A.K. Agrawal
2. Prof. A.K. Tripathi
3. Prof. K.K. Shukla
4. Prof. R.B. Mishra

Department of Electrical Engineering

1. Prof. S.C. Gupta
2. Prof. S.N. Mahendra
3. Prof. Shiva Pujan Singh
4. Prof. S.K. Nagar
5. Prof. Arun Kumar Kapoor
6. Prof. D. N. Vishwakarma
7. Prof. R.K. Pandey

8. Prof. Rakesh Kumar Srivastava
9. Prof. Rakesh Kumar Mishra
10. Prof. Ranjit Mohanty
11. Prof. Devender Singh
12. Prof. R. S. Gorayan

Department of Electronics Engineering

1. Prof. S.K. Balasubramaniam
2. Prof. S.P. Singh
3. Prof. P.K. Jain
4. Prof. R.R. Das
5. Prof. V.N. Mishra
6. Prof. Satyabrat Jit

Department of Mechanical Engineering

1. Prof. S.K. Sharma
2. Prof. J.P. Dwivedi
3. Prof. Virendra Pratap Singh
4. Prof. A.K. Agrawal
5. Prof. A.K. Jha
6. Prof. Mithileshwar Prasad
7. Prof. V.K. Srivastava
8. Prof. Santosh Kumar
9. Prof. S.P. Tewari
10. Prof. K.S. Tripathi
11. Prof. A.P. Harsha
12. Prof. Sanjay Kumar Sinha
13. Prof. Sandeep Kumar

Department of Metallurgical Engineering

1. Prof. S. N. Ojha
2. Prof. G. V. S. Sastry
3. Prof. R. K. Mandal
4. Prof. N. K. Mukhopadhyay
5. Prof. Sunil Mohan
6. Prof. (Mrs.) N.C. Shanti Srinivas
7. Prof. B. Nageshwar Sarma

Department of Mining Engineering

1. Prof. B. K. Shrivastava
2. Prof. Netai Chandra Karmakar
3. Prof. Aarif Jamal
4. Prof. Piyush Rai
5. Prof. Sanjay Kumar Sharma

Department of Pharmaceutics

1. Prof. R.S. Srivastava
2. Prof. B. Mishra
3. Prof. S.K.Singh
4. Prof. Sanjay Singh
5. Prof. S.K. Srivastava

Department of Chemistry

1. Prof. M. M. Singh
2. Prof. (Mrs.) R. B. Rastogi
3. Prof. Prem Chandra Pandey
4. Prof. M.A.Quraishi
5. Prof. A.K. Mukherjee
6. Prof. (Mrs.) Ranjana Ghosh
7. Prof. Syed Hadi Hasan
8. Prof. Vandana Srivastava
9. Prof. Yogesh Chandra Sharma
10. Dr. Dhanesh Tewary

Department of Mathematical Sciences

1. Prof. K. N. Rai
2. Prof. O. P. Singh
3. Prof. Tanmoy Som
4. Prof. (Mrs.) Rekha Srivastava
5. Prof. Lal Pratap Singh
6. Prof. Sanjay Kr. Pandey

English Writing Section

1. Prof. Prasant Kumar Panda

Department of Physics

1. Prof. B. N. Dwivedi
2. Prof. Onkar Nath Singh

3. Dr. D. Giri

School of Bio-Chemical Engineering

1. Prof. Subir Kundu
2. Prof. S. K. Srivastava
3. Prof. (Mrs.) Mira Debnath (Das)
4. Prof. R.M. Banik

School of Bio-Medical Engineering

1. Prof. A. K. Ray
2. Prof. (Mrs.) Ranjana Patnaik
3. Prof.(Miss) Nira Misra

School of Material Science & Technology

1. Prof. Dhananjai Pandey
2. Prof. Rajiv Prakash
3. Prof. Pralay Maiti

8.0 Members of Teaching Learning Cell

1.	Prof. Santosh Kumar, Mechanical Engg.	....	Chairman & Coordinator of Cell
2.	Prof. R. K. Mandal, Metallurgical Engg.	....	Member
3.	Prof. R. K. Mishra, Electrical Engg.	....	Member
4.	Dr. Rajesh Kumar, Civil Engg.	....	Member
5.	Dr. P. Ghosh, Mechanical Engg.	....	Member
6.	Dr. Ravi Shankar Singh, Computer Engg.	....	Member
7.	Dr. Devendra Singh, Electrical Engg.	....	Member
8.	Dr. P. Ahuja, Chemical Engg.	....	Member
9.	Dr. Subir Das, Mathematics	....	Member
10.	Dr. Senthil Raja A., Pharmaceutics	....	Member
11.	Dr. N. S. Rajput, Electronics Engg.	....	Member

With the following Terms of Reference:

The Cell will run programs to enhance teaching-learning processes at IIT(BHU). It will cover all aspects of teaching, pedagogy, laboratory, projects, assessment covering the following areas but not limited to it.

9.0 Senate Library Committee

(Circulated vide Notification No. IIT(BHU)ACD/2012-13/357/L, Dated : October 28, 2013)

1. The Librarian/Asst. Librarian (as the case may be), Main Library, IIT(BHU), Varanasi.
2. The Convener from each Department/School :-

Convener	Department/School
i. Prof. Subir Kundu	Bio-Chemical Engineering
ii. Dr. Neeraj Sharma	Bio-Medical Engineering
iii. Dr. Anil Kumar	Ceramic Engineering
iv. Prof. K.K. Srivastava	Chemical Engineering
v. Prof. V. Srivastava	Chemistry
vi. Prof. Devendra Mohan	Civil Engineering
vii. Dr. R. S. Singh	Computer Science & Engineering
viii. Prof. D.N. Vishwakarma	Electrical Engineering
ix. Dr. N. S. Rajput	Electronic Engineering
x. Dr.(Mrs.) Chandana Rath	Materials Science & Technology
xi. Prof. T. Som	Mathematics
xii. Prof. S. P. Tiwari	Mechanical Engineering
xiii. Prof. Sunil Mohan	Metallurgical Engineering
xiv. Prof. B. K. Shrivastva	Mining Engineering
xv. Dr. Vikas Kumar	Pharmaceutics
xvi. Dr. Rajendra Prasad	Physics

3. Members nominated by the Chairman, Senate :-

- (i) Prof. Santosh Kumar, Dept. of Mechanical Engineering, IIT(BHU)
- (ii) Prof. B. N. Sarma, Dept. of Metallurgical Engineering., IIT(BHU)
- (iii) Prof. R. B. Rastogi, Dept. of Chemistry, IIT(BHU)
- (iv) Dr. Brind Kumar, Dept. of Civil Engineering, IIT(BHU)
- (v) Shri Pratik, III Year, Mechanical Engineering, IIT(BHU)
- (vi) Ms. Neerja, III Year, Mechanical Engineering, IIT(BHU)

10.0 Senate Postgraduate Committee

(Circulated vide Notification No. IIT(BHU)/ACD/2013-14/01/L, Dated : January 1, 2014)

1. Prof. S. Jit, Deptt. of Electronics Engineering., IIT(BHU) - Chairman
2. Faculty Conveners
 - (i) Prof. Subir Kundu, School of Bio-Chemical Engineering
 - (ii) Dr. Neeraj Sharma, School of Bio-Medical Engineering
 - (iii) Prof. Om Parkash, Department of Ceramic Engineering
 - (iv) Dr. R. S. Singh, Department of Chemical Engineering
 - (v) Prof. S. H. Hasan, Department of Chemistry
 - (vi) Prof. Veerendra Kumar, Department of Civil Engineering

- (vii) Prof. A. K. Tripathi, Department of Computer Science & Engineering
- (viii) Prof. R. K. Srivastava, Department of Electrical Engineering
- (ix) Prof. S. Jit, Department of Electronics Engineering
- (x) Dr. Akhilesh Kumar Singh, School of Material Science & Technology
- (xi) Prof. T. Som, Department of Mathematical Science
- (xii) Prof. Sandeep Kumar, Department of Mechanical Engineering
- (xiii) Prof. (Smt.) N. C. Santhi Srinivas, Department of Metallurgical Engineering
- (xiv) Prof. B. K. Shrivastava, Department of Mining Engineering
- (xv) Prof. Sanjay Singh, Department of Pharmaceutics
- (xvi) Dr. Sandip Chatterjee, Department of Physics

3. For SPGC – Outgoing Chairperson

4. Student Conveners

a. M.Tech/M. Pharm. Student

- (i) Shri A. N. Rohit, School of Bio-Chemical Engineering
- (ii) Shri Surendra Kumar Chaurasia, Department of Metallurgical Engineering
- (iii) Shri Ajit Chandra Divedi, Department of Pharmaceutical Engineering

b. Ph.D Student

- (i) Shri Sarthak Singhal, Department of Electronics Engineering
- (ii) Shri Ankit Sharma, Department of Mechanical Engineering

11.0 Undergraduate Committees

(Circulated vide Notification No. IIT(BHU)/ACD/2013-14/01/L, Dated : January 1, 2014)

- 1. Prof. A. K. Mukharjee, Department of Chemistry, IIT(BHU) - Chairman
- 2. Faculty Conveners
 - (i) Prof. S. K. Srivastava, School of Bio-Chemical Engineering
 - (ii) Prof. Nira Misra, School of Bio-Medical Engineering
 - (iii) Prof. S. P. Singh, Department of Ceramic Engineering
 - (iv) Prof. B. N. Rai, Department of Chemical Engineering
 - (v) Prof. A. K. Mukherjee, Department of Chemistry
 - (vi) Dr. S. B. Dwivedi, Department of Civil Engineering
 - (vii) Prof. R. Srivastava, Department of Computer Science & Engineering
 - (viii) Prof. R. Mohanty, Department of Electrical Engineering
 - (ix) Prof. S. K. Balasubramanian, Department of Electronics Engineering

- (x) Dr. (Mrs.) Chandan Rath, School of Materials Science & Technology
- (xi) Prof. S. K. Pandey, Department of Mathematical Science
- (xii) Prof. V. K. Srivastava, Department of Mechanical Engineering
- (xiii) Dr. C. K. Behera, Department of Metallurgical Engineering
- (xiv) Prof. N. C. Karmakar, Department of Mining Engineering
- (xv) Dr. Vikas Kumar, Department of Pharmaceutics
- (xvi) Dr. (Smt.) Anita Mohan, Department of Physics

3. For SUGC

- (i) Prof. Devendra Kumar, Department of Ceramic Engineering, IIT(BHU)
- (ii) Outgoing Chairperson

4. Student Conveners

- (i) Ms. Shruti Agrawal, Department of Electrical Engineering
- (ii) Shri. Vineet Rawat, Department of Ceramic Engineering
- (iii) Shri Abhishekh Bhargwa, Department of Mining Engineering
- (iv) Shri Abhinav, Department of Mechanical Engineering

12.0 Senate Election Committee

1. Prof. A. S. K. Sinha,
Department of Chemical Engineering & Technology - Chairman
2. Prof. N. K. Mukhopadhyay,
Department of Metallurgical Engineering - Member
3. Dr. D. Giri, Department of Physics - Member

13.0 Senate Student's Affairs Committee

1. Professor In-charge, Student Affairs - Chairman
2. The Dean, Academic Affairs - Member
3. Two Councilors, Gymkhana (nominated by Chief Councilor) - Member
4. The Chairman, Council of Wardens - Member
5. Two Wardens (nominated by Council of Wardens) - Member
6. Dy. Chief Proctor, IIT(BHU) - Member
7. One Proctor (nominated by Dy. Chief Proctor) - Member
8. Chairman, Anti-Ragging Squad - Member

14.0 Members of Annular Report Committee

1. Prof. GVS Sastry, Deptt. of Metallurgy -member
2. Prof. N. K. Mukhopadhyay, Deptt. of Metallurgy -member

- | | |
|---|-----------|
| 3. Prof. Santosh Kumar, Deptt. of Mechanical Engg | -chairman |
| 4. Prof. D. Giri, Deptt. of Physics, member | -member |
| 5. Prof. B. N. Sarma, Deptt. Of Metallurgy | -member |

15.0 Proctorial Board on Institute

(Circulated vide Notification No. R/GAD/II-29/51887/51951, Dated :March 06, 2013)

- | | |
|---|---------------------|
| 1. Dr. A. K. Joshi, Deptt. of Sociology, BHU | - Chief Proctor |
| 2. Dr. Prabhakar Singh, Deptt. of Applied Physics, IIT(BHU) | - Dy. Chief Proctor |
| 3. Dr. Rajendra Prasad, Deptt. of Applied Physics, IIT(BHU) | - Proctor |
| 4. Dr. Amit Tyagi, Deptt. of Mechanical Engineering, IIT(BHU) | - Proctor |
| 5. Dr. Abha Mishra, School of Biochemical Engineering, IIT(BHU) | - Proctor |
| 6. Dr. Ruchi Chawla, Deptt. of Pharmaceuticals, IIT(BHU) | - Proctor |

16.0 Woman Grievance Cell

(Circulated vide Notification No. IIT(BHU)/ADM/98(xii)/Gen/571/L, Dated : Feb. 06, 2013)

- | | |
|--|--------------------|
| 1. Dr. Vijay Luxmi Yadav, Deptt. of Chemical Engg. & Tech., IIT(BHU) | - Chairperson |
| 2. Dr. Kalpana Choudhary, Deptt. of Electrical Engg., IIT(BHU) | - Member |
| 3. Dr. Medha Jha, Deptt. of Civil Engg., IIT(BHU) | - Member |
| 4. Mrs. Renu Kaila, S.O., IIT(BHU) – Directorate | - Member-Secretary |

17.0 SC/ST Grievance Committee

(Circulated vide Notification No. IIT(BHU)/ADM/2(xx)/SC-ST/Gen/25/L, Dated : Jan..10, 2014)

- | | |
|---|-------------------|
| 1. Prof. S. Jit, Deptt. of Electronics Engg., IIT(BHU) | - Chairman |
| 2. Prof. Sanjay Singh, Deptt. of Pharmaceutics, IIT(BHU) | - Member |
| 3. Dr.(Mrs.) V. L. Yadav, Deptt. of Chemical Engg., IIT(BHU) | - Member |
| 4. Dr. Anil Kumar, Deptt. of Ceramic Engg., IIT(BHU) | - Member |
| 5. Sri R. K. Gaur, Assistant Registrar (Dev.), IIT(BHU) | - Member |
| 6. One member of the concerned Deptt. Grievance Committee | - Member |
| 7. Dr. Bhaskar Biswas, Deptt. of Computer Science & Tech., IIT(BHU) | -Member-Secretary |

FACULTY AFFAIRS COMMITTEE

18.0 Finance

IITs receive funds from the Ministry of Human Resource Development (MHRD), Govt. of India in the following two Heads:

- (i) Non-Plan
- (ii) Plan

Non-Plan: This Head of Expenditure covers salary, pension, pensionary benefits, allowances and other monetary payments, such as medical reimbursement and LTC etc., which are payable to employees. The total available fund under Non-Plan during F.Y. 2013-14 was Rs. 98,03,72,164/-.

Plan: Earlier, Plan Funds were provided by the MHRD in two parts viz. Plan (Normal) and Plan (Capacity Expansion). Plan (Normal) is meant for taking care of infrastructural development, whereas Plan (Capacity Expansion) was meant for taking care of Special initiatives for creation of infrastructure for meeting the demand arising out of Capacity Expansion due to increase in Student intake. But, since last few financial years, both Plan (Normal) and Plan (Capacity Expansion) have been merged and funds are now being released in two heads i.e. (i) Recurring OH-31 (Fellowship/Scholarship) and Non-recurring OH-35 (Capital). Accordingly, the total available fund under Plan during F.Y. 2013-14 was Rs.71,25,31,785/- .

19.0 Faculty Details

Sl. No.	Category	As on 30.06.2014 Existing Strength
(a)	Professor	93
(b)	Associate Professor	49
(c)	Assistant Professor	91
Total Existing		233

There are ten Engineering departments, three Science department and three interdisciplinary schools offering degrees at various levels in the Institute.

Ceramics Engineering

Professor AGP-10000-PB-4(37400-67000)

1. 13690 DEVENDRA KUMAR
2. 13695 OM PRAKASH
3. 13694 RAM PYARE
4. 13689 SARJOO PRASAD SINGH

Associate Professor AGP 9000-PB-4(37400-67000)

1. 13693 AMAR NATH
2. 16730 ANIL KUMAR
3. 18361 KALYANI MOHANTA
4. 17365 VINAY KUMAR SINGH

Assistant Professor AGP 7000-PB-3(15600-39100)

1. 18295 MANAS RANJAN MAJHI

2. 19780 PRADEEP KUMAR ROY

Chemical Engineering & Technology

Professor AGP-10000-PB-4(37400-67000)

1. 13744 A.K.VERMA
2. 13741 AKHOURY SUDHIR KUMAR SINHA
3. 13746 B.N.RAI
4. 13736 K.K SRIVASTAVA
5. 13748 PRADEEP AHUJA
6. 13747 PRADEEP KUMAR MISHRA
7. 13737 RAMPRASAD
8. 13732 SURENDRA KUMAR

Associate Professor AGP 9000- PB-4(37400-67000)

1. 13749 MANOJ KUMAR MONDAL
2. 16729 RAM SARAN SINGH
3. 18210 SATYAVIR SINGH
4. 13743 VIJAY LAXMI YADAV

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 13742 ANAND CHANDRA MOHAN
2. 17500 HIRALAL PARMANIK
3. 18479 PRADEEP KUMAR

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 18152 BHAWANA VERMA
2. 18151 DURGA PRASAD
3. 19770 SWETA

Chemistry

Professor AGP-10000 PB-4(37400-67000)

1. 13669 A.K.MUKHERJEE
2. 13734 M.M.SINGH
3. 17360 MUMTAZ AHMAD QURAIISHI
4. 12106 PREM CHANDRA PANDEY
5. 13675 RANJANA GHOSE
6. 13738 RASHMI BALA RASTOGI
7. 13674 SYED H.HASAN
8. 17040 VANDANA SRIVASTAVA
9. 17326 YOGESH CHANDRA SHARMA

Associate Professor AGP 9000- PB-4(37400-67000)

1. 17328 DHANESH TIWARY
2. 17327 KAMDEO MANDAL
3. 18364 SUNDARAM SINGH

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 17329 INDRAJIT SINHA

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 18408 ABHILASHA DURGBANSHI
2. 18365 MANISHA MALVIYA

Civil Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 13766 DEVENDRA MOHAN
2. 17178 GAUTAM BANERJEE
3. 17063 PRABHAT KUMAR SINGH
4. 18398 PRABHAT KUMAR SINGH DIKSHIT
5. 13760 PRAMOD KUMAR SINGH
6. 13759 VEERENDRA KUMAR

Associate Professor AGP 9000-PB-4(37400-67000)

1. ANHAY NATH SINHA
2. 17053 ARUN PRASAD
3. 18383 KAMLESH KUMAR PANDEY
4. 17051 RAJESH KUMAR
5. 16811 SASANKA SHEKHAR MANDAL
6. 18387 SHYAM BIHARI DWIVEDI

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 16816 BRIND KUMAR
2. 16727 KESHEO PRASAD
3. 17185 MEDHA JHA
4. 17052 PABITRA RANJAN MAITI
5. 18329 S.K. GUPTA

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 17065 ANURAG OHRI
2. 18571 P. BALA RAMUDU
3. 18477 SURESH KUMAR

Computer Science & Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 13771 A.K. AGRAWAL
2. 13770 A.K. TRIPATHI
3. 13772 K.K. SHUKLA
4. 13769 RAVIBHUSHAN MISHRA

Associate Professor AGP 9000- PB-4(37400-67000)

1. 18363 RAJEEV SRIVASTAVA
2. 18362 SANJAY KUMAR SINGH

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 16832 BHASKAR BISWAS
2. 17184 RAVISHANKAR SINGH

Electrical Engineering

Professor AGP-10000 PB-4(37400-67000)

15. 16750 A.K. KAPOOR
16. 17094 DEVENDRA SINGH
17. 13789 DEVENDRA NATH VISHWAKARMA
18. 13788 R.K. SRIVASTAVA
19. 13782 R.S. GORAYAN
20. 16623 RAJENDRA KUMAR PANDEY
21. 13791 RAKESH KUMAR MISHRA
22. 13792 RANJIT MAHANTY
23. 13787 S.C. GUPTA
24. 13776 S.N. MAHENDRA
25. 13783 SHIV PUJAN SINGH
26. 13780 SHAYAM KRISHNA NAGAR

Associate Professor AGP 9000-PB-4(37400-67000)

1. 13779 GOPAL SHARMA
2. 17590 MITRESH KUMAR VERMA
3. 17548 RAM KHELAWAN SAKET

Assistant Professor AGP 8000-PB-3(15600-39100)

1. 16629 KALPANA CHAUDHARY

Assistant Professor AGP 7000-PB-3(15600-39100)

1. 17538 JEEWAN CHANDRA PANDEY
2. 17101 MANISH KUMAR
3. 17464 RAJEEV KUMAR SINGH

4. 17446 SANTOSH KUMAR SINGH
5. 17589 SOBHITA MEHER
6. 17549 VIVEK NANDAN LAL

Electronics Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 13802 P.K. JAIN
2. 13801 R.R. DAS
3. 16563 S.K. BALASUBRAMANIAM
4. 13804 SATYABRATA JIT
5. 16809 SURYA PAL SINGH
6. 10389 VISHWAMBHAR NATH MISHRA

Associate Professor AGP 9000- PB-4(37400-67000)

1. 14161 PRADEEP KUMAR MUKHERJEE
2. 13799 RAHAMAT ULLAH KHAN
3. 13796 RAMASHRAY DWIVEDI

Associate Professor AGP 8000- PB-4(37400-67000)

1. 16800 NAVIN SINGH RAJPUT

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 18360 AMRITANSHU PANDEY
2. 16628 MANOJ KUMAR MESHARAM
3. 13806 MANOJ KUMAR SINGH

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 18299 AMIT KUMAR SINGH
2. 18358 M. THOTTAPPAN

Mathematical Sciences

Professor AGP-10000 PB-4(37400-67000)

1. 13660 K.N.RAI
2. 17162 LAL PRATAP SINGH
3. 13670 OMPRAKASH SINGH
4. 16728 PRASHANT KUMAR PANDA
5. 13662 REKHA SRIVASTAVA
6. 17315 SANJAY KUMAR PANDEY
7. SHRIRAM
8. 18386 TANMOY SOM

Associate Professor AGP 9000-PB-4(37400-67000)

1. 18409 SANTOSH KUMAR UPADHYAY
2. 17180 SANTWANA MUKHOPADHYAY
3. 18373 SUBIR DAS

Assistant Professor AGP 8000-PB-3(15600-39100)

1. 17179 ASHOKJI GUPTA
2. 17745 RAJEEV
3. 19772 Dr. VINEET KUMAR SINGH

Mechanical Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 16722 A.P. HARSHA
2. 13819 ANIL KUMAR AGRAWAL
3. 13829 ARUN KANTI JHA
4. 13815 JAI PRAKASH DWIVEDI
5. 13821 K.S. TRIPATHI
6. 17361 MITHILESHWAR PRASAD
7. 13814 OM PRAKASH
8. 14343 SANDEEP KUMAR
9. 14364 SANJAY KUMAR SINHA
10. 13831 SANTOSH KUMAR
11. 13817 SATYA PRAKASH TIWARI
12. 13826 SUSHIL KUMAR SHARMA
13. 13811 VIJAY KUMAR SRIVASTAVA
14. 13818 VIRENDRA PRATAP SINGH

Associate Professor AGP 9000- PB-4(37400-67000)

1. 16720 PRABHAS BHARDWAJ
2. 16801 PRADYUMNA GHOSH
3. 16723 PRASHANT SHUKLA
4. 17318 RAJESH KUMAR
5. 17341 RAJNESH TYAGI
6. 17390 SAROJA KANTA PANDA
7. 18130 SHAILENDRA KUMAR SHUKLA
8. 13822 SHARDENDU KUMAR SHAH

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 16657 MOHD. ZAHEER KHAN YUSUFZAI
2. 16798 CHERIAN SAMUEL

3. 17388 JAHAR SARKAR
4. 16724 JEEWAN VACHAN TIRKEY
5. 16721 MEGHANSHU VASHISTA
6. 17253 NILANJAN MALIK
7. 17339 SWASTI SUNDAR MONDAL

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 17268 AMIT TYAGI
2. 17252 ARNAB SARKAR
3. 18139 DEBASHISH KHAN
4. 18214 PRAKASH CHANDRA MANI
5. 18239 RAKESH KUMAR GAUTAM
6. 17335 RASHMI REKHA SAHOO
7. 17269 UPPU SRINIVAS RAO

Metallurgical Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 13855 VAKIL SINGH
2. 13841 A. K. GHOSH
3. 13848 S. N. OJHA
4. 13847 G. V. S. SHASTRY
5. 13842 T. R. MANKHAND
6. 13849 R. K. MANDAL
7. 13853 N. K. MUKHOPADHYAY
8. 13857 SUNIL MOHAN
9. 13851 (SMT) N. C. S. SRINIVS
10. 13852 B. N. SHARMA

Associate Professor AGP 9000- PB-4(37400-67000)

1. 18188 K. K. SINGH
2. 18218 O. P. SINGH
3. 18242 I. CHAKRABORTY

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 16732 C. K. BEHERA
2. 16805 R. MANNA

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 18194 J. K. SINGH
2. 18221 N. K. PRASAD

3. 18229 VIKAS JINDAL
4. 18241 K. CHATTOPADHYAY
5. 18287 G. S. MAHOBIA

Mining Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 13869 AARIF JAMAL
2. 13862 BAL KRISHNA SRIVASTAVA
3. 17282 NETAI CHANDRA KARMAKAR
4. PIYUSH RAI
5. 13871 SANJAY KUMAR SHARMA

Associate Professor AGP 9000- PB-4(37400-67000)

1. 13867 RAMPRATAP SINGH
2. 13872 SUPRAKASH GUPTA

Assistant Professor AGP 7000- PB-3(15600-39100)

1. 18148 AMRENDRA KUMAR
2. 18149 ASHOK JAISWAL
3. 18197 GAURI SANKAR PRASAD SINGH
4. 18150 RAJESH RAI
5. 18237 SANJAY KUMAR PALBI
6. 18230 SURESH KUMAR SHARMA
7. 18147 TARUN VERMA

Pharmacy

Professor AGP-10000 PB-4(37400-67000)

1. 13882 B. MISHRA
2. 13876 RADHEY SHAYAM SRIVASTAVA
3. 16840 SANJAY SINGH
4. 16826 SUSHANT KUMAR SRIVASTAVA
5. 13880 SUSHIL KUMAR SINGH

Associate Professor AGP 9000- PB-4(37400-67000)

1. 13879 ANAND KUMAR SRIVASTAVA
2. 16827 S. HEMALATHA
3. 17684 SAIRAM KRISHNAMURTHY
4. VIKAS KUMAR

Assistant Professor AGP 7000 - PB-3(15600-39100)

1. 18548 RUCHI CHAWLA

2. 18367 SUNIL KUMAR MISHRA
3. 17514 ALAKH NIRANJAN SAHU
4. 16828 SENTHIL RAJA A.

Physics

Professor AGP-10000 PB-4(37400-67000)

1. 13672 B.N.DWIVEDI
2. 13665 O.N. SINGH

Associate Professor AGP 9000- PB-4(37400-67000)

1. 17048 DEBA PRASAD GIRI
2. 18366 PRABHAKAR SINGH
3. 17276 RAJENDRA PRASAD
4. 18478 SANDEEP CHATTERJE

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 17041 ANITA MOHAN
2. 18359 PRAVEEN CHANDRA PANDEY
3. 18536 SAHIL UPADHYAY
4. 19771 ABHISHEK KUMAR SRIVASTAVE

School of Bio-Chemical Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 13889 MIRA DEBNATH
2. 13890 S.K. SRIVASTAVA
3. 13888 SUBIR KUNDU
4. 13887 RATHINDRA MOHAN BANIK

Associate Professor AGP 9000- PB-4(37400-67000)

1. 16831 PRADEEP SRIVASTAVA

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 16830 ABHA MISHRA

School of Bio-Medical Engineering

Professor AGP-10000 PB-4(37400-67000)

1. 13884 AMIT KUMAR RAY
2. 13886 NIRA MISHRA
3. 13885 RANJANA PATNAIK

Associate Professor AGP 9000- PB-4(37400-67000)

1. 16812 NEERAJ SHARMA

Assistant Professor AGP 8000- PB-3(15600-39100)

1. 18117 SANJAY KUMAR RAI
2. 16829 SHIRU SHARMA
3. 19842 SANJEEV KUMAR MAHTO

School of Materials Science & Technology

Professor AGP-10000 PB-4(37400-67000)

1. 13891 DHANANJAI PANDEY
2. 17337 PRALAY MATTI
3. 17100 RAJIV PRAKASH

Assistant Professor AGP- 7000 PB-3(15600-39100)

1. 18438 CHANDAN UPADHYAY
2. 17387 AKHILESH KUMAR SINGH
3. 17280 CHANDANA RATH
4. 19817 BHOLA NATH PAL

Visiting Faculty Members

(List to be verified from Admin.)

- | | |
|------------------------|-----------------------------------|
| 1. Sandeep Pandey | Chemical Engineering Department |
| 2. Brijesh Eshpuniyani | Mechanical Engineering Department |

Academic Staff

					(BP/GP)
1.	18992	Vinod Shankar Pandey	17550/5400	RA	Appl. Mathematics
2.	18986	Janardan Singh	17550/5400	RA	Civil Engineering
3.	18988	UmendraNarain Singh	17550/5400	RA	Appl. Physics
4.	18991	Sudama Singh	17550/5400	RA	Ceramic Engineering
5.	18985	Bhola Nath Singh	17550/5400	RA	Civil Engineering
6.	18987	Arun Kumar Singh	17550/5400	RA	Mining Engineering
7.	18990	Ashok Kumar	17550/5400	RA	Civil Engineering
8.	18989	Raj Kumar Chaturvedi	17550/5400	RA	Ceramic Engineering
9.	17019	A.K. Sharma	17550/5400	SciO	Electronics Engineering
10.	16564	T.K. Singh	17550/5400	SciO	Electronics Engineering
11.	16565	Rajesh Kr. Srivastava	17550/5400	Sr. Sci.	Electronics Engineering

20.0 ACADEMIC PROGRAMMES

20.1 Educational Goals

Education in the Engineering stream should produce trained manpower capable of maintaining and advancing technological growth. The scope of education should be based on the evaluation of technological usefulness and relevance to the prosperity of the country. The education in this context should help to develop a knowledge industry and the systems involved in this endeavour should strive for furtherance of knowledge.

The academic goals of the Indian Institute of Technology (BHU) Varanasi from the viewpoint of its teaching programme are as the following:

- i. To prepare the students for the highest level of excellence in science and Technology and to produce competent, creative and imaginative scientists and engineers.
- ii. To promote a spirit of free and objective inquiry in different fields amongst the students and to motivate them for higher studies and research.
- iii. To foster inter disciplinary approach. To promote the concept of virtual research departments by bringing together faculty and students into activities of mutual interest.

20.2 TEACHING PROGRAMMES

The Institute offers instruction in various disciplines of science and engineering, both at the undergraduate (UG) and the postgraduate (PG) levels. These programmes are planned and implemented by the Academic Senate of the institute. Micro-management and these programmes are carried out by the Senate Undergraduate Committee (SUGC) and the Senate Post-graduate Committee (SPGC) respectively.

Undergraduate Programme

The four-year undergraduate programme consists of two parts having four semesters each. The first part is the Core programme common to all students, and is carefully planned to give the students a strong base of basic Mathematics/ Physics, Chemistry, Engineering Sciences, Technical Arts, Humanities and Social Sciences. The second part of the undergraduate programme consists of the Professional courses and a project in the chosen branch of specialization. At the Bachelor's level, the Institute offers four years B.Tech./B.Pharm programs in Ceramics, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics Engineering, Mechanical Engineering, Metallurgical Engineering, Mining Engineering and Pharmaceutical Engineering.

Postgraduate Programme

The postgraduate programme is intended to prepare students to enter their professions with a perspective and breadth of knowledge related to the principal divisions of their respective fields of specialization through courses and specialized research experience. A postgraduate programme is typically three or four courses each semester until the student advances to a point where the principal requirements of the programme left to be fulfilled are research and thesis.

M. Tech. Programme

The Institute offers M. Tech. Programmes in all the Engineering Branches, as mentioned above. In addition, there are M. Tech. Programmes in the interdisciplinary areas, such as, Industrial Engineering and management, Bio-Chemical, Bio-Medical engineering, Material science. The M. Tech. students are chosen through an all-India examination known as GATE.

The Institute offers 4-Year B.Tech./B.Pharm., 2-Year M.Tech./M.Pharm., 5-Year B.Tech. & M.Tech. / B.Pharm. & M.Pharm. Dual Degree and 5-Year Integrated M.Tech. Degree programmes in different disciplines. Institute also offers research programmes in all sixteen disciplines.

20.3 UNDERGRADUATE AND IDD / IMD PROGRAMMES

Four-Year B. Tech. Programmes

B.Tech. (Ceramic Engineering)
B.Tech. (Chemical Engineering)
B.Tech. (Civil Engineering)
B.Tech. (Computer Engineering)
B.Tech. (Electrical Engineering)
B.Tech. (Electronics Engineering)
B.Tech. (Mechanical Engineering)
B.Tech. (Metallurgical Engineering)
B.Tech. (Mining Engineering)

Four-Year B.Pharm. Programme

B. Pharm.

Five-Year Dual Degree (B. Tech. & M. Tech.) Programmes in Engineering

B.Tech. & M.Tech. (Ceramic Engineering)
B.Tech. & M.Tech. (Computer Science & Engineering)
B.Tech. (Civil Engg.) & M.Tech. (Structural Engineering)
B.Tech. (Electrical Engg.) & M.Tech. (Power Electronics)
B.Tech. & M.Tech. (Mechanical Engineering)
B.Tech. & M.Tech. (Metallurgical Engineering)
B.Tech. (Mining Engineering)
B.Tech. & M.Tech. (Biochemical Engineering & Biotechnology)
B.Tech. (Bioengineering) & M.Tech. (Biomedical Technology)
B.Tech. & M.Tech. (Materials Science & Technology)

Five-Year Dual Degree (B.Pharm and M.Pharm.) Programme in Pharmaceutics

B.Pharm and M.Pharm.

Five-Year Integrated Programmes in Applied Sciences

M.Tech. in Industrial Chemistry
M.Tech. in Mathematics and Computing
M.Tech. in Engineering Physics

20.4 POSTGRADUATE PROGRAMMES

The Institute offers following 2-Year programmes leading to the degree of M.Tech./ M.Pharm. with or without specialization.

Programme	Specialization
M.Tech. Ceramic Engineering	
M.Tech. Chemical Engineering	
M.Tech. Civil Engineering	Hydraulics and Water Resources Engg. Geotechnical Engineering Structural Engineering Environmental Engineering Transportation Engineering
M.Tech. Electrical Engineering	Power Systems Electrical Machines and Drives Control Systems Power Electronics
M.Tech. Electronics Engineering	Microwave Engg. Digital Techniques and Instrumentation Microelectronics Communication System Engg.
M.Tech. Mechanical Engineering	Machine Design Heat Power Engineering Production Engineering
M.Tech. Metallurgical Engineering	Extractive Metallurgy Metals and Materials Processing Alloy Technology
M.Tech. Mining Engineering	Mine Environment Rock Mechanics Mine Planning
M.Tech. Systems Engineering	
M.Tech. Biochemical Engineering	
M.Tech. Industrial Management	
M.Tech. Biomedical Engineering	
M.Tech. Materials Sci. & Tech.	
M.Pharm.	Pharmaceutics Pharmaceutical Chemistry Pharmacology Pharmacognosy

20.5 Ph.D. PROGRAMMES

2-Year and/3-Year Ph.D. programme is offered by all academic departments and schools of the Institute. All Ph.D. programmes are with course work of specified credits.

ADMISSION

Admission to Four-Year B.Tech./B.Pharm. programmes, Five-Year Dual Degree programmes and Five-Year Integrated Masters Degree programmes for Indian and Foreign Nationals are made through the Joint Entrance Examination (JEE). For admission to 4-Year B.Pharm. programme 50% seats are filled through JEE and 50% through PMT I PAT conducted by the University.

Admission to Two-Year M.Tech./M.Pharm. programmes is made on the basis of GATE score. In addition, there is provision for admitting sponsored candidates from academic institutions, industries and R & D organizations.

Admission to Ph.D programmes is made on the basis of GATE/NET scores & through sponsorship by the employer.

ADMISSION OF FOREIGN NATIONALS

Foreign nationals residing in India or abroad are admitted to the post graduate and Ph.D. programmes under (a) self-financing scheme, and (b) cultural exchange fellowship programme. Under the self-financing scheme, some seats are filled by direct admission of eligible qualified foreign nationals, under cultural exchange fellowship programmes of Govt. of India and sponsored candidates from their home countries.

SCHOLARSHIPS/FINANCIAL ASSISTANCE

The Institute offers Merit-cum-Means scholarships to 25% undergraduate students. Besides, there are several endowment scholarships offered by the Institute. Some other facilities are also provided to the undergraduate students in the form of free studentship, scholarship, re-imburement of mess charges and pocket allowances to the students belonging to the Scheduled Castes and Scheduled Tribes.

All the students (non-sponsored) admitted to M.Tech./M.Pharm. programmes are provided financial assistance equivalent to the Junior Research Fellowship.

The Institute offers a large number of Junior/Senior Research Fellowship to students admitted to Ph.D. programmes. Efforts are being made to offer scholarships to all eligible candidates admitted to Ph.D. programmes.

21.0 DEPARTMENT WISE MAJOR AREAS OF RESEARCH

Ceramic Engineering: White Wares, Oxide Refractory, Glass, Electrical and Electronic Ceramics, Glass Ceramics.

Chemical Engineering & Technology: Transport Phenomena, Catalysis and Reaction Engineering, Environmental Engineering, Biochemical Engineering, Process Control, Corrosion, Process Development, Materials Technology, Polymer Technology, Energy Engineering.

Civil Engineering: Environmental Engineering, Soil Engineering, Structural Engineering, Water and Wasterwater Management, Corrosion of Concrete, Reinforced Concrete, Low Cost Housing.

Computer Science & Engineering: Artificial Intelligence, Visual Computing, Parallel and Distributed Systems, Software Engineering.

Electrical Engineering: Control Systems, Electrical Machines and Drives, Power Systems, Power Electronics & Its Application, Electrical Energy, Management & Simulation, Microprocessor and Microcomputer Engineering, Systems Engineering.

Electronics Engineering: Microelectronics, Microwave Engineering, Microprocessor Applications, Communication Systems.

Mechanical Engineering: Heat and Mass Transfer, IC Engines, Tribology, Vibrations and Noise; Mechanisms, TQM and Training Programme. Bulk Metal forming & Processing (Sintering and Forging, Composites, Extrusion etc), Incremental forming, Hydro-forming, Manufacturing Automation & Robotics, Welding and joining technology, Unconventional and modern machining technology, Casting & allied processes, CAD/CAM/CIM and Mechatronics, Rapid prototyping, reverse engineering & concurrent engineering, Micro/nano and miniature manufacturing, Manufacturing simulation and product design development, Industrial Metrology (including micro-nano metrology) & CMM, Virtual Manufacturing & production planning, Hydraulics & pneumatics

Metallurgical Engineering: Deformation and Fracture, Rapid Solidification, Phase Stability and Phase Transformations, Process Metallurgy, Kinetics of Heterogeneous Reactions, Thermodynamics of Materials, Development of Materials, Tribology, Corrosion and Its Inhibition.

Mining Engineering: Rock Mechanics and Ground Control, Mineral Beneficiation and Coal Preparation, Mine Planning and Designing, Exploration, Mine Machinery, Mine Environment Engg.

Pharmaceutics: Pharmaceutical Chemistry, Pharmacology, Pharmacognosy, Pharmaceutics, Pharmaceutical Analysis.

Chemistry: Water Pollution and Hydro-metallurgy, Coordination Chemistry, Coordination Polymers, Bio-inorganic Chemistry, Corrosion and Its Inhibition, Biologically Active Heterocyclic Compounds, Synthesis of Anti-AIDS Compounds, Tribology and Lubricant Additive Development, Superoxide Chemistry, Electro-organic Synthesis, Computational Chemistry.

Mathematical Sciences: Optimization, Operations Research, General Relativity and Cosmology, Combinatorial Analysis, Probability and Statistics, Pseudo-differential Operators, Control Theory, Modern Algebra, Fuzzy Topology, Automate and Discrete Mathematics.

Physics: Fibre Optics, Opto-electronics, Integrated Optics, Photonics and Smart Materials, Space Physics and Plasma Physics, Solid State Physics, Non-Conventional Energy Studies, Microwave Remote Sensing.

Biochemical Engineering: Transfer Processes in Microbial Systems, Bio-conversion, Bioinformatics, Genomics, Enzyme Technology, Food Engineering, Solid State Fermentation, Biological Waste Water Treatment, Drug Delivery Techniques.

Bio-Medical Engineering: Artificial Neural Network, Electrophysiological Signal Processing, Polymeric Materials, Composites, Bio-effects of Microwaves.

Materials Science & Technology: PZT and other Smart Ceramics, Electronic Ceramics, Relaxor Ferroelectrics, Phase Transformations, Computer Simulation, Self Assembly, Biomaterials, Radiation Effect on Materials, Biosensors, Smart Gels, Nanocomposites, Conducting Polymers, Nanomagnetism, Dilute Magnetic Semiconductor.

22.0 ACADEMIC INTERACTION WITH INDUSTRY / R & D ORGANISATIONS

The institute always maintains and strives for close interaction with industry and R&D organizations. In order to ensure that the teaching programmes and the curricula meet the changing needs of the industry, senior professionals from industry are invited as expert members of the Board of Studies and other academic bodies which evaluate changes in curricula as well as new academic programmes. It also interacts with industry to provide real-life exposure of the industrial world to its students through educational tour and vocational training programmes.

The experts from Industry and R & D organizations are also frequently invited to deliver extension lectures and interact with faculty and students. In addition, departments and centres of the institute regularly organize seminars, conferences and workshops for such interactions.

The departments/schools also have a programme for industrial exposure of the faculty. The institute is attempting to broaden the scope of the existing procedure by having built-in provisions of incentives as well as appointment of adjunct faculty from the industry.

The Institute is also making efforts to strengthen the scheme of having Honorary Visiting Professors/Faculty, both from Industry and R&D organizations as a regular feature.

In order to foster greater and stronger bonds with the industry and R&D organizations, the running of tailor-made M. Tech programmes suiting the specific needs of a particular sector of industry/R&D organization are also under consideration.

23.0 HOSTELS

It is compulsory for all the students to reside in the hostels. The institute has 12 boys hostel (2000 rooms) and two girls hostel (120 rooms). The hostels provide all the facilities, viz, internet, mess, common room, indoor games etc. for comfortable stay of the students and appropriate environment for their academic excellence and personality development.

24.0 GYMKHANA / STUDENT ACTIVITIES

The Institute Gymkhana organizes and provides infrastructural facilities for a large number of activities through its cultural, sports & games and co-curricular activities wings. The Gymkhana also has a well equipped fitness centre. The artistic and creative talents of students are encouraged through various competitions like dramatics, debates, music, visual arts etc. and clubs like Radio, Audio, Photography, Automobile, Aero-Modelling, Cine and Computer Club. Besides the Institute's Gymkhana, the University Sports Board also provides excellent opportunities and facilities for all games and sports. Special mention may be made of the Indoor Squash Courts, Swimming Pool, Flying Club, Mountaineering and Boating facilities, Hobby Centre etc. which are open to the entire University community.

25.0 THE GYMKHANA COUNCIL MEMBER

Prof. S K Sharma

Department of Mechanical Engg.

Prof. Rajeev Prakash	Dy. Chief Councilor, School of Material Science
Prof B N Rai	Councilor, Cultural Council, Department of Chemical Engg.
Prof. R Mahanty	Councilor, Science & Technology Council, Deptt.of Electrical Engg.
Dr. K.K. Singh	Treasure IIT (BHU) Gymkhana, Department of Metallurgical Engg.
Dr. R S Singh	Councilor, Games & Sports Council, Chemical Engg.
Dr. S S Mondal	Councilor, Film & Media Council, Department of Mechanical Engg.
Dr. Satish Kanaujia	Asst. Prof. Physical Education, IIT(BHU)

26.0 AWARDS & HONOURS

(a) Institute Blue, highest award was awarded to two students

1	Mr.Rahul Ajay Deshpande	B.Tech Pt. IV Mechanical Engg.	Technical Activities
2	Mr.Ashok Ratan	B.Tech Pt. IV Electrical Engg.	Volleyball

(b) Film and media Council Awards 2013-14

IIT Colour			
1	Mr. Praveen Kumar Sharma	IDD Pt. IV Bio.Chemical	Robotics
2	Mr. Sritam Rout	B.Tech Pt. IV Metallurgical Engg.	Technical Model
3	Mr. Himadri Roy	IDD Pt. V Electrical	Technical Activities
Honourable Mention			
1	Mr. Hardik Garg	B.Tech Pt. IV Electronics Engg.	Organizational Activities
2	Mr. Vipul Nair	IDD Pt. IV Electrical Engg.	Organizational Activities
3	Mr. Akshay Sharma	IDD Pt.IV Metallurgical Engg.	Organizational Activities
4	Mr.Srijan Mishra	IDD Pt. IV Computer Science	Organizational Activities

(c) Games and Sports Council Awards 2013-14

IIT Colour			
1	Mr. Rahul Kumar Meena	B.Tech Pt. IV Mechanical Engg.	Athletics
2	Mr. Rajat Jain	B.Tech Pt. IV Chemical Engg.	Football
3	Mr. Abhishek J. Jain	B.Tech Pt. IV Chemical Engg.	Cricket
4	Mr. Pranay Khandelwal	B.Tech Pt. III Ceramic Engg.	Volleyball
5	Mr. Rahul Kumar	B.Tech Pt. IV Metallurgical Engg.	Tae-Kwon-Do
6	Mr. Shivam Gupta	B.Tech Pt. III Metallurgical Engg.	Basketball

7	Mr. Shubham Singh	B.Tech Pt. IV Civil Engg.	Badminton
8	Mr.Omprakash Jat	B.Tech Pt. IV Electrical Engg.	Volleyball
9	Mr.Gaurav Tyagi	B.Tech Pt. III Electrical Engg.	Athletics
10	Mr.Praveen Kumar	B.Tech Pt. III Electronics Engg.	Chess
11	Mr.Mayank Thakur	B.Tech Pt. III Mining Engg.	Table Tennis
12	Mr. Abhishek Mani	IMD Pt.III Mathematics and Computing	Cricket

Honourable Mention

1	Ms. Ishu Bansal	B.Tech Pt. IV Civil Engg.	Leadership Activities
2	Mr. Pallav Upadhyay	B.Tech Pt. IV Electrical Engg.	Leadership Activities
3	Mr. Naman Jain	IMD Pt.IV Industrial Chemistry	Leadership Activities
4	Mr.Amandeep Singh Dhanjal	IDD Pt. IV Electrical Engg.	Leadership Activities
5	Mr. Pushpendra Singh	B.Tech Pt. IV Ceramic Engg.	Leadership Activities

(d) Science and Technology Council Awards 2013-14

IIT Colour			
1	Mr. L Lakshman Teja	IDD Pt. IV Ceramic Engg.	Photography
2	Ms. Sheema Usmani	IMD Pt. IV Mathematical Sciences	Cinematic Activities
3	Mr. Anuruddh Mishra	B.Tech Pt. III Electronics Engg.	Photography
4	Mr. Niresh Jain	B.Tech Pt. III Ceramic Engg.	Creative Designing
Honourable Mention			
1	Mr. Prateek Hundekar	IDD Pt. III Ceramic Engg.	Creative Designing
2	Mr. Janishar Ali Anwar	IDD Pt. IV Civil Engg.	Animation
3	Mr. Alok Kumar Singh	IMD Pt. III Mathematical Sciences	Film and Media Activities

27.0 SIGNIFICANT ACHIEVEMENTS

1. SPICMACAY, IIT (BHU) Chapter was revived with the initiative taken by our Director. Under VIRASAT (Musical Concert) it organized Kabir Vani by Padma Shree Swami G.C.D. Bharti.
2. ICCR and IIT(BHU) organized a musical Event of Artist from Bangla Desh on 3.10.2013
3. Bhartiya Lok Kala Mandl, Udaipur, an internationally renowned Puppet Theatre performed on 30 and 31st Jan. 2014 in Sengupta Hall.
4. In September a 10 day “Sukshma Yoga Camp” was conducted by Swami Kalki Ji Maharaj.

5. For the First time a Natinal Service Unit was formed in IIT(BHU) with mr. Rotik Kumar as student coordination and Dr. J.V. Triky as Teacher In charge.
6. Gymkhana conducted two Physical Fitness camp for first year students.
7. Under the auspices of Gymkhana, M.Tech students Distributed Blankets to poor during winter.
8. Six students went on expedition with Indian army in Kashmir in the summer.
9. Partial Lighting facilities were created for Kho- Kho, Hockey, Football, Badminton and Hand ball courts.
10. A Marathon race was organized on 29th August to mark the birth day of Major Dhyan Chand.

28.0 INSTITUTE FESTIVALS

Institute Sports festival Spardha was celebrated from 23 Jan to 27 Jan 2014

Colonel Rajyavardhan Singh Rathore Indian shooter, Silver Medalist in Men's Double Trap at the 2004 Summer Olympics in Athens inaugurated the Function. 35 engineering colleges participated in this meet. Vangipurapu Venkata Sai Laxman, commonly known as V.V.S. Laxman, Padmshri, is a former Indian cricketer was the chief guest in the closing function.

IIT (BHU) Gymkhana is organizing its Annual Techno-Management festival, Technex'14 from 7th March to 9th March, 2014. Following eminent personalities delivered lectures to the students.

- Dr. Rabindra D. Mehta, Branch Chief, NASA Sports Aerodynamics
- Dr. Peter Jenni, ATLAS Expt. Head, LHC, CERN, France Experimental Physicist

Kashi-Yatra was organized from 23-25th January 2014 with usual fanfare, Prof. Rajiv Sangal Director IIT(BHU) inaugurated the festival, it was followed by Kavi Sammelan in the evening. A record no of 25 outstation teams participated in the KY-14.

29.0 Inter IIT Meet

For the First Time IIT (BHU) participated in the Inter IIT meet at 49th IIT Guwahati during Dec 13-22 2013 and stood seventh in the meet. Miss Ishu Bansal and Mr. Gaurav Tyagi stood Third in Discuss throw event (W) and Men categories.

The Cricket, Basketball, Volleyball, TT teams reached up to quarterfinal stage. Our performance in Aquatics was poor.

The Staff team also participated in the 23rd Staff meet from 23-28th December 2013 at IITG and gained experience

Six students participated in the prestigious “**Jagriti Yatra**” organized by Jagriti Seva Foundation, Mumbai from 24 December 2013 - 8 January 2014.

	Roll No.	Name	Department	Semester
1	09403EN008	Ankit Mittal	Civil Engg.	X th Sem

2.	10108EN011	Prabhakar Gautam	Mining Engg.	VIII Sem.
3.	11108EN070	Anoop Garg	Mining	VI Sem
4.	10105EN052	Manish Kumar Gupta	Electronics	VIII Sem
5.	12107EN033	Km. Shilpa Roy	Metallurgical	IV Sem
6.	11403EN007	Tushar Gupta	Civil Engg.	VI Sem
7.	11103EN007	Pushpendra Dwivedi	Civil Engg.	VI Sem
8.	11414EN009	Rutuja Chajed	Bio Medical	VI Sem
9.	11102EN016	Naveen Malpani	Chemical Engg.	VI Sem

The students have been selected globally and this prestigious event will bring fame to our institution.

- The Inter Zonal Inter University(All India) Chess tournament was held during 13-17 January 2014 at Mahatma Phule Krishi Vidyapeeth, Rahori Maharashtra. One of our student.

Roll no	Name	Semester	Dept.
11105EN051	Praveen Kumar	VI	Electronics

represented BHU in this tournament. The student also qualified in the East Zone inter university Chess Tournament held at Jadavpur University.

- The Institute team also participated in Spandan 2013-14 and won seven medals. The institute for the first time took part in Folk and Tribal dance events.
- Miss Ruchika Dasgupta B.tech part III , Metallurgical engineering won First place in English Debate in Spandan
- Following Student also won First place in Short Plays :

Keshav Bansal	B.Tech Part IV	Chemical Engg.
Vijit Agrawal	B.Tech Part IV	Civil Engg.
Mrinali Modi	B.Tech Part I	Chemical Engg.
Shivam Mehta	B.Tech Part II	Electronics Engg.
Harshit Agarwal	B.Tech Part IV	Metallurgical Engg.
Rachit Sachdeva	B.Tech Part IV	Chemical Engg.
Arpit Gupta	B.Tech Part III	Mechanical Engg.
Arnav Pareek	B.Tech Part IV	Chemical Engg.
Archit Seth	B.Tech Part III	Electronics Engg.
Samrat Bose	B.Tech Part IV	Chemical Engg.

- The Institute's Science and Technology Team participated in "Techkriti-13" at IIT Bombay jan 2014, Games and Sports Council Team participated in Udgosh at IIT Kanpur September 2013, and Cultural Team went to Bits Pillani, IIT Kanpur Antargni and Mood Indigo at IIT

Mumbai. The Film and Media council team also participated in “Mood Indigo” at IIT Bombay.

- IIT (BHU) Quiz Team consisting of six students to represented the institute in “Nihilanth”, the Inter IIT-IIM Quiz, held at IIT Bombay from 20-23 rd December 2012. It was for the first time our institute has been invited. IIT secured 6th place among all IIMS and IITs

The names of the students are:

1. Shobhit Shubhankar	B.Tech Part II Chemical Engg.
2. Deepak Kumar Singh	B.Tech Part II Mining Engg.
3. Mahendra Mohan Das	B .Tech Part II Ceramic Engg.
4. Ankit Maheshwari	B.Tech Part V SMST
5. Rohan Kulkarni	B.Tech Part II Biochemical Engg.
6. Ashwini Kumar Sahay	B.Tech Part I Metallurgical Engg.

OTHER SUPPORT SERVICES

The Institute availed all the support services of Banaras Hindu University. Some of these are medical services; University Works Department, Horticulture department, Electric and Water Supply, Sanitary Services, residential accommodation of staff and faculty, guest houses, auditorium, sports, games & cultural activity facilities, computer centre, library, internet etc.

30.0 QIP/CEP/EFIP

Quality Improvement Programme (QIP) is one of the effective programmes for upgrading the qualifications and training of teachers from other engineering colleges. Under this programme they can be sponsored for master and doctoral level degrees. At present only two departments of the Institute, Department of Metallurgical Engineering and Department of Mining Engineering are recognized as the QIP centres. Efforts are being made to get other departments also recognized for this purpose. Under Continuing Education Programme (CEP) the departments/schools of the Institute organize short term courses for the benefit of teachers of degree level engineering colleges and technical personnel of R&D and Industrial Organizations.

31.0 ALUMINI ACTIVITIES

There are two formal organizations through which the alumni of this Institution interact with the students: All IIT-BHU Alumni Association (AIBA) for those residing within the country and IIT-BHU Global Alumni Association (IGBAA) for those who are from overseas. There are several Chapters associated to the bodies and they work very actively.

Given below are some of the highlights of the alumni related activities during the period from April, 2013 to March 31, 2014.

1) 3rd Annual IIT BHU Global Alumni Meet, Somerset, New Jersey (September 21, 2013):

Prof. A. K. Kapoor (Electrical 1975, MS 1977, PhD 1993) from the IIT BHU was the Chief Guest and **Shri S. P. Shukla** (Chemical 1979), President, Defense Sector, Mahindra Group, Mumbai, India was the invited keynote speaker. Video messages from the BHU Vice-Chancellor, **Dr. Lalji Singh** and IIT BHU Director, **Dr. Rajeev Sangal** were shared. Four panel discussions on “*Education*”, “*Research*”, “*Entrepreneurship*”, and “*Social Service*” were held. A lot of interesting ideas were discussed to propel the IIT BHU to new heights. There were lighter moments with “Fond Memories of BHU” and “Tribute to Teachers”. The Meet concluded with an entertainment program after the dinner. At the Meet, **over \$208,000** were raised to support various projects at IIT BHU including student scholarships. This included a grant of **\$100,000** by **Mr. Naresh C. Jain** (Mechanical 1967). **Over 300** people attended the Meet.

Prof. A. K. Kapoor conferred 2013 IIT BHU Distinguished Alumnus Award to six alumni. They included **Mr. Soumyo Sarkar** (Corporate – Mechanical 1979), **Prof. V. K. Mathur** (Education – Chemical 1953), **Mr. Ujjual Nath** (Entrepreneurship – Metallurgy 1979), **Dr. Mrityunjay Singh** (Government – Metallurgy Ph.D. 1983), **Dr. Pradeep Rohatgi** (Research – Metallurgy 1961), and **Dr. Manu Vora** (Social Service – Chemical 1968).

Special thanks to **Mr. Manu Goyal** (Mechanical 1993), **Mr. Rabindra Gaan** (Electronics 1985), and **Mr. Yogesh Upadhyaya** (Chemical 1977) for their dedicated efforts along with the 2013 Meet Organizing Committee Members.

2). BENCO '64 Golden Reunion Celebration:

BENCO '64 Batch held their Golden Reunion event from Feb. 28 to March 4, 2014. 1964 classmates with their families attended. They gave a cheque of **Rs. 30 Lakhs** for Gold Medals and Scholarships to the IIT BHU Director. **Dr. Brij Agrawal** (Mechanical 1964) led this effort. Credit goes to **Prof. Anil Kumar Agrawal** who worked very closely with **Prof. Siam Varshney** (Mechanical 1964) for the Golden Reunion. The following Gold Medals have been instituted by BENCO-64 batch:

- i. BENCO-64 Gold Medal for best innovative B.Tech. project with social impact.
- ii. BENCO-64 Gold Medal for best M.Tech. thesis in Mechanical Engg.
- iii. BENCO-64 Gold Medal for the best teacher from Civil, Electrical and Mechanical Engg.

Besides the Gold Medal, the awardee will also be given Rs.25,000/- as cash award.

3). *Scholarship Endowment Process:*

A Scholarship Endowment Process was established with approval from the Director. This Need Based Scholarship will be given as a loan on an interest-free basis (loan repayment in five years after graduation) starting with the 2015-2016 academic year. To start with, **Mr. Naresh C. Jain Scholarship** is now established with his **\$100,000** generous donation.

4). *Prof. Gopal Tripathi Memorial Chair Project:*

Under the leadership of **Prof. S. N. Upadhyay** (Chemical Ph.D. 1969) and **Dr. Manu K. Vora** (Chemical 1968) as Co-Chairs, the Prof. Gopal Tripathi Memorial Chair Project was established. So far **over \$24,000** have been raised from alumni in India and USA with a target of **\$60,000**.

5). *Students and Teachers Awards*

IBGAA has honoured the teachers and students for their contribution to research and academics. A total of 66 persons were honoured. Each one of them was given a certificate and also cash award.

6) Silver Jubilee Re-Union of 1988 batch students

During this meet, more than 100 alumni from undergraduate programme had come during the month of December 2013. They cherished the fond memories of the moments they spent at IIT (BHU).

32.0 TEACHING-LEARNING CELL (TLC)

A new cell on “Teaching-Learning Cell” (T-L-C) was initiated by the Institute on December 5th to strengthen the Teaching environment of the institute by way of initiating several programs to enhance teaching-learning processes at IIT(BHU). It covers all aspects of teaching, pedagogy, laboratory projects, assessment concerning the following areas but not limited to it:

- Course Delivery
 - i. Planing of the course delivery
 - ii. Ogranizing course material using Moodle or other software support
 - iii. Designing laboratory sessions
 - iv. Dealing with large classes
 - v. Organising tutorials for courses
 - vi. Effective handling of tutors and teaching assistants
- Role of design in course
- Project based learning (within course or without)

- e-learning
 - i. Coordinate with national efforts in e-learning
 - ii. Designing MOOC type of courses etc.
- Evaluation and assessment
 - i. Designing good examinations
 - ii. Grading at the end of semester
 - iii. Evaluation projects
- Sharing best practices in teaching by effective teachers at IIT(BHU)
 - i. Running remedial programs in specific areas of weakness in teaching
 - ii. Faculty development program
 - iii. Running National program on Quality Enhancement in Engineering Education (QEEE) to run : Live Lecture, Live Tutorials, Live Labs, MOOC (Open Courseware) and Bridge Courses.
 - iv. Moodle initiatives at IIT(BHU)

Special Programs organized during year 2014

- A three days ‘Brainstorming Workshop on Humanities’ (Oct. 16 – 18, 2013) was held and it was attended by total 67 participants (30 from IIT(BHU), and 37 renowned Professors from outside) to discuss issues for starting the new Department on Humanities from the next session 2014-15.
- One day ‘Best teaching practices in Teaching-Learning’ Workshop was held for Faculty member of IIT(BHU) on Jan 27, 2014 for establishing a better understanding of ‘organising effective Tutorials & Teaching’. More than 52 faculty participated in the workshop.
- A three days ‘Brainstorming workshop on design & Innovation’(March 7 – 9, 2014) was held and it was attended by total 100 participants (70 from IIT(BHU), and 30 renowned Professors from outside) to discuss issues for starting a new project based curricula to be started from the next sessions 2014-15.
- A three days Harmony Workshop was held for all Research Scholars of the Institute during Feb 28 – March 2, 2014 for establishing a better relationship amongst students. Total 20 Participants attended the workshop.

33.0 MAIN WORKSHOP

Functioning of Main-Workshop started in 1919. It has a strong vision to act as a resource base for technical knowledge and training engineers to attain excellence in technology and to develop world-class incubation center for design, planning and realizing the innovative ideas

generated by young engineering students. The vision of the founder of Banaras Hindu University, Pt. Madan Mohan Malviyaji, regarding the engineering education in this university can be seen as stated below.

“To advance and diffuse such scientific, technical and professional knowledge combined with necessary practical training as is best calculated to help in promoting indigenous industries and in developing the material resources of the country.”

It is with this idea that Malviyaji started full scale Workshop in this engineering college, which was christened as Benaras Engineering College (BENCO). This workshop was used to produce every engineering item that was used in construction of producing machine tools – such as, Lathe and other product like electric fans, etc. This unit was providing technical assistance to Martin Burn Electricity Co. and also Diesel Locomotive Works for the maintenance and fabrication of their several items. It may kindly be noted that for a long time, this unit was a part of teaching department, i.e., the Mechanical Engineering Department. To make good use of the resources, both in terms of machines and manpower with the unit, it was providing technical and on the job technical training to less privileged section of the society. This was making extra manpower available to the University for producing useful products and taking various kinds of maintenance work, thereby saving enormous amount of money of the University. For example, the whole fleet of University vehicles was maintained by this workshop.

Activities of Main Workshop – (2013-14)

The Main Workshop of the Indian Institute of Technology (BHU) is offering the following services to the Institute/University/Outsiders.

At Institute Level

1. Training to B.Tech. Pt-I students of all branches and B.Tech. Pt-II Mech. Engg. Students to expose them to various manufacturing practice and processes.
2. Providing facilities for fabrication involved in project work to all the engineering students.
3. Helping students by way of fabricating the models and equipments for research.
4. Helping students by way of fabricating the models for Intuitional Tech. Fest & Department fest like: Technex, Comet, etc.
5. Helping students in shaping the product that come out of their creative & innovative thinking.

At the University Level

1. Providing product such as furniture etc. (for IIT Hostels, Faculty Exchange Building, etc.); switch boards to Electric & Water Supply Unit of the University, etc.
2. Providing maintenance services to the various units of the Institute and also of the University.
3. Providing technical and support services in purchase and maintenance of the University vehicles of all types.
4. Providing facilities and also the technical know-how for development of industrial and innovative products.

To Outsiders

Training to the students of other engineering colleges.

1. Providing processing and production facilities to outsiders.

STAFF DETAILS (NAME OF SHOP IN –CHARGE) - 2013-14

Sl. No.	Emp. No.	Name of Employee	Designation	Shop/Lab. & In-charges
1	13829	Dr. A. K. Jha	Professor in-charge	Deptt. of Machnical Engg.
2	18838	Dr. Santosh Kumar Mandal	Asstt. Workshop Supdt.	IIT Main workshop
3	18828	Sri L.S. Rao	Foreman	IIT Main workshop
4	18836	Sri B.Rajak	Foreman	IIT Main workshop

34.0 MAIN LIBRARY

Introduction/Outline/Goal

The Indian Institute of Technology (Banaras Hindu University), Varanasi library system consists of a Main Library, and five departmental libraries, which collectively support teaching, research and extension programs of the institute. All students, faculty members and employees of the institute are entitled to make use of the library facilities on taking library membership. The library, besides having an excellent print collection of over 1,20,000 volumes of books , journals, theses, reports, standards, pamphlets, it also provides access to over 13,000 electronic journals and more than 30,000 of electronic books and databases in science, engineering and technology.

Acquisition Unit

Collection building is one of the important functions of the library that supports academic and research work of the students, faculty, staff and other users. Library collection comprising of books, journals, theses, reports, standards, pamphlets and other reading material in science, engineering, technology, humanities, social sciences and management is considered one of

the best in the country and is its greatest asset. The total collection of library as on March 2014 stands as follows:

Collection	Added During 2012-2013	Total as on 31 March 2014
Books	646 (512 through donation)	85,555
Theses	221	221
Bound Volume of Journals	32	
Text Books (TBBL)	1,989 (128 through donation)	18,017
Text Books (ST/SC BBL)	652	8,740
Total = 3540		Total = 1,12,533 (Excluding Bound vol.)

Total Rs. 9, 44,028 were utilized and 2900 volumes (excluding donations) were added during this financial year. This year Rs. 10, 481 has been deposited against the loss of books and Rs. 12, 925 against the overdue charges. The library administration motivated retired faculty and pass out students to donate books to the library. As a result, this year library received a rare collection of humanities, religious and engineering books from the donors. The major donor was prof. D S Chuahan, Deptt. of Electrical, engineering who donated 535 books to the library.

Periodical Section

Periodical Section procures and maintains print and online journals for the academic need of the Institute. From this year, the Senate Library Committee has decided to subscribe online version of journals, if it is available. Therefore, we have subscription of very few print journals. In this financial year Rs. 86, 38,846 have been utilized for the subscription and renewal of online and print journals.

New Resources Added (During the financial year 2013-14 Journals (Print/Online))

S.No.	Name of Publishers/Journals	Mode of Access
1.	<u>ACI Structural Journal</u>	Online
2.	<u>Advanced Science, Engineering and Medicine</u>	Online
3.	<u>Advances in Applied Ceramics: Structural, Functional and Bio ceramics</u>	Online
4.	<u>Communications of the ACM</u>	Online
5.	<u>Corrosion</u>	Online
6.	<u>Drug Development and Industrial Pharmacy</u>	Online
7.	<u>Indian Geotechnical Journal</u>	Online
8.	<u>Indian Journal of Radio and Space Physics</u>	Online
9.	<u>International Materials Reviews</u>	Online
10	<u>Journal of Pharmacy and Pharmacology : An International Journal</u>	Online

	<u>of Pharmaceutical Science</u>	
11.	<u>Journal of The ACM</u>	Online
12.	<u>Mining Technology</u>	Online
13.	<u>Pharmaceutical Biology</u>	Online
14.	<u>Steel Research International</u>	Online
15.	<u>Geophysical Research Letter</u>	Online
16.	Computing Review	Online
17.	Microwave Journal	Print+Online
18.	Journal of Institution of Engineers India	Print
19.	Lubrication Science	Online
20.	Solid State Technology	Online
21.	American Ceramic Society Bulletin	Online
22.	Ceramic Industry (USA)	Online
23.	Iron & Steel Technology (USA)	Online
24.	Modern Casting	Print
25.	CIM Bulletin (CANADA)	Print
26.	Blasting & Fragmentation Journal	Print
27.	Coal International	Print
28.	Aluminum International	Print
29.	World Ceramics & Refractory's	Print
30.	Drug Development & Industrial Pharmacy	Online
31.	Welding Journals	Print
32.	Physics & Chemistry of Glasses	Print
33.	Journal of Environmental Science & Engineering (NEERI)	Print
34.	Foundry Trade Journal	Print
35.	Chemical Weekly	Print
36.	Iron & Steel Review	Print
37.	Transaction of the Indian Ceramic Society	Print
38.	Mineral & Metal Review	Print
39.	Transaction of the Indian Institute of Metal	Print
40.	Journal of Metallurgy & Material science	Print
41.	Journal of Mines, Metal & Fuels	Print
42.	<u>Emerald Engineering E Journal Collection</u>	Online
43.	Ceramic & Metal Collection (Full Text)	Online

44.	Journal of Scientific & Industrial Research (NISCAIR)	Print
45.	Indian Journal of Chemical Technology (NISCAIR)	Print
46.	ICE Current Engineering Collection	Online

Online Books

S.No	Name of Publisher	Mode of Access
1.	ASM Handbooks Complete Set	Online

Database

S.No	Name of Publisher	Mode of Access
1.	<u>Metals Abstract (METADEX)</u>	Online
2.	<u>Ceramic Abstract</u>	Online

E-Resources Accessible to Institute

The Main Library provides web-based access to more than 14,000 full text journals and 09 databases 24x7 on institute wide network as follows:

Name of Publisher/journal	Remarks
ACM Digital Library	Journals (42+), conference proceedings, magazines, newsletters, and multimedia titles.
American Society of Civil Engineers (ASCE)	Full text access of 33 journals and transactions.
Institute of Electrical and Electronic Engineers (IEEE/IEE)	126 journals from IEEE, 21 journals from IET, magazines, transactions and 900 + conference proceedings as well as active IEEE standards
ASTM Standards and Engineering Digital Library	1,000+ Special Technical Publications, 50+Manuals and Monographs and 10,000+Journal Articles.
Institution of Civil Engineers (ICE)	(ICE Virtual Library) ICE complete Engineering journals collection covers 30+ journals with their archives (2003 onwards).
Emerald (Emerald Engineering Collection)	928 Scholarly Journals (Including Engineering Collection).
Proquest - Ceramic and Metal Collection (Full Text)	3,000 periodicals, conference proceedings, technical reports, trade journal/newsletter items, patents, books and press releases. View title list
METADEX	Subject Coverage: Steels, Metals, Alloys, Compounds, Metal matrix composites, Nonferrous metals, Processing, Properties, Testing, Analysis.
American Scientific Publishers	Only one title subscribed. Advance Science, Engineering and Medicine (ASEM)
American Concrete Institute	ACI Structural Journal
Institute of Materials, Minerals and Mining	Advances in Applied Ceramics : Structural, Functional and Bio ceramics

NACE International	1. Corrosion
Indian Geotechnical Society	Indian Geotechnical Journal
	Indian Journal of Radio & Space Physics (IJRSP)
Maney Online	1. International Materials Review 2. Mining Technology
Microwave Journal	Online + print
Wiley Online Library (Selected Titles)	1. Journal of Pharmacy and Pharmacology 2. Geophysical Research Letter 3. Lubrication Science 4. Steel Research International
American Ceramic Society	1. American Ceramic Society Bulletin
Informa Healthcare	1. Drug Development and Industrial Pharmacy 2. Pharmaceutical Biology
Through UGC INFLIBNET and Central Library BHU	
American Chemical Society	Through the consortium (INFLIBNET) ACS is giving access to 38 current full-text e-journals including the ACS Legacy Archives having back files of all the journals from vol.1 issue.1
American Institute of Physics	17 full text journals.
American Physical Society	10 full text e- journals.
Annual Reviews	33 full text e-journals.
Cambridge University Press	224 current full-text e-journals.
Institute of Physics	46 full text topmost journals
JSTOR	JSTOR is giving access to 1401 full- text e-journals.
Oxford University Press	222 full- text e-journals with back files since 1998.
Portland Press	8 peer-reviewed journals have been provided with 1996 onwards back files.
Project Euclid	2002 onwards back volumes of 23 journals is accessible.
Project Muse	407 full-text journals.
Royal Society of Chemistry	29 full text journals + 6 Databases.
Sage HSS Online Journals	6 Scholarly Journals.
Science Direct	Access of more than 2000 journals
SIAM	14 full text journals
Springer Link	1950 full text journals
Taylor and Francis	1076 Scholarly Journals.
Westlaw India	300,000 full text decisions from 20 High Courts.
Wiley-Blackwell Publishing	908 Scholarly Journals
DATABASES	
Annual review	Annual review, MathScinet, SciFinder Scholar, CAB Abstract, GALE (The Making of the Modern World), Indian Citation Index, Springer Protocols (1980-2013), Web of Science,
E-BOOKS	Sage E Books, Springer E Books, Taylor & Francis E Books, Cambridge University Press, Encyclopaedia Britannica, Pearson E books.

Technical Services Unit:

Even after acute shortage of staff at technical section, we decided to switch over to DDC classification scheme from the existing CC classification scheme. More than 3500 volumes have been classified and catalogued using the classification scheme DDC. We have planned to convert all the books into DDC in due course of time.

Circulation Unit:

Main Library is open from 9am to 9 pm hrs on all working days except Sundays. The library membership increased by about 15% to more than 5000 including students, faculty and staff. From this year, the upper limit of borrowing of books for students, faculty and staff was increased by more than 50% and the loan period extended for 180 days for faculty and Group-A staff and 90 days for others.

Computer Aided Reference Service Unit:

Until date, we are not able to develop a computer aided reference service unit. However, through mail and chat we try to satisfy the user's queries and demand.

Library Automation

Library provides OPAC and circulation services using the library software "LibSys". Recently the library administration has decided to purchase the latest version of LibSys "LibSys 7.0" to make library housekeeping jobs paperless and implement RFID system in second phase.

Initiative for Digital Library

The Main library is the part of the university wide network and has adequate computing infrastructure including 60 computers to cater the needs of the users. The library home page (www.iitbhu.ac.in/library) a single window to all its resources and services, serves as a popular interface between users and the library. The library has planned to create Digital library by digitizing the rare collections of library. For this purpose, a proposal has been submitted under the 12th plan.

35.0 ANY OTHER INFORMATION/ACTIVITIES**User Education/workshop organized**

In the current situation where increasingly large numbers of resources are available in digital form, which can be access across the campus on the desktops, obviating the need to visit the physical library, user education plays a greater role to inform, alert, educate and train users about various resources of the library. During the year, Main Library organized following User Awareness programs for users.

1. Organized one-day training programme for Faculty/Research Scholar "Interactive session with Springer on Springer Materials Landolt- Börnstein at Main Library, IIT (BHU) on 16-04-2014.

2. Organized one-day training programme for Faculty/Research Scholar “Interactive session with Elsevier on the e-books and back files of science Direct Journals, at Main Library, IIT (BHU) on 06 Dec 2013.

Conference, Refresher course attended/ article published/Book chapter contribution by Staff.

This year the Asstt. Librarian participated and contributed the following:

1. “Author Workshop jointly organized by Springer and BHU” 11th Feb 2014 at Banaras Hindu University, Varanasi.
2. Contributed two chapters in Technical writing. M Lib & Inf.Sc. Block 06. Unit 1. The Editor, Editorial Process Unit 2. Editorial Tools. (In Hindi Language for Master Degree Course of Library and Information Science, Madhya Pradesh Bhoj (Open) University.
3. Upadhyay, N. & Prasad, H. N. (2013). How the Online Resources have affected the Collection Development, Policy, and Role of Library Professionals in Selection of Documents: A Case Study of IIT Libraries. *International journal of Information research*, 2 (3), 271-292.
4. Special Summer School (Equivalent to Refresher/Orientation) organized by the UGC Academic Staff College, BHU, Varanasi, May 11 to May 31, 2013.
5. PhD in Library & Information Science (2013) from the Department of Library & Information Science, Banaras Hindu University, Varanasi under the supervision of Prof. H.N. Prasad, Head Department of Library and Information Science, BHU. Topic of the research “Online Resources and their Impact on Library Collection and Library Services of IITs Library: An Evaluative Study”.

Infrastructure/facility developed during the year

1. To have proper eyes on the library users and staff, the old CCTV system has been replaced by new high-resolution IR camera with extended recording facility.
2. By re-arrangement of some sections, additional reading space with more than 80 reading capacity has been created.
3. One additional photocopy machine has been installed for the photocopying and scanning facility.
4. To provide wi-fi connectivity, three additional access points have been installed. Now all the section of library is wi-fi enabled.
5. Replaced the old EPABX system and installed additional points within the for proper communication with other staff.

36.0 TRAINING & PLACEMENT (TPO)

Introduction

The Training and Placement Cell of the Indian Institute of Technology (BHU) was developed as a separate unit in the Institute as early as 1977-78. Since its inception, the Cell is coordinating placement of final year students in various industries and research organizations and making arrangements of summer internship for B.Tech./B.Pharm/IDD/IMD students every year as part of their academic curriculum. More than 15,300 students of B.Tech./B.Pharm., IDD/IMD and M.Tech./M.Pharm./ Ph.D. have been placed through this Cell with lucrative compensation package in leading industries in the country and abroad.

Placement Activities:

Large numbers of prestigious companies, both from public and private sector, have visited our Institute and their number has greatly increased from mere 16 in 1977 to 107 in 2013-14. Though the recruitment process started only on December 07, 2013, large number of prestigious companies such as Microsoft, Adobe, Morgan Stanley, Oracle, IBM, IBM(IRL), Netapp, CISCO, Mentor Graphics, nVidia, Samsung, Atrenta, DRDO, Hindustan Unilever, BPCL, Tata Motors, Maruti Suzuki, L&T, Reliance Industries, Coal India, Citrix etc., who had been our regular visitors to the Institute, continued to show their faith in our students' performance and made good number of recruitments. There had been the first time visitors to our institute which include companies like Capital Dynamics, Optumsoft, Altair, Gwynniebee, Cvent, Fireeye, Persistent, Misys Soft, VE Commercial, Zostel, Havells and Institutes/Universities like KIIT Bhubaneswar, Tirthankar University, Vignan University etc.

This year a total of 481 job offers were received among 571 B.Tech/ B.Pharm students, 127 job offers for 144 outgoing students of IDD/IMD programmes. A total of 70 job offers have been given to postgraduate students and 03 Ph.D. scholars have also been placed. Besides, the Cell has conducted placement activities for MCA and M.Sc. (Computer Science) students of BHU and some students recruited.

The highest pay package that is offered during the academic session is Rs.60.00 Lac per annum which is from a multi-national software company.

Job offers during the academic session 2013-14

Branch	B.Tech.		IDD/IMD		M.Tech.	
	No. of Students	Offers	No. of Students	Offers	No. of Students	Offers
Ceramic Engineering	35	32	7	7	19	1
Chemical Engineering	103	58	NP*		34	4
Civil Engineering	68	35	13	13	30	15

Computer Engineering	67	64	14	14	NP*	
Electrical Engineering	86	74	17	13	47	18
Electronics Engineering	86	66	NP*		42	19
Mechanical Engineering	88	62	16	15	38	10
Metallurgical Engineering	50	29	11	8	30	1
Mining Engineering	61	57	4	3	2	0
Pharmaceutics	17	4	8	6	30	27
Biochemical Engineering	NP*		10	8	6	1
Biomedical Engineering			8	7	9	1
Material Science & Tech.			7	7	15	0
Industrial Chemistry			6	4	NP*	
Mathematics & Computing			13	12		
Engineering Physics			10	10		
Total	661	481	144	127	302	97
Grand Total	No. of Students: 1107				Total Offers: 705	

*NP - No Program

Practical Training:

The Training and Placement Cell takes care to groom our students according to the needs of the industries. We seek to open frontiers of knowledge and reveal new horizons of changes to broaden mindsets and to create positive attitudes in our students. The students are also subjected to industrial exposure by their industrial visits. The undergraduate students undergo six to eight weeks practical training in the summer vacation in reputed industries/ institutions/ organizations (in India as well as abroad) as part of their academic requirements. Even IDD/IMD and M.Tech.students are being offered six to twelve months project to be executed at the industrial premises with supervision from the Institute.

The in-plant practical training to the undergraduate students during summer vacation has been very much relevant for inculcating the professional culture and exposing the students to the work environment of industries. Such internship programme provides an opportunity to the faculty of the Institute as well to interact effectively with industries in academic, research & development and consultancy assignments. The Cell interacts on an average with around 250 industries to impart practical training to our B.Tech./B.Pharm./IDD/ IMD students for 6-8 weeks. It is a matter of great satisfaction that almost all the eligible students who are entitled to summer internship have been suitably accommodated in the appropriate industry /organization in the country. The summer training offers are also being received from research organizations abroad. Many companies are paying handful internship stipend to our students. Many of the internships are also resulting into Preplacement Offers. This year the number was 42.

Training facilities for other students:

The Institute has been magnanimous enough to accommodate students from other institutions and universities for meeting to their academic needs and more than 250 students were permitted to work in our Institute as summer interns during the session 2013-14. This has given a good exposure to our facilities around the similarly placed institutions in the country.

Awards and Scholarships:

The industrial establishments in the country have been encouraging our students through various awards and sponsorship to extra curricular activities of the students. A few of the prestigious awards/scholarships which have been bagged by our students are as follows:

Honda Yes Award, TCS Best Student Award, TCS Best Project Award, LG Best PG Student Award, TATA STEEL Stipend

37.0 Malaviya Centre for Innovation, Incubation & Entrepreneurship (MCIIE)

The institute takes keen interest in promoting entrepreneurship and innovations. Malaviya Centre for Innovation, Incubation and Entrepreneurship (MCIIE) is the centre dedicated for the cause. One of the key programmes under MCIIE is Technology Business incubator (TBI) which is supported by NSTEDB, Department of Science & Technology, Govt. of India.

The TBI nurtures potential entrepreneurial ideas by providing them requisite support and help them grow from idea stage to flourishing businesses. Under the facility promising technology start-ups are incubated and supported through mentoring, seed funding, technical guidance and networking support. Also, TBI provides office space, access to its well-equipped laboratory, shared office services, high speed internet facility and host of other services to the start-up companies in its dedicated business incubation facility.

Other initiatives under MCIIE are its Entrepreneurship Development Cell, which aims to foster a spirit of entrepreneurship in Institute's students in the region through its awareness campaigns and entrepreneurship development training programme. PRISM (Promoting Innovations in Individuals, Start-ups and MSMEs), supported by DSIR, New Delhi, which aims to scout and support grass root level innovations. The Centre also coordinates MSME programme supported by TIFAC, New Delhi which aims to act as an interface between academia and local MSME (Micro, Small & Medium Enterprises) for improved cooperation and innovations.

38.0 RESEARCH & DEVELOPMENT

1. Introduction & Goal

Research & Development unit is an important unit of any Institution. IIT (BHU) has emerged from its old structure having all facility R &D and consultancy services. There have been hike in number of projects and consultancy including patents this year.

2. Patents filed by the faculty during the financial year 2013-14

S. No	Name of Faculty Member	Patents Filed	Year of Application	Patent Status
1	Dr. Yogesh Chandra Sharma	“Maiden Approach For The Removal Of Chromium From Water Using Nano Crystalline Zirconia CBR No 8416, Application No 2425/DEL/2013	2013	Applied
2.	Dr. Rajiv Prakash et al.	Patent Application No. 3150/DEL/2013	2013	Applied
3.	Dr. P. K. Mishra, Dr. Kamal Kumar Gupta, Dr. Pradeep Srivastava	1124/DEL/2013	2013	Applied
4.	Dr. Pradeep Srivastava	A novel platform design and formulation for eco washing process of Carpets, rugs etc.	2013	Awarded
5.	Dr. Pradeep Srivastava	A novel PLA Scaffold for Bone Tissue Engineering	2013	
6.	Dr. Neeraj Sharma and Dr. Shiru Sharma	Non-Invasive Blood Glucose Meter based on Modulated Ultrasound & Optical Technique	2013	

3. Major Facilities Added during the financial year 2013-14

Information required from Professor –in-charge (R&D) under the head “Central Facilities” LC has been opened for purchasing of the following instruments in the FY.2013-14 and Instrument will arrive within 6 months:

Brand/Company	Name/Model	Amount in INR
M/s LPKF Laser & Electronics AG.	PCB Prototype LPKF Protomat S103	Rs.37,28,551.00
M/s NT-MDT Service & Logistics Ltd.	SPM (NTEGRA Prima)	Rs.1,05,23,028.00
M/s Quantum Design Inc.	SQUID Magnetometer Evercool System (Magnetic Property Measurement System)	Rs.4,42,82,610.00
M/s Rtec Instruments	Tribometer (Friction and Water Testing)	Rs.1,11,46,081.00
M/s Carl Zeiss Microscopy Ltd.	EVO-Scanning Electron Microscope	Rs.1,15,93,274.00

4. (a) Memorandum of Understanding

- i. MoU with Power Grid Corporation of India Ltd.
- ii. MoU Electrical Department, Indian Railways
- iii. MoU with Deakin University.
- iv. MoU with Emerging Technologies Pvt. Ltd., Punjab.
- v. MoU with American Society for Quality India Pvt.Ltd. (ASQ India).
- vi. MoU with WWF-India
- vii. MoU Cybermotion Technologies Pvt. Ltd., Hyderabad, India.
- viii. MoU with CSIR-IIP
- ix. MoU between CSIR-NEERI

(a) MoU under consideration:

- i. MoU with Bharat Heavy Electricals Limited (BHEL)
- ii. MoU with Illinois Institute of Technology, USA
- iii. MoU with Stemcure Pvt. Ltd. & IIT (BHU)
- iv. MoU with National University of Singapore – IRI, Singapore
- v. MoU with National Institute of Technical Teachers Training and Research (NITTTR)

5. Sponsored Projects: All the Projects are National

Sl. No.	Title of Project	PI/Co-PIs Name	Department	Name of Funding Agency	Period of the Project Sanction	Project Sanctioned Date	Total Cost of Project Amount (in Rs.)	Total Amount Received (in Rs.)	Project Code No.
1	Fractional Calculus approached Solutions for Two Dimensional Ground Water Contamination in Unsaturated Porous Media	Dr. Subir Das, P.I.	Mathematical Sciences	BRNS, BARC, Mumbai	3 Years	05.12.2013	22,95,750.00	11,16,525.00	GP/LT/DMS/13-14/01
2	DST-INSPIRE Fellow	Dr. Bratindranath Mukherjee, P.I.	Metallurgical Engg.	DST	5 Years	04.10.2013	19,00,000.00	19,00,000.00	GP/LT/Met./13-14/01
3	Effect of Mean Stress on High Cycle Fatigue (HCF) Properties of GTM-SU-718 Alloy	Prof. Vakil Singh, P.I. Dr. G. S. Mahobia, Co-P.I.	Metallurgical Engg.	DRDO	18 Months	28.02.2014	9,06,000.00	5,20,000.00	GP/LT/Met./13-14/02
4	Exploring the Effect of Processing Parameters on the Corrosion Behavior of Iron - Alumina/Zirconia Metal Matrix Nanocomposites (MMNC)	Prof. Devendra Kumar, P.I. Prof. Om Parkash, Co-P.I. Prof. M.M. Singh, Co-P.I.	Ceramic Engg.	CSIR	3 Years	22(0616)/13/EMR -II dated 26.02.2013	13,64,000.00	13,64,000.00	GP/LT/Cer./13-14/01
5	Analysis, Design and Simulation of an S-Band MIMO	Prof. P.K. Jain, P.I. Dr. M. Thottappan, Co-P.I.	Electronics Engg.	DRDO	03 Years	ERIP/ER/120304 5/M/01/1469 dated 30.05.2013	45,85,000.00	21,41,000.00	GP/LT/EC/13-14/01
6	R&D and Technology Extension Laboratory for Networked Communication & Computation	Dr. N. S. Rajput, P.I.	Electronics Engg.	Institute Project (Seed Money)	01 Year	IIT(BHU)/Budget /2013-14/2935/L dated 13/14.09.2013	15,00,000.00	15,00,000.00	IS/ST/EC/13-14/02

Sl. No.	Title of Project	PI/Co-PIs Name	Department	Name of Funding Agency	Period of the Project Sanction	Project Sanctioned Date	Total Cost of Project Amount (in Rs.)	Total Amount Received (in Rs.)	Project Code No.
7	A Versatile Bidirectional Optimal Battery Charger	Dr. Rajeev Kumar Singh, P.I. Prof. R.K. Mishra, Co-P.I. Prof. D. Singh, Co-P.I.	Electrical Engg.	SERB	2 Years	SB/S3/EECE/012 1/2013 dated 02.09.2013	20,54,400.00	15,43,200.00	GP/LT/EE/13-14/01
8	Design, Development and Performance Analysis of Silicon Carbide Converter for Aerospace Application	Dr. Santosh Kumar Singh, P.I.	Electrical Engg.	SERB	3 Years	SR/FTP/ETA- 38/2012 dated 16.08.2013	23,92,000.00	19,62,000.00	GP/LT/EE/13-14/02
9	Development of Air Breathing Microfluidic Fuel Cell for the Direct Use of Ethanol as fuel for Power Generation	Dr. Hiralal Pramanik, P.I.	Chemical Engg. & Tech.	SERB	3 Years	04.06.2013	24,69,000.00	17,95,000.00	GP/LT/ChE/13-14/01
10	DAE-Raja Ramanna Fellow	Prof. S.N. Upadhyay (Emeritus Professor), P.I.	Chemical Engg. & Tech.	DAE	12.01.2016	04.05.2013	6,00,588.00	6,00,588.00	GP/LT/ChE/13-14/02
11	DST/INSPIRE Faculty Award (IFA-12-PH-21)	Dr. S.K. Singh	Physics	DST	5 Years	01.01.2013	19,00,000.00	19,00,000.00	GP/LT/Phy/13-14/01
12	IFA-12 Ph-22 DST/INSPIRE FACULTY Award/2012 INSPIRE FACULTY AWARD	Shri Sunil Kumar Mishra	Physics	DST	5 Years	27.05.2013	19,00,000.00	19,00,000.00	GP/LT/Phy/13-14/02
13	Development of new Electrolyte materials with optimized electrical/ionic conductivity for Solid Oxide Fuel Cells	Dr. Prabhakar Singh (PI)	Physics	NRB, DRDO	3 Years	03.05.2013	24,72,360.00	16,51,580.00	GP/LT/Phy/13-14/03

Sl. No.	Title of Project	PI/Co-PIs Name	Department	Name of Funding Agency	Period of the Project Sanction	Project Sanctioned Date	Total Cost of Project Amount (in Rs.)	Total Amount Received (in Rs.)	Project Code No.
14	A Systematic Study on the Correlation Between Structural, Magnetic and Electrical Properties of Multiferroic Cd _{1-x} AxV ₂ O ₄ and Bi(Mn _{1-x} Ax) ₃ [A=Fe, Co, Ni]	Dr. Sandip Chatterjee	Physics	BRNS-DAE	3 Years	08.01.2014	19,28,000.00	16,30,250.00	GP/L/T/Phy/13-14/04
15	Study of Tool Wear in Diamond Turn Machining & Micro Machining Processes	Prof. Sandeep Kumar, P.I. Dr. U.S. Rao, Co-P.I. Dr. Amit Tyagi, Co-P.I.	Mechanical Engg.	BRNS, BARC, Mumbai	2 Years	16.02.2013	24,05,800.00	12,02,900.00	GP/L/T/ME/13-14/01
16	Development of Sheet Hydroforming Process for missile Components	Prof. Santosh Kumar, P.I.	Mechanical Engg.	DRDL	2 Years	27.02.2013	9,80,000.00	4,99,978.00	GP/L/T/ME/13-14/02
17	Technology and Fabrication of Tabletop CNC Machine for Micro-Tubular Hydroforming Setup	Prof. Santosh Kumar, P.I.	Mechanical Engg.	BRNS, BARC, Mumbai	2 Years	17.03.2014	49,32,000.00	25,11,000.00	GP/L/T/ME/13-14/03

18	Assessment of residual stress upon friction stir welding of steel	Dr. Mohd. Zaheer Khan Yusufzai, P.I.	Mechanical Engg.	SERB	3 Years	17.02.2014	45,00,000.00	38,50,000.00	GP/LT/ME/13-14/04
19	Award of Ramanujan Fellowship	Dr. Amit Kumar, P.I.	SMST	SERB	5 Years	03.07.2013	73,00,000.00	14,60,000.00	GP/LT/SMST/13-14/01
Sl. No.	Title of Project	PI/Co-PIs Name	Department	Name of Funding Agency	Period of the Project Sanction	Project Sanctioned Date	Total Cost of Project Amount (in Rs.)	Total Amount Received (in Rs.)	Project Code No.
20	DST-INSPIRE Faculty Award "Andreev Transport in Low Dimensional (1D/2D) Systems"	Dr. Amit Kumar, P.I.	SMST	DST	5 Years	02.08.2013	19,00,000.00	19,00,000.00	GP/LT/SMST/13-14/02
21	Synthesis and Characterization of Novel Segmented Polyurethane-Graphene Nanocomposites for Biomedical Applications	Prof. Pralay Maiti, P.I.	SMST	CSIR	3 Years	31.10.2012	12,01,667.00	12,01,667.00	GP/LT/SMST/13-14/03
22	Development of microfluidic tool for neuromuscular synaptogenesis and nanotoxicological studies	Dr. Sanjeev Kumar Mahato	Biomedical Engg.	DST	5 Years	DST/INSPIRE Faculty Award/2013/DST/INSPIRE/04/2013/000836 Dated 01.07.14	35,00,000.00	7,00,000.00	GP/LT/SBC/2014-15/01
23	Development and evaluation of an innovative poly herbal Bi layer wound dressing material	Dr. Pradeep Srivastava	Biochemical Engg.	DRDO	3 Years	DL/S/RD-81/48222/L/SRB-275 Dated 16.01.2014	32,03,200.00	23,63,000.00	GP/LT/SBC/2014-45/01
24	Dynamic of Ions in Tellurite Glasses of Variable Composition	Dr. Prabhaker Singh	Physics	CSIR	3 Years	04.10.2013	9,00,000.00	5,55,725.00	GP/LT/Phy/14-15/05

	Total	5,90,89,765.00	3,82,28,413.00
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6. Consultancy Projects:

Total National Consultancy of Rs.5,56,48,357.00

39.0 BOOKS PUBLISHED

Chemical Engineering

5. S N Kaoul, D N Saini, B N Rai and A K Biswas, Environmental Science, APH Publishing Corporation, New Delhi, (2013).
6. S N Kaul, B N Rai, D R Saini & Y C Sharma, Environmental Science and Engineering, Daya Publishing House, New Delhi, (2013).
7. S N Kaul, D N Saini, B N Rai & Prateek Kaul Pollution Abatement and Control, Daya Publishing House (A Division of Astral International Private Limited), New Delhi, (2014).

Chemistry

8. S.N. Kaul, D.R. Saini, Y.C. Sharma, Prateek Kaul, Bio-Energy from Waste waters, ISBN 9789351301103 , (2014).

Computer Science & Engg.

10. Rajeev Srivastava, S. K. Singh, K. K. Shukla (Editors). Research Developments in Computer Vision and Image Processing: Methodologies and Applications. IGI Global, USA, (2013).
11. Rajeev Srivastava, S. K. Singh, K. K. Shukla (Editors). Research Developments in Biometrics and Video Processing Techniques. IGI Global, USA, (2013).

Electronics Engineering

12. Shashi Tiwari, Arun Kumar Singh, S. K. Balasubramanian, W. Takashima, Keiichi Kaneto, And Rajiv Prakash, "Poly-3-hexylthiophene (P3HT)/Graphene Nanocomposite Field-Effect-Transistor as Ammonia Detector", (2014).
13. B. R. Vishvakarma, R. U. Khan, and M. K. Meshram, Microwave Circuits Theory and Applications, AXIOE Books, India, (2013).
14. B. R. Vishvakarma, R. U. Khan, and M. K. Meshram, Introduction to Microwave Measurements, AXIOE Books, India, (2012).

Mechanical Engineering

11. S.K. Shukla, Atul Dwivedi and Ali Abdulruda Farhan, "Passive building designs & CFD Applications" Lambert Academic Publishing, Germany, (2013).
12. S.K. Shukla and Prachi Rai, "Desiccant Cooling System-Performance Studies and Applications", Lambert Academic Publishing, Germany, (2013).
13. V. P. Singh, "Mechanics of Solids"; ACME Press, (2014).

27. S.K.Shukla, "Advances in Energy Engineering", Excel Publications, New Delhi, (2013).
28. S K Sinha, "Engineering Mechanics", Pearson Education Pub., New Delhi, (2014).

Pharmaceutical Engineering

16. Yadav, K.D., Reddy, K.R.C., Kumar, V. Brahmi Ghrita, Sneha kalpana in Mental Disorders. LAP Lambert Academic Publishing AG& Co. KG, Saarbrücken, Germany (2013).

40.0 BOOK CHAPTERS

Chemical Engineering

1. Kiran Singh, R S Singh, B N Rai and S N Kaul, "Biofiltration", Pollution Abatement and Control, Daya Publishing House (A Division of Astral International Private Limited), New Delhi, (2014), pp 58-80.
2. Kiran Singh, R S Singh, B N Rai, S N Upadhyay and S N Kaul, "Biofiltration of Xylene Using Wood Charcoal as Biofiler Media", in Pollution Abatement and Control, Daya Publishing House (A Division of Astral International Private Limited), New Delhi, (2014), pp 81-94.
3. R.S. Singh, B.N. Rai, Kiran Singh and S.N. Upadhyaya, "Removal of Toluene Vapour from Air Stream Using a Biofilter packed with Polyurethane Foam", in Environmental Science and Engineering, Daya Publishing House, New Delhi, (2013), pp 439-456.
4. B.N. Rai, Kiran Singh and R.S. Singh, "A Review of Aqueous Phase Catalytic Oxidation for Environmental Application," in Environmental Science and Engineering, Daya Publishing House, New Delhi, (2013), pp 439-456.
5. Kumar A. & Prasad R. Diesel soot oxidation by spinel based MCo_2O_4 catalysts. in Advances in Chemical Engineering (Eds. Amit Keshav, P. K. Chaudhari and B. Mazumdar), Ch 10, Apple Academic Press, CRC Press, Taylor & Francis Group, (2013).

Chemistry

6. I. Sinha, Liquid Phase Synthesis of Ag-Cu Alloy/ Bimetallic Nanoparticles (Vol. 2) (ISBN: 1-62699-002-6) Studium Press LLC, P.O. Box 722 200, Houston, TX 77072-USA (2013).
7. I. Sinha, "Fundamentals, Synthesis and Characterization" (Vol.8, Set on NANOTECHNOLOGY (Series ISBN: 1-62699-000-X), (2013).
8. Bhaskar Singh, Yun Liu, Yogesh C. Sharma, Biotechnological Applications of Microalgae: Biodiesel and value-added products, CRC Press (Taylor & Francis Group), USA, (2013).
9. Sushmita Banerjee, Uma, Yogesh Chandra Sharma, An economically viable removal of methylene blue(MB) by adsorption on raw saw dust(RSD), Environmental Science (Editors: S.N. Kaul, D.R. Saini, B.N. Rai, A.K. Biswas), APH Pub Corp, New Delhi (2013).

10. Sushmita Banerjee, Uma and Yogesh Chandra Sharma, Adsorption studies of Orange G from aqueous solutions by unmodified saw dust (USD), in Environmental Education (Editors: S.N. Kaul, D.R. Saini, B.N. Rai, A.K. Biswas) APH Pub Corp, New Delhi (2013).

Civil Engineering

11. V. Kumar, R. Kumar, C. Ashish & N. Kumar, “Properties of Recycled Aggregate Concentrate with Micro-silica as Partial Cement Replacement” in Pollution Abatement and Control, Daya Publishing House (Division of Astral International Pvt.Ltd. (2013).

Computer Science & Engineering

12. Shailendra Tiwari and Rajeev Srivastava, “Research and Developments in Medical Image Reconstruction Methods and its Applications,” in Research Developments in Computer Vision and Image Processing: Methodologies and Applications, R. Srivastava, S. K. Singh, K. K. Shukla (Indian Institute of Technology, (BHU), India) Eds. IGI Global, USA, Chapter No. 14, (2013), pp. 274-312.

13. Rajesh Kumar and Rajeev Srivastava, “Detection of Cancer from Microscopic Biopsy Images Using Image Processing Tools” in Research Developments in Computer Vision and Image Processing: Methodologies and Applications, R. Srivastava, S. K. Singh, K. K. Shukla (Indian Institute of Technology, (BHU), India) Eds. IGI Global, USA, Chapter No. 10, (Sept, 2013), pp. 175-194.

14. Alok Kumar Singh and Rajeev Srivastava, “Recognition of Humans and Their Activities for video Surveillance,” in Research Developments in Computer Vision and Image Processing: Methodologies and Applications, R. Srivastava, S. K. Singh, K. K. Shukla (Indian Institute of Technology, (BHU), India) Eds. IGI Global, USA, Chapter No. 9, (July, 2013), pp. 183-198

Mathematical Sciences

15. Santwana Mukhopadhyay, Shweta Kothari and Roushan Kumar, “Dual phase-lag thermoelasticity”, Encyclopedia of Thermal Stresses, R.B. Hetnarski (Ed.), Springer Science +Buisness Media, Dordrecht, (2014).

Mechanical Engineering

16. R. K. Gautam, Manvandra Kumar Singh, Anita Mohan, Sunil Mohan, “Recent Advances in Composite Materials”, Bloomsbury Publishing India Pvt. Ltd., (2013).

17. Santosh Kumar, "Metal Extrusion" in Metal Forming: Technology and Process Modeling (Edited by U.S. Dixit, R.G. Narayanan), Published by Tata McGraw Hill Education, (2013).
18. S. K. Shukla, "Applications of Solar Distillation and Solar Drying Technologies with Phase Change Material Storage" in Modern Mechanical Engineering, Springer (2013).

Pharmacy

19. Mishra B and Yadav SK, Novel approaches for brain targeted drug delivery, recent trends in novel drug delivery (Eds: Udupa N and Mutalik Srinivas). Chapter 14, Prism Books Pvt. Ltd., Bengaluru, India, (2014) pp 349-382.

Physics

21. B. N. Dwivedi, "Lecture Notes on Maxwell's Equations", LAMBERT Academic Publishing, (2013).
22. R. K. Gautam, Manvandra Kumar Singh, Anita Mohan and Sunil Mohan, Book Chapter on "Development of Copper Based Tungsten Carbide (WC) Nano - Composite and their Mechanical and Tribological Properties" in "Recent Advances in Composite Materials"(Ed. V.K.Srivastava), Bloomsbury Publishing India Pvt. Ltd., (2013), pp. 301-309.

Materials Science & Engineering

23. Sanjeev K. Pandey, Chandana Haldar, Dinesh K. Patel and Pralay Maiti, Advances in Polymer Sciences; (Eds: P.K. Dutta and Joydeep Dutta) Publisher: Springer (2013), pp 169–202.

41.0 JOURNAL PAPERS

Bio-Medical Engineering

1. Anand Kumar Pandey, Pallab Bhattacharya, Swet Chand Shukla, Sudip Paul, Ranjana Patnaik, Neuroprotective effects of Quercetin in chemical hypoxia: in-silico evaluation of the hypothesis exploring PKC inhibition mediated pharmacotherapy, *Medicinal Chemistry Research*, (2013).
2. Pallab Bhattacharya, Anand Kumar Pandey, Sudip Paul, Ranjana Patnaik, Dileep R Yavagal, Aquaporin-4 inhibition mediates Piroxicam-induced neuroprotection against focal cerebral ischemia/reperfusion injury in rodents, *PLOS ONE*, (2013).
3. Pallab Bhattacharya, Anand Kumar Pandey, Swet Chand Shukla, Sudip Paul, Ranjana Patnaik, Neuroprotection by Calpain and Matrix metalloproteinases inhibition by Piroxicam in cerebral ischemia: An in-silico study based novel hypothesis, *Medicinal Chemistry Research*, (2013).
4. Sanjay Saxena, Neeraj Sharma and Shiru Sharma, Region wise processing of an image using multithreading in multi core environment & its application in medical imaging, in *International Journal of Computer Engineering & Technology (IJCET)*. 4(4) (2013), pp.:20-30.
5. K. Chowdhury, A. Srivastava, N. Sharma, & S. Sharma, 'The influence of blood glucose level upon the transport of light in diabetic and non-diabetic subjects'. *International Journal of Biomedical and Advance Research*, 4(5) (2013), pp. 306-316.
6. A. Srivastava, Md. K. Chowdhury, S. Sharma, N. Sharma, 'Optical Clearance Effect Determination of Glucose by near Infrared Technique: An Experimental Study using An Intralipid Based Tissue Phantom', *International Journal of Advances in Engineering & Technology (IJAET)*, (July 2013), 6 (3), pp. 1097-1108.
7. Praveen Kr. Gupta, Jitendra Singh, K. N. Rai & S. K. Rai, Solution of the heat transfer problem in tissues during hyperthermia by Finite difference- decomposition method, *Applied Mathematics and Computation* , 219(12), (2013)pp. 6882-6892.

Ceramics Engineering

8. V. K. Vyas, A Sampath Kumar, Himanshu Tripathi, S. P. Singh and Ram Pyare " Effect of Cr₂O₃ addition on the bioactivity and physic-mechanical properties of 45ss bioactive glass and glass-ceramic", *International journal of Engg. Research and technology*, 3, (2014), pp. 1479-1493.
9. Nandini Jaiswal, Nitish Kumar Singh, Devendra Kumar and Om Parkash. "Ionic conductivity investigation in lanthanum (La) and strontium (Sr) co-doped ceria system, *Journal of Power Sources*, 222, (2013), pp. 230-236.

10. N. Jaiswal, S. Upadhyay, D. Kumar, O. Parkash “Sm³⁺ and Sr²⁺ co-doped ceria prepared by citrate–nitrate auto-combustion method, *International Journal of Hydrogen Energy*, 39 (1), (2014), pp.543-551.
11. Nandini Jaiswal, Shail Upadhyay, Devendra Kumar, Om Parkash “Effect of Mg and Sr co-doping on the electrical properties of ceria-based electrolyte materials for intermediate temperature solid oxide fuel cells” *Journal of Alloys and Compounds*, 577, (2013), pp.456–462.
12. Manish Kumar, S. Shankar, R.K. Kotnala, Om Parkash. “Evidences of magneto-electric coupling in BFO–BT solid solutions. *Journal of Alloys and Compounds* 577, (2013) pp,222–227.
13. Nandini Jaiswal, Shail Upadhyay, Devendra Kumar, Om Parkash “Cerium co-doped with calcium (Ca) and strontium (Sr): A potential candidate as a solid electrolyte for intermediate temperature solid oxide fuel cells” *Ionics*, 20, (2013), pp,45-54.
14. M. Srivastava, K. Kumar, N. Jaiswal, N. K. Singh, D. Kumar, O. Parkash ‘Enhanced ionic conductivity of co-doped ceria solid solutions and applications in IT-SOFCs’ *Ceramics International*, 40 (7), (2014), pp.10901-10906.
15. S Sharma, V. Singh, O. Parkash, R. K. Dwivedi, Effect of processing on dielectric properties of (0.95) PbZr_{0.52}Ti_{0.48}O₃–(0.05) BiFeO₃, *Applied Physics: A* 112 (4), (2013), pp.975-984.
16. A Maheshwari, S. B Rai, O. Parkash, D. Kumar “*Journal of Luminescence* Effect of crystallization temperature on luminescence behaviour of Er–Yb: SrO· TiO₂ borosilicate glass, 137, (2013), pp.1-5.
17. P. Gupta, D. Kumar, O. Parkash, A. K. Jha “*Bulletin of Materials Science* Structural and mechanical behaviour of 5% Al₂O₃-reinforced Fe metal matrix composites (MMCs) produced by powder metallurgy (P/M) route, 36 (5), (2013), pp.859-868.
18. C. R. Gautam, D. Kumar, O. Parkash, P. Singh, Synthesis, IR, crystallization and dielectric study of (Pb, Sr) TiO₃ borosilicate glass–ceramics, *Bulletin of Materials Science*, 36 (3), (2013), pp. 461-469.
19. P. Gupta, D. Kumar, M. A. Quraishi, O. Parkash *Advanced Science, Engineering and Medicine* Corrosion Behavior of Al₂O₃ Reinforced Fe Metal Matrix Nanocomposites Produced by Powder Metallurgy Technique 5, (4), (2013), pp.366-370.
20. C. R. Gautam, D. Kumar, O. Parkash, Controlled crystallization of (Pb, Sr) TiO₃ borosilicate glass ceramics doped with Nb₂O₅ *Glass Physics and Chemistry*, 39 (2), (2013), pp.162-173.

21. N. Singh, O. Parkash, D. Kumar Ionics Preparation and characterization of Al and La co-doped $(\text{Ce}_{1-x-y}\text{Al}_x\text{La}_y\text{O}_{2-(x+y)/2})$ ceria, 19 (1), (2013), pp.165-170.
22. K. Mohanta, A. Kumar, O. Parkash, D. Kumar Processing and properties of low cost macroporous alumina ceramics with tailored porosity and pore size fabricated using rice husk and sucrose. Journal of the European Ceramic Society, 34 (10), (2014), pp.2401-2412.
23. V. K. Mishra, S. B. Rai, B. P. Asthana, O. Parkash, D. Kumar Effect of annealing on nanoparticles of hydroxyapatite synthesized via microwave irradiation, Structural and spectroscopic studies Ceramics International, 40 (7), (2014) pp.11319-11328.
24. K. Mohanta, A. Kumar, O. Parkash, D. Kumar "Low Cost Porous Alumina with Tailored Microstructure and Thermal Conductivity Prepared using Rice Husk and Sucrose, Journal of the American Ceramic Society, (2014) .
25. A. K. Rai, J. Gim, E. Shin, H. H. Seo, V. Mathew, K. D. Mandal, O. Parkash, J. S. Lee, Effects of praseodymium substitution on electrical properties of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramics, Ceramics International 40 (1), (2014), pp.181-189.
26. A. Srivastava, P. Maiti, D. Kumar, O. Parkash Mechanical and dielectric properties of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ and La doped $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ Poly (vinylidene fluoride) composites, Composites Science and Technology 93, (2014), pp.83-89.
27. P. Gupta, D. Kumar, M. A. Quraishi, O. Parkash "Effect of Cobalt Oxide Doping on the Corrosion Behavior of Iron-Alumina Metal Matrix Nanocomposites Advanced Science, Engineering and Medicine, 5 (12), (2013), pp.1279-1291.
28. P. Gupta, D. Kumar, O. Parkash, A. K. Jha "Effect of sintering on wear characteristics of Fe- Al_2O_3 metal matrix composites" Proceedings of the Institution of Mechanical Engineers, (Part J), Journal of Engineering Tribology, 228 (3), (2014). pp.362-368.
29. P. Jha, P. Gupta, D. Kumar, O. Parkash Synthesis and characterization of Fe- ZrO_2 metal matrix composites, Journal of Composite Materials, (2013), DOI: 10.1177/0021998313494915.
30. P. Singh, O. Parkash, D. Kumar, Dielectric Behaviour of Manganese Modified Strontium Titanate Ceramics Synthesized by Solid State Ceramic Route, International Journal of Modern Physics: Conference Series 22, (2013), pp.207-216.
31. R. K. Chaturvedi, Ram Pyare, M. R. Majhi " Role of low solubility glasses as a source of plant nutrients- A review paper based on "an effort to protect fertility of land (soil) against chemical fertilizer effects", Caribbean Journal of Science and Technology, 2, (2014) pp.457-463.

Chemical Engineering

32. Maya Yadav, Navnita Srivastva, Ram Sharan Singh, Siddh Nath Upadhyay, Suresh Kumar Dubey, Biodegradation of chlorpyrifos by *Pseudomonas* sp. in a continuous packed bed bioreactor, *Bioresource Technology*, 165, (2014), pp.265-269.
33. Mohanty, P; Kabiraj, D; Mandal, RK; Kulriya, PK; Sinha, ASK; Evidence of room temperature ferromagnetism in argon/oxygen annealed TiO₂ thin films deposited by electron beam evaporation technique, *Journal of Magnetism and Magnetic Materials*,355, (2014), pp.240-245.
34. S P Pandharinath, R C Pradhan and B N Rai, A Green Separation of *Langenaria Siceraria* Seed Oil, *Industrial Crops and Products*, 52, (2014), pp.796-800.
35. S R Geed, P P Said, R C Pradhan and B N Rai, Extraction of Essential Oil from Coriander Seed, *International Journal of Food and Nutritional Sciences*, 3, (2014), pp.7-9.
36. Mondal, MK; Singh, J; Khatri, D, Equilibrium CO₂ Capture in Aqueous Blend of Trisodium Phosphate and Piperazine, *Journal of Chemical and Engineering Data*,59(4), (2014),pp.1175-1180.
37. Singla, P; Mehta, R; Berek, D; Upadhyay, SN, Ring Opening Polymerization of Lactide in a Monomode Microwave using Stannous Octoate and Dibutyltin Dimethoxide Catalysts, *Journal of Macromolecular Science (Part A-Pure and Applied Chemistry)*, 51(4),Published: APR 3 (2014), pp.350-361.
38. Shukla, AK; Upadhyay, SN; Dubey, SK, Current trends in trichloroethylene biodegradation: a review, *Critical Reviews in Biotechnology*, 34(2), (2014), pp.101-114.
39. Raghvendra ; Singh, RK; Sinha, ASK; Singh, P, Investigations on structural and electrical properties of calcium substituted LSGM electrolyte materials for IT-SOFC, *Ceramics International*,40(7), (2014), pp.10711-10718.
40. Mishra Anupama, Prasad R. Preparation and application of perovskite catalysts for diesel soot emissions control: An overview, *Catal. Rev.: Sci. & Eng.*, (2014), pp.57-81.
41. Srirapu, VKVP ; Kumar, M ; Awasthi, R ; Singh, RN; Sinha, ASK, Manganese molybdate and its Fe-substituted products as new efficient electrocatalysts for oxygen evolution in alkaline solutions, *International Journal of Hydrogen Energy*,38(31), (2013), pp.13587-13595.
42. Kumar, P ; Singh, RK; Sinha, ASK; Singh, P, Effect of isovalent ion substitution on electrical and dielectric properties of LaCrO₃, *Journal of Alloys and Compounds*,576, (2013), pp.154-160.

43. Jazie Ali A., Pramanik H., Sinha A.S.K., "Egg shell as eco-friendly catalyst for transesterification of rapeseed oil: optimization for biodiesel production," *International Journal of Sustainable Development and Green Economics*, 2(1), (2013), pp. 2315 – 4721.
44. Jazie Ali A., Pramanik H., Sinha A.S.K. "Transesterification of peanut and rapeseed oils using waste of animal bone as cost effective catalyst", *Mater Renew Sustain Energy*, (2013) 2:1, DOI 10.1007/s40243-013-0011-4
45. Bajpai, M.K. Mondal, Study on Equilibrium Solubility of CO₂ in Aqueous Mixtures of DEA and AEEA, *Journal of Chemical & Engineering Data*, 58, (2013), pp.1490-1495.
46. M. Kapur and M.K. Mondal, Mass transfer and related phenomena for Cr (VI) adsorption from aqueous solutions onto *Mangifera indica* sawdust, *Chemical Engineering Journal*, 218, (2013), pp.138-146.
47. M.K. Mondal and Vaishnava Raghunath Chelluboyana, New experimental results of combined SO₂ and NO removal from simulated gas stream by NaClO as low-cost absorbent, *Chemical Engineering Journal*, 217, (2013), pp. 48-53.
48. M.K. Mondal, V.R. Chelluboyana, J.S. Rao, Solubility of SO₂ in aqueous blend of sodium citrate and sodium hydroxide, *Fluid Phase Equilibria*, 349, (2013), pp. 56–60.
49. Verma B, Yadav V L & Srivastava K K, Experimental studies on Thermal Performance of a Pulsating Heat Pipe with Methanol/DI water, *Journal of Electronics Cooling and Thermal Control*, (3), (2013), pp. 27-34.
50. R. Prasad, Sony, Pratchi Singh. Low Temperature Complete Combustion of Lean Mixture of LPG Emissions over Cobaltite Catalysts, *Catal. Sci. Technology*, 3, pp. 3223-3233, 2013.
51. R. Prasad, Pratchi Singh. A novel route of single step reactive calcination of copper salts far below their decomposition temperatures for synthesis of highly active catalysts. *Catal. Sci. Technology*, 3, (2013), pp. 3326-3334.
52. Kamal K. Gupta, Namrata Pal, Pradeep K. Mishra, Pradeep Srivastava, Sujata Mohanty, Pralay Maiti, 5-Fluorouracil loaded poly(lactic acid)-poly(caprolactone) hybrid scaffold: potential chemotherapeutic implant, *Journal of Biomedical Materials Research(Part A)*, 'Article', doi: 10.1002/jbm.a.34932 (I F - 2.8),(2013).
53. K. K. Gupta, N. L. Singh, A. Pandey, S. Shukla, V. Mishra, S. N. Upadaya, P. Srivastava, N. P. Lalla, P. K. Mishra, Effect of Anatase/Rutile TiO₂ Phase Composition on Arsenic Adsorption , *Journal of Dispersion Science and Technology*, 34, (2013), pp.1043–1052.

54. Kamal K. Gupta, P.K. Mishra, Pradeep Srivastava, Mayank Gangwar, Gopal Nath, Pralay Maiti, Hydrothermal In-situ preparation of TiO₂ particles onto poly(lactic acid) electrospun nanofibres, *Applies Surface Science*, 264, (2013), pp.375–382 .
55. S.K. Dubey, Alpana Singh , R.S. Singh and S.N. Upadhyay “Changes in methanogenic population size and CH₄ production potential in response to crop phenology in tropical rice field,” *Soil Biology and Biochemistry*, 57, (2013), pp.972-978.
56. Singh S., Sombhatla S.S., Rai B.N., and Singh R.S., “Removal of MEK, Toluene and Xylene (MTX) from Air Using Modified Wood Charcoal Beads as Biofilter Media,” *World Journal of Environmental Biosciences*, 2(1), (2013).
57. Raisul Hasan¹, Pradyumna Ghosh, R.S. Singh, “Viscous fingering through two dimensional porous layer in microgravity environment,” *International Journal of Astrophysics and Space Science*, 1(1), (2013), pp,1-6.
58. Narang, S., Mehta, R., and Upadhyay, S.N., “Polyethylene Glycol and Montmorillonite Clay Anchored Schiff Base Ligand-metal Complexes,” *Industrial and Engineering Chemistry Research*, 52, (2013), pp. 3967-3973.
59. B. Verma, V.L.Yadav and K.K.Srivastava, Experimental study on thermal performance of pulsating heat pipe with Al₂O₃-Deionizedwater nanofluid at different orientations, *Journal of Enhanced Heat Transfer*, 20 (2), (2013),pp 153–163.

Civil Engineering

60. Rajesh Kumar, “Cost optimization of industrial buildings using genetic algorithms”, *International journal of scientific engineering and technology*, 2(3), (2013).
61. B K Patra, Rajesh Kumar, V Kumar, “Analysis of skew deck slab bridge by analytical methods”, *International journal structural engineering*, 1(4), (2013).
62. S. M. Singh and P. R. Maiti, “Experimental studies of local scour at cylindrical pier fitted with collar”, *Journal of Civil Engineering* , 3(3),(2013), pp-10-15.
63. Bala Ramudu Paramkusam, Arun Prasad and Chandra Shekhar Arya, A study on CBR Behaviour of Waste Plastic (PET) on stabilized Red Mud and Fly ash, *International Journal of Structural and Civil Engineering Research*, 2(3), (2013), pp. 232-240.

Computer Science & Engineering

64. Madhushi Verma, K. K. Shukla, A Greedy Algorithm for Fuzzy Shortest Path Problem, *International Journal of Fuzzy System Applications*, IGI Global, 3(2), (2013), pp.55-70.

65. Kavita Gupta, K K Shukla, Faster Branch and Bound Algorithms for Solving the Maximum Clique Problem, *International Journal of Advanced Research in Computer Science and Software Engineering*, 4(3), (2014), , pp.656-664.
66. Nalin Goel, K. K. Shukla, Modified Evolutionary Autonomous Agents Approach to Image Feature Extraction, *International Journal of Computer Applications*, 70(25), (2013), pp. 13-18.
67. Himani Arora, K.K.Shukla, Luc Duong, Stent Fitting using Cylindrical Affine Transformation Model for Pulmonary Artery, *International Journal of Computer Applications*, 70(19), (2013), pp, 36-41.
68. Abhijeet Kumar Sinha, K.K. Shukla,” A Study of Distance Metrics in Histogram Based Image Retrieval”, *International Journal of Computers & Technology*, 4(3) , (2013), pp. 69-78.
69. Abhishek Pandeya, R. Prasada, V.P. Singh, S.K. Jha, K.K. Shukla, Crop Parameters Estimation by Fuzzy Inference System using X-band Scatterometer Data, *Advances in Space Research*, Elsevier, 51(5), (2013), pp. 905-911.
70. Madhushi Verma, K. K. Shukla, A Greedy Algorithm for Fuzzy Shortest Path Problem , *International Journal of Fuzzy System Applications*, IGI Global, 3(2), (2013), pp.55-70.
71. S. Sah, K K Shukla, Construction and Maintenance of Virtual Backbone in Wireless Networks, *Wireless Networks*, Springer, Volume 19, Issue 5, Print ISSN 1022-0038, Online ISSN 1572-8196, (July 2013), pp. 969-984.
72. R.B.Mishra, “AI based Conceptual Frame work in Design and Development of Expert Systems”, *Journal of IMS Group*, (2013).
73. Babita pandey, R.B. Mishra, Performance index assessment of intelligent computing methods in EMG-based neuromuscular diseases, *Int. J. Knowledge Engineering and Soft Data Paradigms*, 4(1), (2013), pp,42–71.
74. Shahnawaz and R.B.Mishra, “Rule based approach for handling case markers in English to Urdu/Hindi translation”, *International Journal of knowledge engineering and soft data paradigm* , 4(2), (2013).
75. Hatem Al-Dois , A. K. Jha & R. B. Mishra (2013) “Task-based design optimization of serial robot manipulators, *Engineering Optimization*”, 45(6), (2013), pp.647-658.
76. Rajeev Srivastava, and S. Srivastava, “Restoration of Poisson noise corrupted digital images with nonlinear PDE based filters along with the choice of regularization parameter estimation”, *Pattern Recognition Letters(Elsevier Sc.)* , 34(10), (2013), pp. 1175-1185.

77. Shrikant R. Rajpurohit, Lokendra Singh Umrao, Subhash Chandra Patel and Ravi Shankar Singh. Parallel Implementation of Bicubic Interpolation Algorithm Using OpenMP on Multicore Parallel Systems, *International Journal of Information and Computation Technology*, 3(1), (2013),pp.34-37.
78. S.C.Patel, L.S.Umrao, R.S.Singh, M.Gupta and N.Trivedi. Access Control Using Mobile Verification System for Cloud, *International Journal of Information and Computation Technology*, 3(1), (2013), pp.78-81.
79. Pradeep Ch and Ravi Shankar Singh. Article: Performance Improvement of EZW Encoding through Parallelization. *International Journal of Computer Applications* 89(19), (2014), pp.21-24.
80. Srivastava, S., Sharma, N., Singh, S.K. and Srivastava, Rajeev, 'Design, analysis and classifier evaluation for a CAD tool for breast cancer detection from digital mammograms', *Int. J. Biomedical Engineering and Technology*, 13(3), (2013). pp.270–300.

Electrical Engineering

81. Sachin Kumar Gupta, Rohit Sharma and R. K. Saket , "Effect of Variation in Active Route Timeout and Delete Period Constant on the Performance of AODV Protocol", *International Journal of Mobile Communications(Inderscience Publishers,UK)*, ISSN print:1470-949X, 12(2),(2014), pp: 177-191.
82. Satyendra Pratap Singh and S.P. Singh, "Optimal PMU Placement in Power System Considering the Measurement Redundancy", *Int. J. of Advances in Electronic and Electric Engineering*, 4(6), (2014), pp. 593-598.
83. Pradeep S. Chauhan and S. P. Singh, "Optimal PMU Placement in Power System Networks Using Integer Linear Programming" *Int. J. of Innovative Research in Science, Engineering and Technology* 3(3),(2014).
84. Ashutosh Srivastava, Deepak Kumar,"Mobile Ad-hoc Networks (MANET) Performance in a Disaster Management Scenario",*IEEE Trans. Comp &ICTs* , 7(1), (2014).
85. R.Mahanty, "Indirect current controlled shunt active power filter for power quality improvement," *International Journal of Electrical Power and Energy Systems*, 62, (2014), pp.441-449.
86. Srivastava, R.K., Singh, S.K., Dwevedi, A., Golapudi S.: "PM Enhanced Sensing of Internal EMF variation- a Tool to Study PMBLDC/AC Motors", 6(4), *online Journal of Smart Sensing and Intelligent Control*, NZ, (2013), pp. 1456-78.

87. F. Guédon, S. K. Singh, R.A. Mc Mahon, and F. Udrea, “Boost Converter with SiC JFETs - Comparison with CoolMOS and Tests at Elevated Case Temperature”, IEEE Transaction of Power Electronics, 28(4), (2013), pp.1938-1945.
88. Lalam S. Sindhura, Kalpana Chaudhary, “Artificial Neural Network Implementation for Maximum Power Point Tracking of Optimized Solar Panel”, International Journal of Computer Applications, 78(10), (2013), pp.0975-8887.
89. Lokesh Varshney, R. K. Saket and Saeid Eslamian, "Power Estimation and Reliability Evaluation of MWW and SEIG Based Micro Hydro Power Generation System", International Journal of Hydrology Science and Technology (Inderscience Publishers UK), (2013), 3(2), pp: 176-191, (2013).
90. R. K. Saket, "Design Aspects and Probabilistic Approach for Generation Reliability Evaluation of MWW Based Micro Hydro Power Plant", Renewable and Sustainable Energy Review, Elsevier's SCI Journal (ISSN: 1364-0321), 28, (2013), pp: 917-929.
91. Rajeev Singh and Santanu Mishra “A Magnetically Coupled Feedback-Clamped Optimal Bi-directional Battery Charger,” IEEE Trans.On Ind. Electronics, 60(2), (2013), pp.422-432.
92. Rajeev Singh and Santanu Mishra “Synthetic Ripple Based Digital Hysteretic Modulator for Point-of-Load Converters,” IEEE Trans. on Industrial Electronics, 60(11), (2013), pp.4996-5007.
93. Deepak Kumar, J.P. Tiwari and S. K. Nagar, “Model Reduction by extended minimal degree optimal hankel norm approximation”, Applied Mathematical Modelling, Elsevier, (2013).
94. Deepak Kumar, J.P. Tiwari and S.K. Nagar, “Reducing Power system models by Hankel norm approximation technique”, Int. J. Modelling and Simulation 33(3), (2013).
95. A.K. Mishra, M. Kumar, D. Kumar & O.N. Singh ,“Comparative study of dispersion characteristics of uniaxial crystalline optical fiber under the extreme cases of helix pitch angles”, Journal of Modern Optics,DOI: 10.1080/09500340.2013.833316, (2013)
96. A.K. Mishra, M. Kumar, D. Kumar, O.N. Singh II,“Modal study of plasma cladded cylindrical optical fiber”, Journal of Electromagnetic Waves and Applications, ,DOI:10.1080/09205071,(2013).789411
97. D. K. Tanti, M. K. Verma, Brijesh Singh and O. N. Mehrotra, “Optimal placement of DSTATCOM in an Indian power system for load and voltage balancing”, International Journal of Electrical Engineering & Technology (published by

- International Association of Engineering and Management Education), 4(3), (2013), pp. 63-74.
98. B. Singh, R. Mahanty and S. P. Singh, "Optimal rescheduling of generators for congestion management and benefit maximization in a decentralized bilateral multi-transactions power network," *International Journal of Emerging Electric Power Systems*, 14(1), (2013), pp 25-32.
99. B. Singh, R. Mahanty and S. P. Singh, "Optimal power flow with benefit maximisation in coordinated bilateral power market," *International Journal of Power and Energy Conversion*, 4(3), (2013), pp 268-277.
100. Brijesh Singh, R. Mahanty and S.P. Singh, "Optimal Rescheduling of Generators for Congestion Management and Benefit Maximization in a Decentralized Bilateral Multi-Transactions Power Network", *Int. J. Emerging Electric Power Systems*, 14 (1), (2013), pp. 1-7.
101. R. K. Pandey, "Captive Power in Network Security" *Electrical & Power Review*, 1(7), (2013), pp. 26-27.

Electronics Engineering

102. Shashi Tiwari, Wataru Takashima, Sirkazhi Krithivasan Balasubramanian, Shougo Miyajima, Shuichi Nagamatsu, Shyam Sudhir Pandey, and Rajiv Prakash, "P3HT-fiber-based field-effect transistor: Effects of nanostructure and annealing temperature", *Japanese Journal of Applied Physics*, 53, (2014).
103. Shubham Paliwal, Archit Bindal & S. K. Balasubramanian "Design of Low Power and High Speed Error Tolerant Adder Cells for Digital Signal Processing Applications", *ITSI Transactions on Electrical and Electronics Engineering*, 1(6), (2013), pp. 23-26.
104. A. Gupta, R. K. Gangwar and S.P. Singh, "Three element dual segment triangular dielectric resonator antenna for X-band Applications," *Progress in Electromagnetic Research C*, 34, (2013), pp. 139-150.
105. Ravi Kumar Gangwar, S. P. Singh, Meenakshi Choudhary, D. Kumar, G. Lakshmi Narayana Rao and K. C. James Raju, "Experimental study on LTCC glass-ceramic based dual segment cylindrical dielectric resonator antenna," *Journal of Ceramics*, 2013, Article ID 906748, (2013).
106. Saba Shahin, Vineet Prakash Singh, Ritesh K. Shukla, Alok Dhawan, Ravi Kumar Gangwar, Surya Pal Singh, Chandra Mohini Chaturvedi, "2.45 GHz microwave irradiation –induced oxidative stress affects implantation or pregnancy in mice, *Mus musculus*," *Appl Biochem Biotechnol*, 169(5), (2013), pp. 1727-1751.

107. Ravi Kumar Gangwar, S.P. Singh, D. Kumar, "Four element wideband rectangular dielectric resonator antenna terminated in a bio-medium," *Wireless Personal Communications*, (2013), pp. 663-677.
108. Ravi Kumar Gangwar, S.P. Singh, D. Kumar, "Modified fractal rectangular curve dielectric resonator antenna terminated in a bio-medium," *International Journal of Signal and Imaging Systems Engineering (Inderscience Publications)*, 7(1), (2014), pp. 43-51.
109. Bhagirath Sahu, Pankaj Tripathi, Rajesh Singh and Surya Pal Singh, "Dual Segment Rectangular Dielectric Resonator Antenna with Metamaterial for Improvement of Bandwidth and Gain" *International Journal of RF and Microwave Computer-Aided Engineering*, (2014), DOI: 10.1002/mmce.20808.
110. M. S. Chauhan, M. V. Swati and P. K. Jain, "PIC Simulation of a 35 GHz, 200 kW Gyrokystron," *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, 12(2), (2013), pp. 353-362.
111. M. V. Swati, Rajeev Sharma, M. S. Chauhan and P. K. Jain, "Multimode Simulation and Analysis of Two Cavity Gyrokystron", "INROADS(International Journal of Jaipur National University), 3(1), (2014), pp. 254-257.
112. M. Thottappan, Surya Prakash Singh and P. K. Jain, "Analysis and PIC Simulation of Gyrotron Travelling Wave Tube Amplifier", *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, 12(2), (2013), pp. 70-87.
113. M. Thottappan and P. K. Jain, "Analysis, Design and Simulation of Metal PBG Waveguide", *International Journal of Microwave and Optical Technology*, 8(2), (2013), pp. 61-78.
114. Sunny Kr. Paswan, M. S. Chauhan, M. V. Swati and P.K. Jain, "Analytical Studies of a Five-Cavity, 140 GHz Gyrokystron Amplifier," *INROADS (An International Journal of Jaipur National University)*, 3(1), (2014), pp. 153-156.
115. Smrity Dwivedi, and P. K. Jain, "Magnetically Insulated Line Oscillator (MILO) Performance Study and Its Parameter Optimization," *IEEE Transaction on Plasma Science*, 41(9), (2013), pp. 2532-2538.
116. Smrity Dwivedi and P. K. Jain , " Design Expressions for the Magnetically Insulated Line Oscillator, *IEEE Transactions on Plasma Science*, 41(5), (2013), pp. 1549-1556.
117. Smrity Dwivedi and P. K. Jain, "International Journal of Microwave and Optical Technology", 8(3), (2013), pp. 129-137.
118. Purnima Hazra, S. K. Singh and S. Jit "Ultraviolet photodetection properties of ZnO/Si heterojunction diode fabricated by ALD technique without using a buffer

- layer”, *Journal of Semiconductor Technology and Science*, 14(1), (2014), pp. 117-123.
119. Purnima Hazra and S. Jit, “p-Silicon nanowire/n-ZnO thin film heterojunction diode prepared by thermal evaporation technique”, *Journal of Semiconductors*, 35(1), (2014).
 120. Abirmoya Santra, Mirgender Kumar, Sarvesh Dubey, S. Jit and Pramod Kumar Tiwari, “Analytical modeling of threshold voltage of stacked Triple-Material-Gate (TMG) Strained-Si (s-Si) on Silicon-Germanium-on-Insulator (SGOI) MOSFETs,” *Journal of Active and Passive Electronic Devices*, 9(2-3), (2014), pp.235-257.
 121. Gopi Krishna S., Abirmoya Santra, Mirgender Kumar, Sarvesh Dubey, S. Jit, Pramod Kumar Tiwari, “Analytical subthreshold current and subthreshold swing models for a short-channel dual-metal-gate (DMG) fully depleted recessed-source/drain (Re-S/D) SOI MOSFET,” *Journal of Computational Electronics*, 13, pp.467-476, 2014
 122. Aniruddh Bahadur Yadav, Amritanshu Pandey and S. Jit, “Annealing-Temperature Effects on the Properties of ZnO Thin Films and Pd/ZnO Schottky Contacts Grown on n-Si (100) Substrates by Vacuum Deposition Method,” *Superlattices and Microstructures*, 71, (2014), pp. 250-260.
 123. Divya Somvanshi and S. Jit, “Mean Barrier Height and Richardson Constant for Pd/ZnO Thin Film Based Schottky Diodes Grown on n-Si Substrates by Thermal Evaporation Method,” *IEEE Electron Device Letters*, 34(10), (2014), pp.1238-1240.
 124. Aniruddh Bahadur Yadav, C.Periasamy, Sudipta Bhaumik and S. Jit, “Room-Temperature Hydrogen Gas Sensing Properties of Pd/ZnO Thin Films Grown on n-Si<100> Substrates by Thermal Evaporation and Sol-Gel Techniques: A Comparative Study,” *Indian Journal of Pure and Applied Physics*, 51, (2013), pp.792-799.
 125. Divya Somvanshi, Amritanshu Pandey and S. Jit, “Ultraviolet Detection Characteristics of Pd/n-ZnO Thin Film Schottky Photodiodes Grown on n-Si Substrates,” *Journal of Nanoelectronics and Optoelectronics*, 8, (2013), pp. 349-354.
 126. Sarvesh Dubey, A. Mirgender Kumar, Pramod Kumar Tiwari, and S. Jit, “Analytical Modeling of Threshold Voltage of Short-Channel Strained-Si on Silicon-Germanium-on-Insulator (SGOI) MOSFETs with Localized Charges,” *Journal of Computational and Theoretical Nanoscience*, 11(1), (2014), pp. 165-172.
 127. Purnima Hazra and S. Jit, ” An In-House Approach for Fabrication of Silicon Nanowire Arrays using Electroless Metal Deposition and Etching Method,”

International Journal of Surface Science and Engineering, 7(3), (2013), pp.285 – 294.

128. Mirgender Kumar, Sarvesh Dubey, Pramod Kumar Tiwari and S. Jit, “Analytical Models of Subthreshold Current and Swing of Short-Channel Strained-Si (s-Si) on Silicon-Germanium-on-Insulator (SGOI) MOSFETs,” Superlattices and Microstructures, 58, (2013), pp. 1-10.
129. Purnima Hazra and S. Jit, “Studies on ZnO/Si heterojunction diode Grown by ALD Technique,” Journal of Nanoelectronics and Optoelectronics, 8(4), (2013), pp. 378-382
130. Mirgender Kumar, Sarvesh Dubey, Pramod Kumar Tiwari and S. Jit, “Analytical Modeling and Simulation of Subthreshold Characteristics of Back-Gated SSGOI and SSOI MOSFETs: A Comparative Study,” Current Applied Physics, 13, (2013), pp.1778-1786.
131. Purnima Hazra and S. Jit, “p-Si Nanowires/n-ZnO Thin Film Based Core-Shell Heterojunction Diodes with Improved Effective Richardson Constant,” Journal of Nanoscience and Nanotechnology, 14(7), (2014), pp. 5380-5385.
132. Mirgender Kumar, Sarvesh Dubey, Pramod Kumar Tiwari and S. Jit, “Two-Dimensional Modeling of Subthreshold Current and Subthreshold Swing of Double-Material-Gate (DMG) Strained-Si (s-Si) on SGOI MOSFETs,” Journal of Computational Electronics, 12, (2013), pp.275-80.
133. Shantanu Sarangi, Shiv Bhushan, Abirmoya Santra, Sarvesh Dubey, Pramod Kumar Tiwari, and S. Jit, “A rigorous simulation based study of gate misalignment effects in gate engineered double-gate (DG) MOSFETs,” Superlattices and Microstructures, 60, (2013), pp. 263-279.
134. Gopi Krishna S., Abirmoya Santra, Sarvesh Dubey, S. Jit, and Pramod Kumar Tiwari, “An analytical threshold voltage model for a short-channel dual-metal-gate (DMG) recessed- source/drain (Re-S/D) SOI MOSFET” Superlattices and Microstructures, 60, (2013), pp.580-595.
135. Sarvesh Dubey, P.K.Tiwari and S. Jit, “On-Current Modeling of Short-Channel Double-Gate (DG) MOSFETs with a Vertical Gaussian-like Doping Profile,” Journal of Semiconductors, 34(5), (2013), pp.1-8.
136. Mirgender Kumar, Sarvesh Dubey, Pramod Kumar Tiwari and S. Jit, “An Analytical Model of Threshold Voltage for Short-Channel Double-Material-Gate (DMG) Strained-Si (s-Si) on Silicon-Germanium-on-Insulator (SGOI) MOSFETs,” Journal of Computational Electronics, 12, (2013), pp.20-28.

137. Hari Shankar Singh, Mayank Agarwal, Gaurav Kumar Pandey, and Manoj Kumar Meshram, "A Quad-Band Compact Diversity Antenna for GPS L1/Wi-Fi/LTE2500/WiMAX/HIPERLAN1 Applications," *IEEE Antenna and Wireless Propagation Letters*, 13 (2014), pp. 249-252.
138. Mayank Agarwal, Rajesh Singh, and Manoj K. Meshram, "Linearly Polarized Planar Inverted F-Antenna for GPS and WiMAX Applications", *IET Microw. Antennas Propag.*, 7(12), (2013), pp. 991–998.
139. Hari Shankar Singh, Bhaskarareddy Meruva, Gaurav Kumar Pandey, Pradutt Kumar Bharti, and Manoj Kumar Meshram, "Low Mutual Coupling between MIMO Antennas by using two Folded Shorting Strips" *Progress In Electromagnetics Research B*, 53 (2013), pp. 205-221.
140. Gaurav K. Pandey, Hari S. Singh, Pradutt K. Bharti, and Manoj K. Meshram, "Design of WLAN Band Notched UWB Monopole Antenna with Stepped Geometry Using Modified EBG Structure", *Progress In Electromagnetics Research B*, 50 (2013), pp. 201-217.
141. Pradutt K. Bharti, H. S. Singh, G. K. Pandey, and M. K. Meshram, "Slot Loaded Tri Band Microstrip Antenna for Wireless Applications" *International Journal of Microwaves and Optical Technology*, 8(3), (2013), pp. 120-128.
142. Pradutt K. Bharti, H. S. Singh, G. K. Pandey, and M. K. Meshram, "Slot Loaded Microstrip Antenna for GPS, Wi-Fi, and WiMAX Applications" *International Journal of Microwaves Applications*, 2(2), (2013), pp. 45-50.
143. M.Thottappan, Surya Prakash Singh and P.K.Jain, "Analysis and PIC Simulation of Gyrotron Travelling Wave Tube Amplifier", *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, 12(2), (2013), pp. 70-87.
144. M.Thottappan and P.K.Jain, "Analysis, Design and Simulation of Metal PBG Waveguide", *International Journal of Microwave and Optical Technology*, 8(2), (2013), pp.61-68.

Materials Science & Technology

145. Anar Singh, Anatoliy Senyshyn, Hartmut Fuess, Shane J. Kennedy, and Dhananjai Pandey, "Magnetic transitions and site-disordered induced weak ferromagnetism in (1-x)BiFeO₃-xBaTiO₃" *Phys Rev: B*, 89, (024108), (2014).
146. Ravindra Singh Solanki, S. K. Mishra, Yoshihiro Kuroiwa, Chikako Moriyoshi, and Dhananjai Pandey, "Evidence for a tricritical point coinciding with the triple point in (Pb_{0.94}Sr_{0.06})(Zr_xTi_{1-x})O₃: A combined synchrotron x-ray diffraction, dielectric, and Landau theory study" *Phys Rev :B*, 88, (184109), (2013).

147. Jay Prakash Patel, Anatoliy Senyshyn, Hartmut Fuess, and Dhananjai Pandey, "Evidence for weak ferromagnetism, isostructural phase transition, and linear magneto-electric coupling in the multiferroic $\text{Bi}_{0.8}\text{Pb}_{0.2}\text{Fe}_{0.9}\text{Nb}_{0.1}\text{O}_3$ solid solution" *Phys Rev: B*, 88, (104108), (2013).
148. Anar Singh, Chikako Moriyoshi, Yoshihiro Kuroiwa, and Dhananjai Pandey, "Evidence for local monoclinic structure, polarization rotation and morphotropic phase transitions in $(1-x)\text{BiFeO}_3-x\text{BaTiO}_3$ solid solutions: A high-energy synchrotron x-ray powder diffraction study" *Phys Rev B* 88, 024113, (2013).
149. Anar Singh, Chikako Moriyoshi, Yoshihiro Kuroiwa and Dhananjai Pandey, "Visualization of Bi^{3+} off-centering in the average cubic structure of $(\text{Ba}_{0.70}\text{Bi}_{0.30})(\text{Ti}_{0.70}\text{Fe}_{0.30})\text{O}_3$ at the electron density level" *Appl. Phys. Lett.* 103 (121907), (2013).
150. Shuvrajyoti Bhattacharjee, Anatoliy Senyshyn, Hartmut Fuess and Dhananjai Pandey, "Morin-type spin-reorientation transition below the Neel transition in the monoclinic compositions of $(1-x)\text{BiFeO}_3-x\text{PbTiO}_3$: A combined dc magnetization, x-ray, and neutron powder diffraction study" *Phys Rev: B*, 87, (054417), (2013).
151. Sanjay Singh, J Nayak, Abhishek Rai, Parasmani Rajput, Adrian H Hill, S R Barman and Dhananjai Pandey, "(3 + 1)D superspace description of the incommensurate modulation in the premartensite phase of Ni_2MnGa : a high resolution synchrotron x-ray powder diffraction study" *J. Phys.: Condens. Matter*, 25, (212203), (2013).
152. Ravindra Singh Solanki, Sunil Kumar Mishra, Anatoliy Senyshyn, Songhak Yoon, Sunggi Baik, Nansoo Shin and Dhananjai Pandey, "Confirmation of the monoclinic Cc Space group for the ground state phase of $\text{Pb}(\text{Zr}_{0.525}\text{Ti}_{0.475})\text{O}_3$: A combined synchrotron X-ray and neutron powder diffraction study" *App. Phys. Lett.* 102, (052903), (2013).
153. K. Singh, Rajiv Prakash, Dhananjai Pandey, "A comparative thermal, optical, morphological and mechanical properties studies of pristine and C15A nanoclay-modified PC/PMMA blends: a critical evaluation of the role of nanoclay particles as compatibilizers" *RSC Advances* 3, (15411), (2013).
154. Madhu Tiwari, Sandeep Gupta and Rajiv Prakash, One pot synthesis of coordination polymer 2,5-dimercapto-1,3,4-thiadiazole-gold and its application in voltammetric sensing of resorcinol. *RSC Adv.*, 4, (2014).
155. Ashish Kumar, Wataru Takashima, Keiichi Kaneto and Rajiv Prakash, Nano-dimensional Self Assembly of Regioregular Poly (3-hexylthiophene) in Toluene: Structural, Optical, and Morphological Properties, *J. Appl. Polym. Sci.*, 131, (2014).

156. Shashi Tiwari, Wataru Takashima, Sirkazhi Krithivasan Balasubramanian, Shougo Miyajima, Shuichi, Nagamatsu, Shyam Sudhir Pandey, and Rajiv Prakash, P3HT-fiber-based field-effect transistor: Effects of nanostructure and annealing temperature. *Japanese Journal of Applied Physics* 53, (2014).
157. K. Singh, S. K. Singh, Bipin Kumar Gupta, Rajiv Prakash and S. B. Rai, Lanthanide doped dual-mode nanophosphor as spectral converter for promising next generation solar cells, *Science of Advanced Materials*, 6, (2014), pp.4005-4012.
158. Shashi Tiwari, W. Takashima, S.K. Balasubramaniam, S. Miyajima, S. Nagamatsu, S.S. Pandey and Rajiv Prakash, P3HT-fiber-based field-effect transistor: Effects of nanostructure and annealing temperature. *Japanese J. Applied Physics*, 53, (2014).
159. R. K. Pandey, Syougo Miyajima, Shuichi Nagamatsu, Rajiv Prakash, Wataru, Takashima, Shuzi Hayase and Keiichi Kaneto, Fabrication of Large-scale Drop-cast Films of π -conjugated Polymers with Floating-film Transfer Method, *Dauendorffer Arnaud, Trans. Mat. Res. Soc. Japan*, 38, (2013), pp.305-308.
160. Rajiv K. Pandey, Chandan Upadhyay and Rajiv Prakash, Pressure Dependent Surface Morphology and Raman Studies of Semicrystalline Poly(indole-5-carboxylic acid) by Langmuir Blodgett Technique. *RSC Advances*, 3, (2013), pp.15712-15718.
161. Rajiv K. Pandey, Wataru Takashima, Shuichi Nagamatsu, Arnaud Dauendorffer, K.Kaneto and Rajiv Prakash, Macroscopic Self Ordering of Solution Processible Poly(3,3'-dialkylquaterthiophene) by Floating Film Transfer Method, *J Applied Physics*, 114, (2013).
162. Ashish Kumar, Leela Joshi and Rajiv Prakash, Electro-Catalytic Performance of Interfacially Synthesized Au-Polyindole Composite towards Formic Acid Oxidation, *ACS Industrial & Engineering Chemistry Research* 52, (2013), pp. 9374-9380.
163. Gopal Ji, Priyanka Dwivedi, Shanthi Sundaram and Rajiv Prakash, Inhibitive Effect of Chlorophytum Borivilianum Root Extract on Mild Steel Corrosion in HCl and H₂SO₄ Solutions, *Industrial & Engineering Chemistry Research*, 52, (2013) pp. 10673-10681.
164. Aditya Kumar Singh, Gopal Ji, Rajiv Prakash, Eno E. Ebenso, Ashish Kumar Singh, Cephamycin; A Novel Corrosion Inhibitor for Mild Steel Corrosion in HCl Acid Solution, *Int. J. Electrochem. Sci.*, 8, (2013), pp. 9442-9448.
165. Joshi and Rajiv Prakash, Synthesis of Conducting Poly(5-carboxyindole)/Au Nanocomposite: Investigation of Structural and Nanoscale Electrical Properties, *Leela Thin Solid Films*, 534, (2013), pp. 120-125.

166. K. Singh, S. K. Singh, Bipin Kumar Gupta, Rajiv Prakash and S. B. Rai, Probing a highly efficient dual mode: down–upconversion luminescence and temperature sensing, performance of rare-earth oxide phosphors, *Dalton Transactions*, 42, (2013), pp.1065-1072.
167. Nira Misra, Vakil Singh, Swati Srivastava, Partha Roy, Kausik Dana and Pralay Maiti, Bone cement based nanohybrid as super biomaterial for bone healing, Govinda Kapusetti, *Journal of Materials Chemistry B*, 2(25), (2014), pp.3984-3997.
168. Anshuman Srivastava, Pralay Maiti, Devendra Kumar and Om Parkash, Mechanical and dielectric properties of CaCu₃Ti₄O₁₂ and La doped CaCu₃Ti₄O₁₂ Poly (vinylidene fluoride) composites, *Composites Science and Technology*, 93, (2014), pp. 83-89.
169. Abhinay Mishra, Sunil K. Singh, Debabrata Dash, Vinod K. Aswal, Biswajit Maiti, Manjusri Misra and Pralay Maiti, Self-assembled Aliphatic Chain Extended Polyurethane Nanobiohybrids: Emerging Hemocompatible Biomaterials for Sustained Drug Delivery, *Acta Biomaterialia* 10, (2014), pp. 2133–2146.
170. Kamal K. Gupta, Namrata Pal, Pradeep K. Mishra, Pradeep Srivastava, Sujata Mohanty, Pralay Maiti, 5-Fluorouracil loaded poly(lactic acid)-poly(caprolactone) hybrid scaffold: potential chemotherapeutic implant, *Journal of Biomedical Materials Research: Part A* 102A, (2014), pp. 2600–2612.
171. Vimal Tiwari, Amit Prasad, Vaishali Singh, Karun Jana, Manjusri Misra, C. Durga Prasad, Pralay Maiti, Nanoparticle and Process Induced Super Toughened Piezoelectric Hybrid Materials: The Effect of Stretching on Filled System, *Macromolecules* 46, (2013), pp. 5595–5603.
172. Narendra K. Singh, Sunil K. Singh, Debabrata Dash, Prasad Gonugunta, Manjusri Misra, Pralay Maiti, CNT Induced β -phase in Polylactide : Unique Crystallization, Biodegradation and Biocompatibility", *Journal of Physical Chemistry C* 117 (2013), pp. 10163-10174.
173. Govinda Kapusetti, Raghvendra Raman Mishra, Swati Srivastava, Nira Misra, Vakil Singh, Partha, Roy, Santhosh Kumar Singh, Chanchal Chakraborty, Sudip Malik, Pralay Maiti, Layered double hydroxide induced advancement in joint prosthesis using bone cement: The effect of metal substitution, *Journal of Materials Chemistry B* 1, (2013) , pp. 2275-2288.
174. Karun Kumar Jana, Niraj Kumar Vishwakarma, Biswajit Ray, Saif A. Khan, Devesh K. Avasthi, Manjusri Misra and Pralay Maiti, Nanochannel Conduction in Piezoelectric Polymeric Membrane using Swift Heavy Ions and Nanoclay, *RSC Advances* 3, (2013), pp. 6147-6159.

175. Mukty Sinha, Rathindra M. Banik, Chandana Halder, Pralay Maiti, Development of ciprofloxacin hydrochloride loaded poly(ethylene glycol)/chitosan scaffold as wound dressing, *Journal of Porous Materials* 20, (2013), pp. 799-807.
176. Niraj Kumar Vishwakarma, Avnish Kumar Mishra, Abhinay Mishra, Tapas Paira, Vijay Kumar, Patel, Chandra Sekhar Biswas, Tarun Kumar Mandal, Pralay Maiti and Biswajit Ray, Synthesis, Characterization, and application of novel Amphiphilic Poly (D- gluconamidoethylmethacrylate) -b-polyurethane-b-poly (D- gluconamidoethyl methacrylate) triblock Copolymers, *Journal of Applied Polymer Science* 128(3), (2013), pp. 1369-1380.
177. Vijay Kumar Patel, Niraj Kumar Vishwakarma, Avnish Kumar Mishra, Chandra Sekhar Biswas, Pralay Maiti & Biswajit Ray, Synthesis of Alkyne-terminated Xanthate RAFT Agents and Their Uses for the Controlled Radical Polymerization of N-Vinylpyrrolidone and the Synthesis of Its Block Copolymer Using Click Chemistry, *Journal of Applied Polymer Science* 127(6), (2013), pp. 4305-4317.
178. Narendra. K. Singh, Biswa Pratim Das Purkayastha, Muktikanta Panigrahi, Rajeev K. Gautam, Rathindra M. Banik & Pralay Maiti, Enzymatic Degradation of Polylactide/Layered Silicate Nanocomposites: Effect of Organic, Modifiers, *Journal of Applied Polymer Science*, 127(4), (2013), pp. 2465-2474.
179. Kamal K. Gupta, Pradeep K. Mishra, Pradeep Srivastava, Mayank Gangwar, Gopal Nath & Pralay Maiti, Hydrothermal in-situ preparation of TiO₂ particles onto poly(lactic acid) electrospun nanofibres, *Applied Surface Science* 264, (2013), pp. 375– 382.
180. Vimal K. Tiwari, Narendra K. Singh, Devesh K. Avasthi, Manjusri Misra, and Pralay Maiti, Swift Heavy Ions Induced Controlled Biodegradation of Poly(ϵ -caprolactone) Nanohybrids, *Radiation Physics and Chemistry*, 82, (2013), pp.92–99.
181. P Mohanty, V P Singh, N C Mishra, S Ojha, D Kanjilal and Chandana Rath, Evolution of structural and magnetic properties of Co doped TiO₂ thin films irradiated with 100 MeV Ag⁷⁺ ions, *J. Physics D: Applied Physics*, 47, (2014).
182. D. Kumar, P. Mohanty, V.P. Singh, A.Banerjee, V. Ganeshan and Chandana Rath, Tuning of magnetic transition temperatures in nanoparticles of CoCr₂O₄ multiferroic by B-site mixing, *Materials Research Bulletin*, 54, (2014), pp.78–83.
183. V. P. Singh, S.B. Rai, H. Misra and Chandana Rath, Stabilization of High Temperature Hexagonal Phase of SrAl₂O₄ at Room Temperature: Role of ZnO, *Dalton Transactions*, 43 (14), (2014), pp. 5309 – 5316.
184. V.P. Singh, R.K. Singh, D. Das and Chandana Rath, Defects in Zn_{1-x-y}Co_xMg_yO Nanoparticles: Probed by XRD, *J. Magn. Mater* 355 (2014), pp. 240-245.

185. V.P. Singh, R.K. Singh, D. Das and Chandana Rath, RAMAN and PAS Techniques, *Materials Science in Semiconductor Processing* 16, (2013), pp. 659-666.
186. P Mohanty, S Saravanakumar, TiO₂ Nanowires Grown from Nanoparticles: Structure and Charge Density Study R Saravanan and Chandana Rath, *J. Nanoscience and Nanotechnology*, 13 (2013) ,pp.1-7.
187. P Mohanty, V.Ganeshan, and Chandana Rath, Room Temperature Ferromagnetism in Ti_{0.985}Co_{0.015}O_{2-δ} Thin Films Grown by Pulsed Laser Deposition Technique, *Materials Science Forum*, 760 (2013) pp.1-7.
188. V.P. Singh, D. Das and Chandana Rath, Hydrogen related defect complexes in ZnO nanoparticles examined through FTIR, Raman and PAS measurements, *Materials Research Bulletin* ,48 (2013), pp.682-686.
189. S. J. Mills, A. G. Christy, O. Guérin, A. J. Herbillon, E. Kuzmann, G. Ona-Nguema, C. Ruby & Chandan Upadhyay, Mössbauerite, Fe₃+O₄(OH)₈[CO₃]₃H₂O, the fully oxidized 'green rust' mineral from Mont Saint-Michel, Bay, France, J.-M. R. Génin, *Mineralogical Magazine*, 78 (2014) DOI: 10.1180/minmag.2014.078.2.14 (Earth/Environmental Science)
190. Rishikesh Pandey, Ravi Kiran Pillutla, Uma Shankar and Akhilesh Kumar Singh, "Absence of Tetragonal Distortion in (1-x)SrTiO₃-xBi(Zn_{1/2}Ti_{1/2})O₃ Solid Solution", *Appl. Phys.* 113, (2013).
191. Jyoti Sharma, Rishikesh Pandey, and Akhilesh Kumar Singh, "Synthesis and structural characterization of highly tetragonal (1-x)Bi(Zn_{1/2}Ti_{1/2})O₃-xPbTiO₃ piezoceramics", *AIP Conf. Proc.*, 1512, (2013), 92-93.
192. Rishikesh Pandey, Braj Raj Meena and Akhilesh Kumar Singh, "Structural and dielectric characterization on multiferroic xNi_{0.9}Zn_{0.1}Fe₂O₄/(1-x)PbZr_{0.52}Ti_{0.48}O₃ particulate composite", *Journal of Alloys and Compounds*, 593 (2014), pp. 224–229.
193. Satyendra Singh, Vineet Gupta, B.C. Yadav, Poonam Tandon & Akhilesh Kumar Singh, "Structural analysis of nanostructured iron antimonate by experimental and quantum chemical simulation and its LPG sensing", *Sensors and Actuators: B*, 195 (2014), pp. 373–381.
194. Rishikesh Pandey, Ashish Tiwari, Ashutosh Upadhyay and Akhilesh Kumar Singh, "Phase Coexistence and the Structure of the MPB Region in (1-x)Bi(Mg_{1/2}Zr_{1/2})O₃-xPbTiO₃ Solid Solution", *Acta Materialia*, 76 (2014), pp.198–206.

195. Ashutosh Upadhyay, Rishikesh Pandey, Shashwat Anand, and Akhilesh Kumar Singh, Synthesis and structural studies on $(1-x)$ Bi $(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3-x\text{PbTiO}_3$ piezoceramics, AIP Conf. Proc., 1591, (2014), pp. 79-80.
196. A Upadhyay, AK Singh, A Kumar, "Electronic structure and stability of hydrogen defects in diamond and boron doped diamond: A density functional theory study", Computational Materials Science, 89, (2014) pp. 257-263.
197. Rishikesh Pandey and Akhilesh Kumar Singh, "Presence of a Monoclinic (Pm) Phase in the Morphotropic Phase Boundary Region of Multiferroic $(1-x)\text{Bi}(\text{Ni}_{1/2}\text{Ti}_{1/2})\text{O}_3-x\text{PbTiO}_3$ Solid Solution: A Rietveld Study", Appl. Phys., 116, 044102 (2014).

Mathematical Sciences

198. T. Som, S. Biswas, A New Method for Face Recognition using Feature Clustering with Fuzzy Parameters, J. Math. Comp. Sci., 7(3), (2013), pp. 181-195.
199. H. Rajput, T. Som & S. Kar, Offline character recognition using monte carlo method and neural network, International Journal of Artificial Intelligence & Applications (IJAA), 4(3) (2013), pp. 23-38.
200. T. Som & D. Rout, On Hesitant Soft Relations, International Journal of Advanced Research, 1(5) (2013), pp. 341-346.
201. H. Rajput, T. Som & S. Kar, An Approach for feature extraction of alpha-numeric by using Snakes and Principal Component Analysis for its recognition, International Journal of Artificial Intelligence and Mechatronics, 2(2) (2013), 31-36.
202. P. K. Singh, T. Som, K. Vishal & V. S. Pandey, An analytic algorithm for fractional order $(2+1)$ dimensional coupled Burgers' system model, Nonlinear Sci. Letter A: 4(4) (2013), pp. 98-111.
203. A. Choudhury & T. Som, Some fixed point results for asymptotically commuting mappings in uniformly convex Banach space, Bull. Cal. Math. Soc., 105 (2013), 105(2013).
204. S. Sah & T. Som, Recognition of Handwritten Characters Using Cosine Measure, Advances in Computational Sciences and Technology, 6(2), (2013), pp. 111-119.
205. L. P. Singh, S. D. Ram & D. B. Singh, The influence of magnetic field upon the collapse of a cylindrical shock wave Meccanica, 48(4) (2013), pp. 841-850.
206. Shikha Gaur and L. P. Singh, Wavelet based adaptive solution of elliptic operator equations, International Journal of Advancements in Research and Technology 2(5), (2013), pp. 88-93.

207. Shikha Gaur, L. P. Singh, Vivek Singh & P. K. Singh, Wavelet based multiscale scheme for two-dimensional advection-dispersion equation *Applied Mathematical Modelling*, 37(6), (2013), pp. 4023-4034.
208. S. D. Ram, R. Singh and L. P. Singh, An Exact Analytical Solution of the Strong Shock Wave Problem in Nonideal Magnetogasdynamics, *Journal of Fluids*, Article ID 810206 (2013), pp.1-4.
209. R. Singh, L.P. Singh and S.D. Ram, Acceleration waves in non-ideal magnetogasdynamics:A, in *Shams Eng J*, 5 (1) (2014), pp.309-313.
210. Dharmendra Tripathi, S. K. Pandey and O. Anwar Bég, Mathematical modelling of heat transfer effects on swallowing dynamics of viscoelastic food bolus through the human oesophagus, *International Journal of Thermal Sciences*, 70 (2013), pp. 41-53.
211. S. K. Agrawal and S. Das, A modified adaptive control method for Synchronization of some fractional chaotic systems with unknown parameters, *Nonlinear Dynamics*, Springer, 73, (2013), pp. 907-919.
212. S. Das, M. Srivastava and A.Y.T. Leung, Hybrid phase synchronization between identical and non-identical three-dimensional chaotic system using active control method, *Nonlinear Dynamics*, 73, (2013), pp. 2261-2272 .
213. S. K. Agrawal and S. Das, Projective Synchronization between different fractional order hyperchaotic systems with uncertain parameters using Proposed Modified Adaptive Projective Synchronization Technique, *Mathematical Methods in the Applied Sciences*, (DOI: 10.1002/mma. 2963),(2013).
214. M. Srivastava, S. K. Agrawal, K. Vishal and S. Das, Adaptive synchronization between different chaotic systems with uncertain parameters, *Pramana - Journal of Physics*(Springer), 81, (2013), pp. 417-437.
215. M. Srivastava, S. K. Agrawal and S. Das, Reduced-order anti-synchronization of the projections of the fractional order hyperchaotic and chaotic systems, *Central European Journal of Physics*, 11(10), (2013), pp.1504-1513.
216. M. Srivastava, S. P. Ansari, S. K. Agrawal, S. Das and A. Y. T. & Leung, Anti-synchronization between identical and non-identical fractional order chaotic systems using Active control method, *Nonlinear Dynamics*, 76, (2014), pp. 905-914
217. P. K. Singh and S. Das, Approximate analytical solutions of the time-fractional coupled Burger equations and KdV equations using homotopy perturbation transform method, *Problems of Nonlinear Analysis*, Engineering Systems, 19, (2013), pp. 58-67.

218. S. Das, S. Mukhopadhyay and R. Prasad, Boundary integral equation formulation for coupled thermo-elasticity with three phase-lags-Mathematics and Mechanics of Solids, 18, (2013) pp. 44-58.
219. S. Das, S. Mukhopadhyay and R. Prasad, A two dimensional problem of Mode-I crack in a type III thermoelastic medium, Mathematics and Mechanics of Solids18 (2013), pp.506-523.
220. S. Das, K. Vishal and P. K. Gupta, Approximate analytical solution of diffusion equation with fractional time derivative using optimal homotopy analysis method, Surveys in Mathematics and its Applications, 8, (2013),pp. 35-49.
221. S. Das &S. P. Ansari Stability analysis of fractional order water-borne eqidemic model, Communications in Fractional Calculus, 4, (2013),pp. 25-31.
222. K. Vishal, S. Das, S. H. Ong and P. Ghosh, on the Solutions of fractional Swift Hohenberg Equation with dispersion, Applied Mathematics and Computation, 219, (2013),pp.5792-5801.
223. V. Mishra. K. Vishal, S. Das and S. H. Ong, On the solution of the nonlinear fractional Diffusion-wave equation with Absorbtion: Homotopy approach, Zeitschrift filr Naturforschung,(2013),pp.2013-0084.
224. S. K. Agrawal, M. Srivastava and S. Das, Hybrid Synchronizaition between different fractional order Hyperchaotic systems using Active control method, Journal of Nonlinear System and Application, 2013, (2013), pp.70-76.
225. M.K. Singh, M.K. Verma and Shri Ram, Anisotropic Bianchi Type- II Viscous Fluid Models with Time – Dependent Gravitational and Cosmological Constants, International Journal of Physics, 1 , (2013), 77.
226. M.K. Verama, M.K. Singh and Shri Ram, Two-Fluid Cosmological Models of Bianchi Type V with Negative Constant Deceleration Parameter, International Journal of Theoretical Physics, 52, (2013), 227.
227. M.K. Singh and Shri Ram, Bianchi Type –III Magnetized Perfect fluid Models with Time -Varying Cosmological Term Λ , Physics Science International Journal, 4, (2014), 742.
228. M.K. Singh and Shri Ram, Dynamics of Anisotropic Bianchi Type-III Bulk Viscous String Model with Magnetic field, International Journal of Theoretical Physics(DOI 10.1007/s/10773-014), (2014).
229. Priyanka,M. K. Singh, and Shri Ram, Anisotropic Bianchi Type-III Bulk Viscous Fluid Universe in Lyra Geometry, Advances in Mathematical Physics(Article ID 416294), Hindawi Publishing Corporation, (2013).

230. Shri Ram, Priyanka and M.K.Singh, Anisotropic cosmological models in $f(R, T)$ theory of gravitation Pramana, Journal of Physics ,81, 67 (2013),
231. Shri Ram & Priyanka, Some Kaluza-Klein cosmological models in $f(R, T)$ gravity theory, Astrophys Space Sci , (2013), pp. 347-389,
232. S. Chandel & Shri Ram, Anisotropic Bianchi type -III perfect fluid cosmological model in $f(R, T)$ theory of gravity, Indian Journal of Physics, 87, (2013) pp. 1283-1287.
233. S.Chandel,M.K.Singh and Shri Ram, Bianchi Type-VI₀ Cosmological Models with Isotropic Dark Energy, Electronic Journal of Theoretical Physics, 11(30), (2014), pp. 1-8.
234. S. Chandel and Shri Ram, Bianchi Type-II String Cosmological Models with Bulk Viscous Fluid in Lyra Geometry, ScienceDomain international , 4(6), (2014), pp. 768-779.
235. Shweta Kothari and Santwana Mukhopadhyay, Some theorems in Linear Thermoelasticity with dula phase-lags for an anisotropic media, Journal of Thermal Stresses, 36, (2013),pp. 985-1000.
236. Shweta Kothari and Santwana Mukhopadhyay, Study of a problem of functionally graded hollow disk under various thermoelasticity theories with finite element method, Computers and Mathematics with Applications, 66(7), (2013),pp. 1306-1321.
237. Shweta Semwal and Santwana Mukhopadhyay, “Boundary integral equation formulation for generalized thermoelastic diffusion-Analytical aspects”, Applied Mathematical Modelling, 38, (2014), pp. 3523-3537.
238. Rajeev, M S Kushwaha & Ajay Kumar, An approximate solution to a moving boundary problem with space-time fractional derivative in fluvio-deltaic sedimentation, Shams Eng J, 4(2013),pp. 889-895.
239. S. K. Upadhyay, Anuj Kumar & Jitendra Dubey, Asymptotic Series of General Symbol of Pseudo-Differential Operator Involving Fractional Fourier Transform, ISRN Mathematical Analysis, (2013).
240. S.K.Upadhyay, Ravi Shankar Pandey and R.N.Mohapatra, H^p -boundedness of Hankl Housdorff operators involving Hankel transform, Dynamics of Continuous, Discrete and Impulsive Systems:(Series A), Mathematical Analysis, 21, 2014, pp. 243-258.

Metallurgical Engineering

241. GS Mahobia, Sudhakar R.G, Ajesh Antony, Neeta Paulose, Tamil Selvi, K. Chattopadhyay, N.C. SanthiSrinivas&Vakil Singh, Effect of Salt Coating on Low Cycle Fatigue Behavior of Nickel Based Superalloy GTM-SU-IN718, *Proceeding Engg*, 55, (2013), pp. 830-834.
242. Saraf SK, Singh RP, Singh V &Varma A, Pullout strength of misplaced pedicle screws in the thoracic and lumbar vertebrae - A cadaveric study, *Indian J Orthop* 47(3), (2013), pp. 238-243.
243. Rahul Garg, G Sudhakar Rao, VikashBhartia & Vakil Singh, Fretting Fatigue And Wear Behavior of Ti Alloy IMI 834, *Procedia Engg*, 55, (2013), pp. 661–665.
244. Nagesha, R. Kannan, R. Sandhya, G.V.S. Sastry, M.D. Mathew & K. BhanuSankara Rao, Thermomechanical Fatigue Behaviour of a Modified 9Cr-1Mo Ferritic-Martensitic Steel Vakil Singh, *Procedia Engineering*, (55) (2013), pp. 199–203.
245. Govinda Kapusetti, Raghvendra Raman Mishra, Swati Srivastava, NiraMisra, Vakil Singh, Partha Roy, Santosh Kumar Singh, Chanchal Chakraborty, Sudip Malik and PralayMaiti, J. Mater Layered double hydroxide induced advancement in joint prosthesis using bone cement: the effect of metal substitution, *Chem: B*, 1, (2013), pp. 2275-2288.
246. Govinda Kapusetti, NiraMisra, Vakil Singh, R. K. Kushwaha, PralayMaiti, J. Biomed. Bone cement/layered double hydroxide nanocomposites as potential biomaterials for joint implant *Mater. Res.*, 100A, (2013), pp. 3363–3373.
247. G. Sudhakar Rao, J.K. Chakravarthy, N. Saibaba, G. S. Mahobia, K.Chattopadhyay, N. C. SanthiSrinivas &Vakil Singh, Low cycle fatigue behavior of Zircaloy-2, *Journal of Nuclear Materials*, 441(1-3), (2013), pp. 455–467.
248. E. Hari Krishna, Kartik Prasad, Vakil Singh&Vikas Kumar, Fatigue Crack Growth Behaviour of Conventional and Modified IN 718 Superalloys at 650 °C, *Transactions of the Indian Institute of Metals*, 66 (1), (2013), pp. 1-4
249. Neeta Paulose&Vakil Singh, Hot Corrosion Behavior of Superalloy IN718 at 550 and 650 °C G.S. Mahobia, *Journal of Materials Engineering and Performance*, 22 (8), (2013), pp. 2418-2435
250. S. Sathyanarayanan, JoysuryaBasu, A. Moitra, G. Sasikala & V. Singh, Effect of Thermal Aging on Ductile-Brittle Transition Temperature of Modified 9Cr-1Mo Steel Evaluated with Reference Temperature Approach Under Dynamic Loading Condition, *Metallurgical and Materials Transactions: A*, 44(5), (2013), pp. 2141-2155.
251. G. S. Mahobia, Neeta Paulose, S. L. Mannan, K. Chattopadhyay, N. C. SanthiSrinivas&Vakil Singh, Tensile Behavior of Alloy 718 in Hot Corrosive

- Environment Journal of Materials Engineering and Performance, 22 (12), (2013), 3810-3817
252. Archana Singh, B.P. Singh, Mohan R Wani, Dinesh Kumar, J.K. Singh & Vakil Singh, Effect of anodization on corrosion behaviour and biocompatibility of Cp-titanium in simulated body fluid, Bull. Mater. Sci., 36 (5), (2013), pp. 931–937.
253. Ashutosh Kumar Singh, Amit Rastogi & Vakil Singh, Biomechanical comparison of dynamic condylar screw and locking compression plate fixation in unstable distal femoral fractures: An in vitro study, Indian journal of Orthopaedics, 47(6) (2013), pp. 615-620.
254. Himanshu R. Verma, S.K.Sahu, Pratima Meshram, B.D.Pandey and T.R.Mankhand “Kinetics of Hydrometallurgical Extraction of Rare Metals from Waste Phosphor” ,International Journal of Research in Engineering and Technology, 2(5), (2013), pp. 251-255.
255. Pritima Meshram, M.K.Sinha. S.K.Sahu. Pritam Khan, B.D.Pandey and T.R.Mankhand “Solvothermal Synthesis of High value copper from copper bleed solution of an Indian Copper Smelter” ,Powder Technology, 233, (2013) pp. 325-340.
256. Amit Chaurasia, K.K.Singh and T.R.Mankhand “Extraction of Tin and Copper by Acid Leaching of PCBs”, International Journal of Metallurgical Engineering, 2(2), (2013), pp. 243-248.
257. A.Rai, A.K.Mandal, K.K.Singh and T.R.Mankhand “Preparation and Characterisation of Unfired Lime bricks made with industrial Resources” , International Journal of Waste Resources, 3(1), (2013), pp. 40-46.
258. Rajnish Kumar, G. V. S. Sastry and R. Manna, Bulk Ultrafine-Grained Aa3003 Alloy Processed by Equal-Channel Angular Pressing, Proceeding in Heat Treatment & Surface Engineering Conference & Expo 2013 (HT&SE 2013), (2013), pp.16-18.
259. Vikas Jindal, B Nageswara Sarma, & S Lele, “A thermodynamic assessment of the Cr–Mo system using CE-CVM”, Calphad 43 (2013), pp.80-85.
260. M. Bohra, M.C. de Weerd, V. Fornee, R.K. Mandal, N.K. Mukhopadhyay, R. Chatterjee and G.V.S. Sastry, “Structural, tribological and resistivity studies of Ga substituted $(Al_{71-x}Ga)_2Pd_{21}Mn_8$ icosahedral and other intermetallic phases”, Journal of Alloys and compounds, 551, (2013), pp.274-278.
261. A. K. Chaubey, S. Scudino, M. S. Khoshkhoo, N.K. Mukhopadhyay, B. K. Mishra and J. Ckert, “Synthesis and characterization of nanocrystalline $Mg_{93.3}Al_{6.7}$ powders produced by mechanical alloying”, Metals, 3, (2013), pp.58-68.

262. G. Agarwal, H. Agrawal, M. Srinivas, B. Majumdar and N.K. Mukhopadhyay, “Role of Al addition on substitution of Fe substituted $\text{Fe}_{73.5-x}\text{Si}_{13.5}\text{B}_9\text{Nb}_3\text{Cu}_1\text{Al}_x$ alloy ribbons”, *Bull. Mater. Sci.*, 36, (2013), pp. 613-618.
263. F. Ali, S. Scudino, S.M. Gorantla, V.C. Srivastava, H.R. Shahid, V. Uhlenwinkel, M. Stoica, G. Vaughan, N.K. Mukhopadhyay & J. Eckert, “Mechanically-driven phase transformation in single-phase $\text{Al}_{62.5}\text{Cu}_{25}\text{Fe}_{12.5}$ quasicrystal: Effect of milling intensity”, *Acta Materialia*, 61, (2013), pp. 3819-3830.
264. N. K. Mukhopadhyay, F. Ali, S. Scudino, M. SamadiKhoshkhou, M. Stoica, V. C. Srivastava, V. Uhlenwinkel, G. Vaughan, C. Suryanarayana, and J. Eckert, “Grain size softening effect in $\text{Al}_{62.5}\text{Cu}_{25}\text{Fe}_{12.5}$ nanoquasicrystals”, *Applied Physics Letters*, 103 (2013) pp.2019141-2019145.
265. Niraj Nayan, S.V.S. Narayana Murty, Abhay K. Jha, Bhanu Pant, S.C. Sharma, Koshy M. George & G.V.S. Sastry, Processing and characterization of Al–Cu–Li alloy AA2195 undergoing scaleup production through the vacuum induction melting technique *Materials Science and Engineering: A*, 576, (2013), pp. 21-28.
266. S.N. Ojha, *Emerging Trends in Materials Processing*, IIM Metals News, (34), (2013).
267. F. Forouhandeh, S. Kumar, S.N. Ojha and R. Balasubramanian, Development in Micro hydroforming Process for Near-Net Shape Forming, *Advances in Mechanical Engineering*, (2013) pp.1-14.
268. R.K.Gautam, Anita Mohan and Sunil Mohan, “Fabrication and Characterisation of Al– Al_2O_3 Composite by Mechanical Alloying”, *Materials Science Forum*, (736), (2013) pp. 81-97.
269. D. Singh, D. Singh, T. P. Yadav, R. K. Mandal, R. S. Tiwari & O. N. Srivastava, Synthesis and Indentation Behavior of Amorphous and Nanocrystalline Phases in Rapidly Quenched Cu–Ga–Mg–Ti and Cu–Al–Mg–Ti Alloys, *Metallography, Microstructure and Analysis*, 2 (5), (2013), pp.321-327.
270. S. Banumathy, R. K. Mandal & A. K. Singh, Ageing texture of hot rolled and solution treated Ti–Nb alloys, *International Journal of Materials Research*, 104 (10), pp.941-953.
271. Singh Devinder, Shahi, Rohit R., Yadav, T. P.; Mandal, R. K., Srivastava, O. N. Tiwari, Hydrogenation of $(\text{Zr}_{69.5}\text{Al}_{7.5}\text{Cu}_{12}\text{Ni}_{11})(100-x)\text{Ti}_x$ quasicrystalline alloys and its effect on their structural and microhardness behavior, *J. Noncryst. Solids*, 380, (2013), pp.11-16.

272. Prasad, Nand Kishore, Naulakha, Abhinandan Jha, Neeraj & Mandal R K, Magnetic and electric properties of nanoparticles of Ni-substituted ferrites synthesized using a microwave refluxing process, *J. Mater. Reseach*, 104(7) , (2013), pp.680-685.
273. Mandal R. K., Singh A. K., Metall, Phase Transformation Textures in Hot-Rolled Binary Ti-Nb Alloys Banumathy, *Mater. Trans* 6, (2013), pp. 249-251
274. Fournée Vincent, Mukhopadhyay N K, Mandal R K; Chatterjee R, Sastry, Structural, tribological and resistivity studies of Ga substituted (Al_{71-x}Ga_x)Pd₂₁Mn₈ icosahedral and other intermetallic phases, Bohra Murtaza, de Weerd & GVS, *J. Alloys and Compounds*, 55, (2013), pp. 274-278
275. Mohd.Talha, C.K.Behra & OP Sinha, ‘A review on Nickel Free Nitrogen Containing Austenitic Stainless Steels for Biomedical Application’, *Materials Science and Engineering: C*, 33 (2013), pp. 3563-3575.
276. Alok Sarkar, Arup Mandal & OP Sinha, “Pelletisation Behavior of Fluxed Iron Ore Pellets of varying Basicity made with waste fines”, *International Journal of Science and Engineering*, 5(1),(2013), pp. 9-14.
277. A K Mandal & O P Sinha, ‘Technological Changes in Blast Furnace Iron Making in India since Last Few Decades’, *International Journal of Science and Research (IJSR)*, 2(12), (2013) pp. 211-219
278. R C Gupta & O P Sinha,“ Challenges to the growth of Indian Steel Industries in view of land, water and human resource limitations in addition to energy and environment”, *Journal of Sustainable Planet (ISSN 0974-6714)*,4(4), (2013), pp.14-37.
279. G.S. Mahobia, Neeta Paulose, S.L. Mannan, R.G. Sudhakar, K. Chattopadhyay, N.C. Santhi Srinivas & Vakil Singh, “Effect of hot corrosion on low cycle fatigue behavior of superalloy IN718”, *International Journal of Fatigue*, 59 (2014), pp.272–281,
280. G. Sudhakar Rao, J.K. Chakravarty, N.Saibaba, G.S. Mahobia, Kausik Chattopadhyay, N.C.SanthiSrinivas & Vakil Singh, Disappearance and reappearance of serrated plastic flow under cyclic loading: A study of dislocation substructures, *Materials Science & Engineering*, 603 (2014), pp. 114–120.
281. P. K. Katiyar, N. S. Randhawa, J. Hait, R. K. Jana, K. K. Singh and T. R. Mankhand “Anodic Dissolution Behaviour of Tungsten Carbide Scrap in Ammonical Media”, *Advanced Materials Research*, 828, (2014), pp 11-20.
282. Vikas Jindal, B Nageswara Sarma & S Lele, “An improved CVM entropy functional for binary fcc alloys”, *Computational Materials Science*, 84, (2014), pp. 129-133.

283. V.C.Srivastava, E. Huttunen-Saarivirta, C. Cui, V. Uhlenwinkel, A.Schulz & N.K. Mukhopadhyay, "Bulk synthesis by spray forming of Al-Cu-Fe and Al-Cu-Fe-Sn alloys containing a quasicrystalline phase", *Journal of Alloys and Compounds*, 597, (2014), pp. 258-268.
284. T.P Yadav, N.K. Mukhopadhyay and O.N. Srivastava, "Synthesis of quasicrystalline materials by mechanical alloying: bulk to nano", *The Banaras Metallurgist*, 19, (2014), pp.53-64.
285. Rahul Agarwal, Anita Mohan, Sunil Mohan and Rakesh Kr. Gautam, "Synthesis and Characterization of Al/Al₃Fe Nanocomposite for Tribological Applications", *Trans. ASME Journal of Tribology*, 138, (2014), 012001-9.
286. Mohanty P., Kabiraj D., Mandal R. K., Kurliya P.K., Sinha A S K and Rath Chandana, Evidence of room temperature ferromagnetism in argon/oxygen annealed TiO₂ thin films deposited by electron beam evaporation technique, *J. Magnetism and Magnetic Mater*, 355, (2014), pp.240-245.
287. Singh Dharmendra, Singh Devinder, Mandal R. K., Srivastava O N and Tiwari J, Glass forming ability, thermal stability and indentation characteristics of Ce₇₅Al₂₅-Ga-x(x) metallic glasses, *Alloys and Compounds*, 590, (2014), pp. 15-20.
288. Mohd.Talha, Sanjay Kumar, C.K.Behra & OP Sinha, "Effect of Cold working on Biocompatibility of Ni-free high nitrogen austenitic stainless steels using Dalton's Lymphoma cell line", *Materials Science and Engineering*, 35, (2014), pp.77-84.
289. Mohd.Talha, C.K.Behra, Sudarshan Kumar, Om Pal, Gurmeet Singh & OP Sinha, "Long term and Electrochemical Corrosion Investigation of cold worked AISI- 316L and 316LVM in Simulated Body Fluid", *RSC Adv.*, 4 (26) , (2014), pp.13340 - 13349 .

Mechanical Engineering

290. M. Vashista & V. Moorthy "Influence of applied magnetic field strength and frequency response of pick-up coil on the magnetic barkhausen noise profile", *Journal of Magnetism and Magnetic Materials*, 345, (2013), pp. 208–214.
291. D.S. Yadav, M. Z. Khan YusufZai & M. Vashista "Microstructural characterization of different steels using Barkhausen Noise measurement", *International Journal of Mechanical Engineering and Research*, 3(6), (2013), pp. 609-616.
292. Vivek Roy & Santosh Kumar "Development of Lathe Attachment for a CNC Machine", *Journal of the Institution of Engineers (India): Series C*, 94 (2), (2013), pp. 187-195.

293. Y. Kumar & S. Kumar, "Incremental Dieless Forming of Sheet Metals: A Short Review", International Journal of Mechanical Engineering & Research, 03(01), (2013), pp. 1- 4.
294. Forouhandeh F., Kumar S. , Ojha S. N. & Omkar T. "A Generative CAPP System for Sheet Hydro Forming of CP Titanium" Int. J of Emerging Technology and advanced Engineering, 3(6), (2013).
295. Forouhandeh F., Kumar S. , Ojha S. N. & Balasubramanian "Recent Development in micro hydro forming", Advances in Mechanical Engg, Hindawi Publishing corporation, (2013), pp.1-4.
296. Tiwari A.K., Tiwari A., Samuel .C & Bhardwaj P., "Procurement Flexibility as a Tool for Supplier Selection in Disastrous Environments", Global Journal of Flexible Systems Management, 14 (4), (2013), pp. 211-223.
297. J. P. Dwivedi, V. P. Singh and Radha Krishna Lal," Dynamic response of twin lined shells due to incident seismic waves", Journal of Mechanics of Material and Structure, 9(2), (2014).
298. J. P. Dwivedi, V. P. Singh, and Radha Krishna Lal," Dynamic analysis of shear flows over a porous medium in a cylindrical tube, Advances in Mechanical Engineering, (2013).
299. Kumar, Saurabh, A. P. Harsha, H. S. Goyal, A. Aazad Hussain, and S. B. Wesley. Three-body abrasive wear behaviour of aluminum alloys, Proceedings of the Institution of Mechanical Engineers, (Part J), Journal of Engineering Tribology, 227 (4), (2013), pp. 328-338.
300. A.P.Harsha & T.J.Joyce, Comparative wear tests of Ultra high molecular weight of polyethylene and cross-linked polyethylene, Proc. Instn Mech. Engrs, (Part H), J. Engineering in Medicine, 227(5), (2013), pp.600-608.
301. Khan, Debashis, Bhushan A., Panda S. K. and Biswas K., "Assessment of Structural Integrity under Dynamic Loading using Path Independent Integral \hat{J}_F ", Mechanics Based Design of Structures and Machines, 41(4), (2013), pp. 434-451.
302. Khan, Debashis, Bhushan A., Panda S. K. and Biswas K., "Elastic-plastic dynamic fracture analysis for stationary curved cracks", Finite Elements in Analysis and Design, 73, (2013), pp.55-64.

303. Vinay Jaiswal, Rashmi B. Rastogi, Rajesh Kumar, Laxman Singh and K. D. Mandal, Tribological studies of stearic acid-modified $\text{CaCu}_2.9\text{Zn}_0.1\text{Ti}_4\text{O}_{12}$ nanoparticles as effective zero SAPS antiwear lubricant additives in paraffin oil, *Journal of Materials Chemistry*, (Royal Society of Chemistry), 2, (2014), pp.375-386.
304. Jaiswal, R.B. Rastogi and R. Kumar, "Tribological study of ashless Schiff base 4-AAPB as antiwear additive in paraffin oil", *International Journal of Engineering Research and Technology*, 06, (2013), pp. 205-208.
305. Rahul Agarwal, Anita Mohan, Sunil Mohan & Rakesh Kr. Gautam, "Synthesis and Characterization of Al/Al₃Fe Nanocomposite for Tribological Applications" *Journal of tribology (ASME)*, 136, (2014).
306. R.K.Gautam, Anita Mohan, and Sunil Mohan, "Fabrication and Characterisation of Al-Al₂O₃ Composite by Mechanical Alloying" *Materials Science Forum*, 736, (2013), pp. 81-97.
307. S.M. Quraishi and K. Sandeep, Multiscale modeling of beam and plates using customized second-generation wavelets, *Journal of Engineering Mathematics*, (2013).
308. Radha Krishna Lal, Vikas Kumar Chaudhary, J.P. Dwivedi, V.P. Singh and Sandeep Kumar "Springback Analysis of Rectangular Sectional Bar of Non-linear Work Hardening Materials under Torsional Loading", *Applied Mechanics and Materials*, 393,(2013), pp. 422-434.

Mining Engineering

309. Gupta Suprakash, Bhattacharya Jayanta, Barabady Javad and Kumar Uday, Cost-effective importance measure - a new approach for resource prioritization in a production plant, *International Journal of Quality and Reliability management*, 30(4), (2013), pp. 379-386.
310. P Jain, A Singh, Rajesh Rai and B.K.Shrivastva, "Simulation of weak layer in dump stability by numerical modeling", *MineTech*, 34(1), (2013), pp.32-38.
311. Rai, Piyush and Yang, Hyung-Sik, Assessment of Firing Patterns on Moderately Strong and Weak Cover Rocks in a Surface Mine, *Int. Jl. Powder Technology (Elsevier)*, 263, (2014), pp: 66-73.
312. Yang, Hyung-Sik, Jung-Gyu, Kim, Young-Hoon, Ko and Rai, Piyush, Effect of tamping materials on the external charge blasting of structural members, *Explosives and blasting Journal of Korean Society of Explosives & Blasting (KoreanSCI)*, 31(1) (2013), pp: 49-54.

313. Rajesh Rai and B.K.Shrivastva, "Numerical simulation of vegetated mine dump slope with reference to small plants", International Journal of Mining Science and Technology, 24, (2014), pp.111–115.

Pharmacy

314. Chaubey P and Mishra B, Mannose-conjugated chitosan nanoparticles loaded with rifampicin for the treatment of visceral leishmaniasis, Carbohydrate Polymers. 101, (2014), pp. 1101-1108.
315. Chawla R, Jaiswal S and Mishra B, Development and optimization of polymeric nanoparticles of antitubercular drugs using central composite factorial design, Expert Opinion on Drug Delivery, 11(1), (2014), pp. 31-43.
316. Chaurasia S and Mishra B, An overview on phytosomes: A gimmick or relevant approach to novel herbal drug delivery system, Pharmatech Medica. 2(4), (2013), pp. 309-315.
317. Pandey G and Mishra B, A new analytical Q-absorbance ratio method development and validation for simultaneous estimation of Lamivudine and Isoniazid. ISRN Spectroscopy. 2013, (2013)
318. Gupta MK, Prakash D and Mishra B, Development and characterization of microparticulated drug delivery system of captopril, Indo American J. Pharmaceutical Research, 3(10), (2013), 8323-8332.
319. Kumar N, Tripathi R, Nath G and Mishra B, Xanthan gum based once aday matrix tablet of cefixime trihydrate: development and evaluation, International J. Pharmaceutical Sciences and Research, 4(9), (2013), pp.3390-3399.
320. Tripathi R and Mishra B, Preparation and evaluation of composite microspheres of polyacrylamide-grafted polysaccharides. J. Applied Polymer Science, 130(4), (2013), pp. 2912-2922.
321. Alakh N. Sahu, Nanotechnology in herbal medicines and cosmetics, Int. J. Res. Ayurveda Pharma, 4(3), (2013), pp. 472- 474.
322. Sahu Alakh N*, Hemalatha S and Sairam K, Quality Control Studies of *Mesua ferrea* Linn. Flowers, International Journal of Herbal Medicine, 1(2), (2013), pp. 2321-2187.
323. Sahu Alakh N, Hemalatha S and Sairam K Quality control studies of *Argyreia speciosa* Sweet leaves, Int. J. Res. Ayurveda Pharma., 4(4), (2013), pp. 495 - 498.
324. Sahu Alakh N, Hemalatha S and Sairam K, HPTLC fingerprinting and in vitro antioxidant studies of *Argyreia speciosa* Sweet leaves and *Mesua ferrea* Linn Flowers, Int. J. Res. Ayurveda Pharma, 4(4), (2013), pp. 499- 502.

325. Sahu Alakh N, Hemalatha S and Sairam K, Phyto-Pharmacological Review of *Argyreia Speciosa* Sweet Asian Journal of Biochemical and Pharmaceutical Research, 3(3), (2013), pp.104 – 111.
326. Sahu Alakh N, Hemalatha S and Sairam K, Quantitative Phytochemical and Heavy Metal Estimation of *Mesua ferrea* Flowers and *Argyreia speciosa* Leaves International Journal of Pharmaceutical Sciences Review and Research, 22(2), (2013), pp. 276-278.
327. Jain P, Sarvanan C & Singh S K, “Sulphonamides: Deserving Class as MMP inhibitors”, Eur J. Med Chem, 60, (2013), pp.89-100.
328. Kumar D., Harish B.G., Gangwar M., Kumar M, Kumar D K, Tilak R, Nath G, Kumar A, Singh S K, “Synthesis molecular docking and *in vitro* antimicrobial studies of new hexahydroindazole derivatives of curcumin”, Letters in Drug Design & Discovery,10(2), (2013),pp. 119-28.
329. Singh Meenakshi, Singh SK, Mahesh T. Chhabria, Kamala Vasu & Dhaivat Pandey, “CoMFA and Comsia 3D QSAR Models for a series of some condensed Thieno[2,3-d]pyrimidin-4(3H)-ones with antistaminic(H1) activity” Medicinal Chemistry, 9(3), (2013), pp.389-401.
330. Gangwar M, Verma VC, Singh TD, Singh SK, Goel RK & Nath G “*In-vitro* scolicidal activity of *Mallotus philippinensis*(lam.) Muell Arg. Fruit glandular hair extracts against hydatid cyst *Echinococcus granulosus*” Asian Pacific Journal of Tropical Medicine, (2013), pp. 412-20.
331. Sarvanan C, Punitha AD, Srivastava AK, Nath G and Singh SK, “Antibacterial activity of novel 3-(substituted sulfonamide)benzoic acid derivatives, Indo American J of Pharmaceutical Research 4, (2013), pp. 220-25.
332. Sarvanan C, Punitha, Srivastava AK, Nath G and Singh SK, “Antibacterial activity of novel 2-(substituted sulfonamido) benzoic acid derivatives”, J of Pharmacy Research, 7, (2013), pp. 525-28.
333. Kumar D., Kumar M., Kumar A. and Singh S.K. “Chalcone and Curcumin Derivatives: A Way Ahead for Malarial Treatment”, Mini-Reviews in Medicinal Chemistry, 13(14), (2013), pp.2116-2133.
334. Bharti S and Singh S.K. “Design ,synthesis and biological evaluation of some novel benzylidine-2-(4 phenylthiazol-2-yl)hydrazines as potential anti-inflammatory drugs” Med Chem Res,23(2), (2014), pp.1005-1015.
335. Meenakshi Singh and Sushil K. Singh, Benzothiazoles: “How Relevant in Cancer Drug Design Strategy?”, Anti-Cancer Agents in Medicinal Chemistry, 14(1), (2014), pp. 127-146.

336. Kumar D, Harish BG, Gangwar M, Kumar M, Kumar D K, Tilak R, Nath G, Kumar A & Singh SK, "Synthesis, Molecular Docking and In Vitro Antimicrobial Studies of Novel Pyrazole Analogues of Curcumin", *Letters in Drug Design & Discovery*, 11(4), (2014).
337. Meenakshi Singh, Sudhir K. Singh, Mayank Gangwar, Gopal Nath, and Sushil K. Singh, "Design, Synthesis and mode of action of some benzothiazole derivatives bearing amide moiety as antibacterial agents", *RSC Adv.*, 4 (36), (2014), pp. 19013 – 19023.
338. Singh G.K., Rai G., Chatterjee S.S. and Kumar V., Potential antianxiety activity of *Fumariaindica*: A Preclinical Study, *Pharmacognosy Magazine*, 9 (2013), pp. 14-22.
339. Thakur A.K., Chatterjee S.S. and Kumar V., Anxiolytic-like activity of leaf extract of traditionally used Indian-Mustard (*Brassica juncea*) in diabetic rats, *International Journal of Genuine Traditional Medicine*, 3, (2013), pp.7.1-7.7.
340. Kumar V., Characterization of anxiolytic and neuropharmacological activities of Silexan, *Wiener Medizinische Wochenschrift*, 163, (2013), pp. 89-94.
341. Thakur A.K., Chatterjee S.S. and Kumar V., Beneficial effect of *Brassica juncea* on cognitive functions in diabetic rodents, *Pharmaceutical Biology*, 51, (2013), pp. 1304-1310.
342. Yadav K.D., Reddy K.R.C. and Kumar V., Encouraging effect of *Brahmi Ghrita* in amnesia, *International Journal of Green Pharmacy*, 2,(2013), pp. 122-126.
343. Singh G.K., Rai G., Chatterjee S.S. and Kumar V., Effects of ethanolic extract of *Fumariaindica* L. on rat cognitive dysfunctions, *AYU*, 34,(2013), pp. 421-429.
344. Kumar A., Agarwal P., Shakya A., Thakur A.K., Kumar V., Key Role of Carnosic Acid in the Anxiolytic-like Activity of *Rosmarinus officinalis* Linn. in Rodents, *Journal of Pharmacology & Clinical Toxicology*, 1(2013), pp. 1013.1-1013.5.
345. Yadav K.D., Reddy K.R.C. and Kumar V., Acute and sub-chronic toxicity study of *Brahmi Ghrita* in rodents, *International Journal of Green Pharmacy*, 1, (2014), pp.18-22.,
346. Thakur A.K., Chatterjee S.S., and Kumar V., Therapeutic potential of traditionally used medicinal plant *Andrographis paniculata* (Burm. F.) against diabetes: an experimental study in rats, *TANG: International Journal of Genuine Traditional Medicine*, 4, (2014), pp. 7.1-7.8.
347. Thakur A.K., Shakya A., Husain G.M., Emerald M., Kumar V., Gut-Microbiota and Mental Health, Current and Future Perspectives, *Journal of Pharmacology & Clinical Toxicology*, 2, (2014), pp. 1016.1-1016.15.

348. Shukla S, Srivastava RS, Shrivastava SK, Sodhi A and Kumar P, Synthesis, characterization, in-vitro anticancer activity and docking of Schiff bases of 4-amino-1,2-naphthoquinone. *Med Chem Res*, 22, (2013), pp. 1604-1617.
349. Kamal Shah, Sushant K. Shrivastava and Pradeep Mishra, Synthesis, kinetics and pharmacological evaluation of mefenamic acid mutual prodrug. *Acta Poloniae Pharmaceutica-Drug Research*, 70, (2013), pp. 905-911.
350. Sinha S. K and Shrivastava S. K., Synthesis, evaluation and molecular dynamics study of some new 4-aminopyridine semicarbazones as an anti-amnesic and cognition enhancing agents *Bioorg, Med. Chem. Lett.*, 21, (2013), pp. 5451-5460.
351. Sinha S. K and Shrivastava S. K., Design, synthesis and evaluation of some new 4-amino pyridine derivatives in learning and memory *Bioorg, Med. Chem. Lett.*, 23(10), (2013), pp. 2984-2989.
352. S. Shukla, R. S. Srivastava, S. K. Shrivastava, A. Sodhi, and Pankaj Kumar Synthesis, Characterization, In-Vitro Anticancer Activity and Docking of Schiff Bases of 4-Amino-1,2-Naphthoquinone, *Medicinal Chemistry Research*, 22, (2013), pp.1604-1617.
353. Kamal K. Shah, Sushant K. Shrivastava and Pradeep Mishra, Evaluation of Mefenamic Acid Mutual Prodrugs, *Medicinal Chemistry Research*, 22, (2013), pp.70-77.
354. Rati K. P. T., Omprakash G and Senthil Raja A, Design, synthesis, in vitro MAO-B inhibitory evaluation, and computational studies of some novel 6-Nitrobenzothiazole-derived semicarbazones, *ChemMedChem*, 8(3), (2013), pp.462-474.
355. Jain A., Singh S.K., Singh Y. And *Singh S.*, Development of lipid nanoparticles of diacerein an Osteoarthritic drug for enhancement in bioavailability and reduction in its side effects, *Journal of Biomedical Nanotechnology*, 9 (5), (2013), pp.891-900.
356. Vijayakumar M.R., Muthu M.S. and *Singh S.*, Co-polymers of poly (lactic acid) and D- α -tocopheryl polyethylene glycol 1000 succinate based nanomedicines: versatile multifunctional platforms for cancer diagnosis and therapy, *Expert Opinion on Drug Delivery*, 10(4), (2013), pp.529-543.
357. Singh S.K., Vuddanda P.R., *Singh S. and Srivastava A.K.*, A comparison between use of spray and freeze drying technique for preparation of solid self-microemulsifying formulation of valsartan and in-vitro, in-vivo evaluation, *BioMed Research International*, (2013), pp. 1-13.

358. Kushwaha AK., Vuddanda PR., Priyanka K., Singh SK. and Singh S., Development and evaluation of solid lipid nanoparticles of raloxifene hydrochloride for enhanced bioavailability. *BioMed Research International*, (2013).
359. Priyanka K. and Singh S., A review on skin targeted delivery of bioactives as ultradeformable vesicles: Overcoming penetration problem, *Current Drug Targets*, 15 (2), (2013), pp.184-192.
360. Mishra A., Vuddanda P.R. and Singh, S., Intestinal lymphatic delivery of praziquantel by solid lipid nanoparticles: formulation design, in vitro and in vivo studies, *Journal of Nanotechnology*, (2014), pp.1-7.
361. Gundampati R.K., Sahu S., Srivastava A.K., Chandrasekaran S., Vuddanda P.R., Pandey R.K., Maurya R., Singh S. and Jagannadham M.V., In silico and in vitro studies: trypan blue peroxidase inhibitor activity of methotrexate for antileishmanial activity, *American Journal of Infectious Diseases*, 9 (4), (2013), pp.117-129.
362. Shah P, Vuddanda, P.R., Singh, SK., Jain, A. and Singh, S., Pharmacokinetic and Tissue distribution study of Solid Lipid Nanoparticles of Zidovudine in Rats, *Journal of Nanotechnology*, (2014), pp.1-7.
363. Jain A., Mishra S.K., Vuddanda P.R., Singh S.K., Singh R. and Singh S., Targeting of diacerein loaded lipid nanoparticles to intra-articular cartilage using chondroitin sulfate as homing carrier for treatment of osteoarthritis in rats. *Nanomedicine: Nanotechnology, Biology, and Medicine*, (2014).
364. Singh B, Vuddanda P.R., Vijayakumar M.R, Vinod Kumar, Saxena P.S and Singh, S., Cefuroxime axetil loaded Solid Lipid Nanoparticles for enhanced activity against *S. aureus* biofilm. *Colloids and Surfaces, Biointerfaces*, (2014).

Physics

365. A.K. Srivastava, B.N. Dwivedi and Mukul Kumar, Observations of Intensity Oscillations in a Prominence-like Cool Loop System as Observed by SDO/AIA: Evidence of Multiple Harmonics of Fast Magnetoacoustic Waves, *Astrophysics and Space Science*, 345, (2013), 25.
366. K.Wilhelm and B. N. Dwivedi, Increase of the Mean Sun-Earth Distance Caused by a Secular Mass Accumulation, *Astrophysics and Space Science*, 347, (2013), 41.
367. B. N. Dwivedi, A.K. Srivastava and A. Mohan, Estimation of Plasma Properties and Magnetic Field in a Prominence-like Structure as Observed by SDO/AIA, *IAUS300 Cambridge Journals*, 8, (2014), pp.405-412.

368. K.Wilhelm and B.N. Dwivedi, On the gravitational redshift, *New Astronomy*, 31, (2014).
369. K.Wilhelm and B.N. Dwivedi, Secular perihelion advances of the inner planets and asteroid Icarus, *New Astronomy*, 31, (2014).
370. P. Chmielewski, A.K. Srivastava, K. Murawski and Z.E. Musielak, Impulsively Generated Linear and Non-linear Alfvén Waves in the Coronal Funnel, *Acta Physica Polonica A*, 125, (2014), p. 158.
371. A.K.Tripathi, R.P.Singhal, K.P.Singh and O.N.Singh, Whistler mode instability and pitch-angle diffusion near Ganymede, *Planet. & Space. Sci.* 92, (2014), p 50.
372. A.K.Tripathi, R.P.Singhal, K.P.Singh and O.N.Singh, Pitch angle diffusion by whistler mode waves in the Jovian magnetosphere and diffuse auroral precipitation, *ICARUS*225, (2013), pp. 424-431.
373. A.K.Tripathi, R.P.Singhal, K.P.Singh and O.N.Singh, Diffuse auroral precipitation by resonant interaction with electron cyclotron harmonic and whistler mode waves, *J. Atmos & Solar Terrestrial Phys.*, 97, (2013), pp. 125-134.
374. S. Nath, D.P. Foster, D. Giri and Kumar S., Single polymer gating of channels under a solvent gradient, *Physical Review E*: 88, (2013), 054601.
375. S. Nath, T. Modi, R.K. Mishra, D. Giri, B.P. Mandal and S. Kumar, Statistical mechanics of DNA rupture: Theory and simulations, *Journal of Chemical Physics*, 139, (2013).
376. R.K. Mishra, Garima Mishra, D. Giri and Sanjay Kumar, Scaling of hysteresis loop of interacting polymers under a periodic force, *Journal of Chemical Physics*, 138, (2013).
377. Raghvendra, Rajesh Kumar Singh and Prabhakar Singh, Investigations on structural and electrical properties of calcium substituted LSGM electrolyte materials for IT-SOFC, *Ceramics International*, 40, (2014).
378. V.K. Singh, A. Annu, U. Singh, P. Singh, S.P. Singh, B. Bhattacharya and P.K. Singh, Dye sensitized solar cell based on poly(vinyl alcohol) doped with ammonium iodide solid polymer electrolyte, *Journal of Optoelectronics and Advanced Materials*, 15, (2013), p927.
379. Sharath S. U., R. K. Singh, Raghvendra, B.P. Singh, P. Kumar and Prabhakar Singh, Influence of grain and grainboundary resistances on dielectric properties of KNbO₃ under small DC bias field, *J. American Ceramic Society*, 96(10), (2013), p3127.
380. C. R. Gautam, D. Kumar, O. Parkash and Prabhakar Singh, Synthesis, I R, crystallization and dielectric study of (Pb,Sr)TiO₃ borosilicate glass ceramics, *Bulletin of Materials Science*, 36, (2013), p 461.

381. Pravin Kumar ,Rajesh Kumar Singh, A.S.K. Sinha and Prabhakar Singh, Effect of isovalent ion substitution on electrical and dielectric properties of LaCrO_3 , *Journal of Alloys and Compounds*, 576, (2013), p154.
382. B. P. Singh, A. K. Parchur, R. K. Singh, A. A. Ansari, P. Singh and S. B. Rai, Structural and up-conversion properties of Er^{3+} and Yb^{3+} co-doped $\text{Y}_2\text{Ti}_2\text{O}_7$ phosphors, *Physical Chemistry*, 15, (2013), p3480.
383. Brijesh Kumar, Gagandeep Kaur, P. Singh and S. B. Rai, Synthesis, structural, optical and electrical properties of metal nanoparticle–rare earth ion dispersed in polymer film, *Applied Physics: B*, 110, (2013), p345.
384. Raghvendra, Prabhakar Singh and Rajesh Kumar Singh, Structural characterization, electrical and dielectric relaxations in Dy-doped zirconia, *Journal of Alloys and Compounds*, 549, (2013), p238.
385. Indra Sen Ram, Rajesh Kumar Singh, Prabhakar Singh and Kedar Singh, Effect of Pb addition on dielectric relaxation in $\text{Se}_{80}\text{In}_{20}$ glassy system, *Journal of Alloys and Compounds*, 552, (2013), p480.
386. Chandkiram Gautam, Avadhesh Kumar Yadav and Prabhakar Singh, Synthesis, crystallisation and microstructural study of perovskite $(\text{Ba,Sr})\text{TiO}_3$ borosilicate glass ceramic doped with La_2O_3 , *Material Research Innovations*, 17, (2013), p148.
387. Rajesh Kumar Singh, T. Sadhasivam, G. I. Sheeja, P. Singh and O. N. Srivastava, Effect of Different Sized of CeO_2 Nano Particles on Decomposition and Hydrogen Sorption Kinetics of Magnesium Hydride, *International Journal of Hydrogen Energy*, 38, (2013), p6221.
388. Anup K. Ghosh, G.D. Dwivedi, B. Chatterjee, B. Rana, A. Barman, S. Chatterjee and Yang H. D., Role of codoping on multiferroic properties at room temperature in BiFeO_3 ceramic, *Solid State Communications*, 166, (2013), p22.
389. Shiv Kumar, K. Asokan, Ranjan Kr. Singh, S. Chatterjee, D. Kanjilal and Anup K. Ghosh, Structural and optical properties of ZnO and ZnO:Fe nanoparticles under dense electronic excitations, *Journal of Applied Physics*, 114, (2013).
390. Shiv Kumar, S. Basu, B. Rana, S.N. Jha, A. Barman, S. Chatterjee, D. hattacharyya, N.K. Sahoo and Anup K. Ghosh, Structural, Optical and Magnetic Properties of sol-gel derived ZnO:Co Diluted Magnetic Semiconductor Nanocrystals: An EXAFS study, *J. Mater. Chem. :C*, 2, (2014), p481.
391. Shiv Kumar, K. Asokan, Ranjan Kr. Singh, S. Chatterjee, D. Kanjilal and Anup K. Ghosh, Structural and optical properties of ZnO and ZnO: Fe nanoparticles under dense electronic excitations, *J. Appl. Phys.*, 114, (2013).

392. A. Kumar, P. Kumari, A. Das, G. D. Dwivedi, P. Shahi, K. K. Shukla, A. K. Ghosh, A. K. Nigam, K. K. Chattopadhyay and Sandip Chatterjee, Structural and magnetic properties of quasi one dimensional doped LiCuVO_4 , *J. Sol. State Chem.*, 208, (2013), p120.
393. A. Pandey, R. Prasad, V.P. Singh, S.K. Jha, and K.K. Shukla, Crop Parameters Estimation by Fuzzy Inference System Using X-band Scatterometer Data, *International Journal of Advances in Space Research*, 51, (2013), p905.
394. Rahul Agarwal, Anita Mohan, Sunil Mohan & R. K. Gautam Synthesis and Characterization of Anodized $\text{Al}/\text{Al}_3\text{Fe}$ Nanocomposite for Tribological Applications. *Trans. ASME- Journal of Tribology*, 136, (2014).
395. A.K., Mishra, P.C. Pandey, D. Kumar, O.N. Singh, An analytical study of modal dispersion characteristics of helically clad crystal-cored optical fiber, *Optik - International Journal for Light and Electron Optics*, 124, (2013), p2661.
396. Khem B. Thapa, P. C. Pandey, Prabal P. Singh and S. P. Ojha, Tunable characteristics of one dimensional magnetic photonic crystal composed with single-negative materials, *Optik-International Journal for Light and Electron Optics*, 124 (2013), p6631.
397. Bipin K. Singh, Khem B. Thapa, P. C. Pandey, Optical Reflectance and Omnidirectional Bandgaps in Fibonacci Quasicrystals Type 1-D Multilayer Structures Containing Exponentially Graded Material, *Optics Communications (U.S.A)*, 297, (2013), 65.
398. Nandani Jaiswal, Devendra Kumar Shail Upadhyay and Om Parkash, Ceria co-doped with calcium (Ca) and strontium (Sr): a potential candidate as a solid electrolyte for intermediate temperature solid oxide fuel cells, *Ionics*, 20, (2014), p45.
399. Shail Upadhyay, High temperature impedance spectroscopy of barium stannate, *Bulletin of Materials Science*, 36, (2013), p1019.
400. Nandani Jaiswal, Devendra Kumar Shail Upadhyay and Om Parkash, Effect of Mg and Sr co-doping on the electrical properties of ceria-based electrolyte materials for intermediate temperature solid oxide fuel cells, *Journal of Alloy and Compounds*, 577, (2013), p456.
401. Nandani Jaiswal, Shail Upadhyay, Devendra Kumar and Om Parkash, Ionic conductivity investigation in lanthanum (La) and Strontium (Sr) co-doped ceria system, *J. Power Sources*, 222, (2013), p230.

402. R. V. Yadav, S. K. Singh, R. K. Verma and S. B. Rai, "Observation of multi-mode: upconversion, downshifting and quantum-cutting emission in $\text{Tm}^{3+}/\text{Yb}^{3+}$ co-doped Y_2O_3 phosphor", *Chem. Phys. Lett.*, 599, (2014), p122.
403. A. K. Singh, S. K. Singh, Pawan Kumar, Bipin Kumar Gupta, R. Prakash and S. B. Rai, Lanthanide doped dual-mode nanophosphor as spectral converter for promising next generation solar cells, *Sci. Adv Mater.*, 6, (2014), p405.
404. K. Mishra, S. K. Singh, A. K. Singh and S. B. Rai, Photo-luminescence and frequency upconversion of Er^{3+} : Y_2O_3 : Tailoring effect of Li^+ ion and Yb^{3+} sensitization, *Mat. Res. Bull.*, 48, (2013), p4307.
405. S. K. Singh, Dong Gi Lee, Soung Soo Yi, Kiwan Jang, Dong-Soo Shin and Jung Hyun Jeong, Probing dual mode luminescence of Eu^{3+} in garnet phosphor, *J. Appl. Phys.*, 113, (2013).
406. D. G. Lee, S. K. Singh, C. H. Moon, S. S. Yi, K. Jang, J. H. Jeong and J. S. Bae, Photoluminescence properties of $\text{NaSr}(\text{P},\text{V})\text{O}_4$: Eu^{3+} phosphors, *J. Nanosci. Nanotechnol.*, 13, (2013), p5552.

42.0 PAPERS PRESENTED IN SEMINARS /CONFERENCES /WORKSHOPS

Biomedical Engineering

1. Nishant Kumar Singh, Richa Braru and S. K. Rai, “Development and Validation of Robust 3d-Solid Model of Human Femur using CT Data”, International Conference on Industrial Electronics and Electrical Engineering, Goa, India, (2014).
2. S. K. Rai, Nishant Kr. Singh and Nilanjan Mallik, “Finite Element Analysis of New Cementless Hip Arthroplasty and Biomechanical Comparison With Different Shapes to Facilitate Minimally Invasive Surgery (MIS)”, International Conference on Computer Aided Engineering, Department of Mechanical Engineering, Indian Institute of Technology, Madras, India, (2013).
3. S. K. Rai, Nishant Kr. Singh and Nilanjan Mallik, “Variation in total knee arthroplasty (TKA) with genuvarum & valgum deformity – A Finite element Study”, International Conference on Mathematical Modeling and Numerical Simulation, Department of Applied Mathematics, BBA Central University, Lucknow, India, (2013).
4. Nishant Kumar Singh, Rati and S. K. Rai, “Solid model generation of knee joint & alignment analysis in total knee arthroplasty (TKA) in obese patient – A finite element study”, National Conference on Bio-Mechanical Sciencefinite element study”, Center of Bio-Mechanical Science, Siksha ‘O’ Anusandhan University, Bhubaneswar, Odisha, India, (2014).
5. Neeraj Sharma, Sanjay Saxena, Shiru Sharma and Lalit M. Aggarwal, “Parallel processing of images in multi core environment: its applications in medical imaging”, Annual Conference of Association of Medical Physicists of India AMPINC-CON 2014, Department of Radiation Oncology, King George’s Medical University, Lucknow. (2014).
6. Sanjay Saxena, Neeraj Sharma and Shiru Sharma, “An intelligent System for Segmenting an Abdominal Image in Multi Core Architecture” 10th International Conference and Expo on Emerging Technologies for a Smarter World (CEWIT), 2013, Mellville Marriott Long Island, New York, USA, (2013).

Civil Engineering

7. Mandal, S. “Water conservation for holistic harnessing of energy & development of Sikkim : Structural Engineering aspects.”, Proceedings of Water conservation year 2013, Central Water Commission, Gangtok, Sikkim, (2013), pp. 13-22.
8. Mandal, S. “Application of turbulence models to Computational Wind Engineering (CWE)”, Technical Education Quality Improvement Programme (TEQIP), Faculty

- Development Programme (FDP) on “Advanced Topics in Fluid Flow and Heat Transfer” at Thapar University, Patialaon (2013).
9. Mandal, S. “Orientation of youth energy – a guideline.” Youth convention at Ramakrishna Mission Sevashrama, Vrindaban, (2013).
 10. Singh, G. J., Mandal, S., and Kumar, R.. “Effect of additional columns on plan of multi-story building on shear lag phenomenon.” Proc. of 8th Asia Pacific Conference on Wind Engineering (APCWE VIII), SERC, Chennai, (2013), pp. 59 - 62.
 11. Mandal, S., Bhargava, P. and Ojha, C. S. P. “Appraisal of certain linear and non-linear k-epsilon turbulence models.” Proc. of 8th Asia Pacific Conference on Wind Engineering (APCWE VIII), SERC, Chennai, (2013), pp. 275 - 278.
 12. Singh, A. and Mandal, S. “A comparative study on interference factors of buildings.” Proc. of 8th Asia Pacific Conference on Wind Engineering (APCWE VIII), SERC, Chennai, (2013) pp. 465 - 468.
 13. Mandal, S. “Some Aspect of Numerical Simulation Of Wind Flow Around Buildings”Proc. of First National Conference on Emerging Trends in Engineering And Sciences, Asansol, India,(2014). pp. 334-338.
 14. Mandal, S. Charan, I. R., & Gupta, H.”Effects of Plan Aspect Ratio on Dynamic Wind Characteristics”, Proc. of First National Conference on Emerging Trends in Engineering And Sciences, Asansol, India, (2014), pp.339-345.
 15. Mandal, S., Charan, I. R., & Gupta, H. “Effects of Continuous Lintel Beams on a Building Subjected to Lateral loads” , Proc. of First National Conference on Emerging Trends in Engineering And Sciences, Asansol, India, (2014), pp. 346-352.
 16. Mandal, S. “Current research issues in the Deptt. of Civil Engg, IIT (BHU)”, Special lecture at Institute of Steel Structures, Technical University Braunschweig, Braunschweig, Germany, Braunschweig, Germany. (lecture delivered as a part of collaborative research initiative between IIT (BHU) and TUB), (2014).
 17. Mandal, S. “Recent advances in design of wind resistant Buildings” Proc. of National Conference on Innovative Construction and Design of Structures, April, NIT Durgapur, India, (2014). (delivered as key note lecture)
 18. Gupta, A. and Mandal, S. “Gupta, A. and Mandal, S. (2014). “Comparative Study of Chord forces in Flat Slabs due to seismic loads in buildings of different plan aspect ratio” Conference paper at Proc. of National Conference on Innovative Construction and Design of Structures, NIT Durgapur, India, (2014).
 19. Rajesh Kumar, K K Pandey and V Kumar, “Direct approach to numerical simulation of soil in homogeneous building cluster”, Proceedings of International conference on

- future trend in structural, civil, environmental and mechanical engineering FTSCEM, Bangkok, Thailand, (2013).
20. Sabita Madhvi Singh & P. R. Maiti (2013) Study of shape effect on scour rate, 2nd International Conference on Emerging Trends in Engineering and Technology, College of Engineering, Teerthankar Mahaveer University, Moradabad, (2013).
 21. Satyam Mandloi, Sankala Akashlal & P R Maiti (2013) Response of beam resting on Winkler foundation subjected to varying load velocity, 2nd International conference on Architecture and Civil Engineering, ACE -2014, Singapore, (2014).
 22. P R Maiti, Bhawesh Madhukar & Satyam Mandloi, Analysis of Plate Resting on Pasternak and Winkler Foundation due to Moving Load , International Conference on Structural Engineering and Mechanics (ICSEM-2013), NIT Rourkela, (2013).
 23. Sabita Madhvi Singh & P. R. Maiti, Analysis of flow around Square cylinder with CFD, Recent advances in Civil Engineering, National Institute of Technology, Patna, (2013).

Computer Science & Engineering

24. Aman Singhal and K K Shukla, A new Energy Efficient Clustering based Communication Protocol for Wireless Sensor Networks, Proc. International Conference on Recent Trends in Information, Telecommunication and Computing, (ISBN 978-94-91587-21-3), Association of Computer Electronics and Electrical Engineers, (2014).
25. Jayadeep Pati and K K Shukla, Time Series Prediction of Debian Bug Data Using Autoregressive Neural Network, 4th International Conference on Computer and Communication Technology (ICCT), IEEE explorer, (2014) pp. 110-115.
26. Bhavna Srivastava and Rajeev Srivastava, "Optimum gene selection, classification and analysis of high dimensional ovarian cancer dataset", In Proc: 3rd International Conference on Biomedical Engineering and Assistive Technologies (BEATS-2014), Chandigarh, India, (2014).
27. Alok K. Singh Kushwaha and Rajeev Srivastava, "Complex Wavelet Based Moving Object Segmentation using Approximate Median Filter Based Method for Video Surveillance," Proc: 4th IEEE International Advanced Computing Conference, Gurgaon, India, (2014).
28. Alok K., Singh Kushwaha and Rajeev Srivastava, "Performance Evaluation of Various Moving Object Segmentation Techniques for Intelligent Video Surveillance System," In Proc: IEEE International Conference on Signal Processing & Integrated Networks (SPIN 2014), Noida, India, (2014).

29. Rajesh Kumar and Rajeev Srivastava, "Evaluation of Segmentation Algorithms for Microscopic Biopsy Images", In Proc: IEEE International Conference on Signal Processing & Integrated Networks (SPIN 2014), Noida, India, (2014).
30. Dharmendra Prasad Mahato, Lokendra Singh Umrao and Ravi Shankar Singh, Recovery of Failures in Transaction Oriented Composite Grid Service. IJCA Proceedings on Computing Communication and Sensor Network 2013 CCSN, (Published by Foundation of Computer Science, New York, USA) (2013), pp 38-42.
31. Dehariya Y.K., Biswas, B. and Singh, R.S., "Comparative analysis of graph clustering algorithm using bloggers data," International Conference on Issues and Challenges in Intelligent Computing Techniques (ICICT), (2014), pp.24,28.
32. Piyush Kumar Singh, Ravi Shankar Singh, K.N. Rai and Sumit Jaiswal, Comparative Study Of Image Compression Techniques Based On Wavelet Transform And Wavelet Packet Transform, International Conference on Recent Trends on Computer Science and Engineering, Central University of Bihar, Patna, (2014).
33. Lokendra Singh Umrao, Raghavendra Singh and Ravi Shankar Singh, Implementation Of Parallel Genetic Algorithm Using Message Passing Interface, International Conference on Recent Trends on Computer Science and Engineering, Central University of Bihar, Patna, (2014).

Mathematical Sciences

34. T. Som, On the Theory of Fixed and Common Fixed Points, Proceedings of "Mathematical Sciences and their Applications Recent Advances" (Ed. K Dutta Choudhury, D Biswas, S Saha), (Narosa Publ. New Delhi, (2013), 185-199.

Electronics Engineering

35. Yogesh kumar, Chandan Kr. Rai, and S. K. Balasubramanian, "A Novel Ground Bounce Reduction Technique using Four Step Power Gating", 2nd students' conference on engineering and systems, Proc. IEEE student branch (SCES 2013), MNNIT, Allahabad (India). (2013) pp29-31.
36. Shubham Paliwal, Yogesh Kumar, Praveen Kr. Sahu, and S. K. Balasubramanian, "Clock Distribution Networks- A Case Study Using Multi VDD and Multi Threshold Level Converters," IEEE International conference on Signal Processing, computing and control, JUIT Shimla (H.P). (2013).
37. Yogesh Kumar, Shubham Paliwal, Praveen Kr. Sahu, and S. K. Balasubramanian "Ground Bounce Noise Minimization Using Multi-VDD Level Converter". Proc. IEEE CONECCT-2014, IISc Bangalore , (2014).

38. Ravi Kumar Gangwar and S.P. Singh, "A low profile wideband slotted square dielectric resonator antenna," Poster presentation in 7th European Conference on Antennas and Propagation (EuCAP 2013), Gothenberg, Sweden, (2013), pp. 901-905.
39. Bhagirath Sahu, Pankaj Tripathi, Rajesh Singh and S. P. Singh, "Compact Dual Segment Cylindrical Dielectric Resonator Antenna for X-band Applications," International Conference on Microwave and Photonics (ICMAP), Indian School of Mines, Dept. of Electronics Engineering, Dhanbad, India, (2013).
40. S. Singh, K. K. Katare, S. R. Patre and S. P. Singh, "Performance Comparison of SAR Distributions in Phantom Bio-medium Due to TiO₂ Loaded Metal Diagonal and Square Horn Antennas," IEEE MTT-S International Microwave and RF Conference (IMaRC), IIT Delhi, INSPEC Accession Number: 1419728, (2013), pp 1 – 4.
41. M. V. Swati, M. S. Chauhan and P. K. Jain, "Multimode Behavior Study of a Gyroklystron Amplifier', Workshop on Vacuum Electronics Devices and Applications (VEDA-2013), IIT Roorkee, (2013).
42. M. V. Swati, M. S. Chauhan and P. K. Jain, "Multimode Analysis of a 35 GHz Gyroklystron Amplifier," International Conference on Microwaves, Antenna, Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).
43. M. V. Swati, Rajeev Sharma, M. S. Chauhan and P. K. Jain, "Multimode Simulation and Analysis of Two Cavity Gyroklystron," International Conference on Innovative Advancements in Engineering and Technology (IAET-2014), Jaipur, (2014).
44. M. S. Chauhan, M. V. Swati, and P. K. Jain, "Performance Evaluation of a Four-Cavity Gyroklystron Amplifier," International Conference on Microwaves, Antenna, Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).
45. Sunny Kr. Paswan, M. S. Chauhan, M.V. Swati and P.K. Jain, "Analytical Studies of a Five-Cavity, 140 GHz Gyroklystron Amplifier," International Conference on Innovative Advancements in Engineering and Technology (IAET-2014) Jaipur, (2014).
46. Yuvraj S., M. Thottappan and P. K. Jain, "Analytical Study of HIGH Power Gyro-Twystron" 9thInternational Conference on Microwaves, Antenna, Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).
47. Pushpalata Laxman Pakhale, M. Thottappan and P. K. Jain, "PIC Simulation of Second Harmonic Gyro-TWT Amplifier", GHz Gyroklystron Amplifier," International Conference on Microwaves, Antenna, Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).

48. Yuvraj S., M. Thottappan and P. K. Jain, “ High Power Gyo-Twystrotron-A Review”, “Workshop on Vacuum Electronics Devices and Applications (VEDA KOLLEG 2013), IIT Roorkee, Uttarakhand, (2013).
49. Pushpalata Laxman Pakhale, M. Thottappan and P. K. Jain, “ PIC Simulation of Second Harmonic Gyro-TWT Amplifier”, Workshop on Vacuum Electronics Devices and Applications (VEDA KOLLEG 2013), IIT Roorkee, Uttarakhand, (2013).
50. M. Thottappan, Sukhwinder Singh and P. K. Jain, “Second Harmonic High Power Gyro-TWT Amplifier”, Workshop on Vacuum Electronics Devices and Applications (VEDA KOLLEG 2013), IIT Roorkee, Uttarakhand, (2013).
51. Yuvraj S., M. Thottappan and P. K. Jain, “Design and Simulation of 94 GHz Metal PBG Waveguide”, IEEE MTT-S International Microwave and RF Conference - 2013, Delhi, (2013).
52. Gargi Dixit and P. K. Jain, “An Improved MILO Structure for Device Efficiency Enhancement,” National Workshop on Vacuum Electron Devices & its Applications (VEDA-2013), Roorkee, (2013).
53. Gargi Dixit and P. K. Jain, “An Improved MILO Structure for Device Efficiency Enhancement” National Workshop on Vacuum Electron Devices & its Applications (VEDA-2013), Roorkee, (2013).
54. Gargi Dixit and P. K. Jain, “Simulation Study of Improved Compact MILO Structure,” International Conference on Innovative Advancements in Engineering and Technology (IAET-2014), Jaipur, (2014).
55. Manpuran Mahto and P. K. Jain, “Reltron, A GigaWatt HPM Source - A Review”, International Conference on Innovative Advancements in Engineering and Technology (IAET-2014), Jaipur, (2014).
56. Sivavenkateswara Rao V., and P. K. Jain, “Design and Development of 95 GHz Gyrotron: A Review,” International Conference on Innovative Advancements in Engineering and Technology (IAET-2014), Jaipur, (2014).
57. Gopi Krishna Saramakala, Satyabrata Jit, and Pramod Kumar Tiwari, 'ATLAS based simulation study of the electrical characteristics of dual-metal-gate (dmg) fully-depleted recessed-source/drain (RE-S/D) SOI MOSFETS' IEEE Conference ICAEE'2014, VIT University Vellore, (2014).
58. E. Goel, S. Kumar, G. Rawat, Mirgender Kumar, S. Dubey and S. Jit, Two Dimensional Model for Threshold Voltage Roll-Off of Short Channel High-k Gate-

- Stack Double-Gate (DG) MOSFETs, 17th International Workshop on the Physics of Semiconductor Devices (IWPSD), Springer conference (Amity university, Noida) proceeding, (2014), pp. 193-196.
59. S. Kumar, E. Goel, G. Rawat, Mirgender Kumar, S. Dubey and S. Jit, Threshold Voltage Modeling of Short-Channel DG MOSFETs with Non-Uniform Doping in the Vertical Direction, 17th International Workshop on the Physics of Semiconductor Devices (IWPSD), Springer conference (Amity university, Noida) proceeding, (2014), pp. 263-266.
 60. G. Rawat, Mirgender Kumar, S. Dubey, S. Jit, An Analytical Study of Ion Implanted Strained-Si on SOI MOSFETs for Optimizing Switching Characteristics, 17th International Workshop on the Physics of Semiconductor Devices (IWPSD), Springer conference (Amity university, Noida) proceeding, (2014), pp. 203-206.
 61. E. Goel, Mirgender Kumar, S. Dubey and S. Jit, A Threshold Voltage Model of High-k Gate Stack Short-Channel Double-Gate (DG) MOSFETs, National Conference on Nanoscience and Instrumentation Technology, at NIT, Kurukshetra, (2013).
 62. Gopi Krishna S., Abirmoya Santra, and Pramod Kumar Tiwari, An analytical surface potential modeling of dual-metal-gate (DMG) recessed- source/drain (Re-S/D) SOI MOSFET, International Conf. on Advanced Trends in Engineering and Technology, Jaipur, (2013), pp.160-163.
 63. S. Kumar, Mirgender Kumar, S. Dubey and S. Jit, Analytical modeling of Surface Potential and Threshold Voltage of Non-uniformly doped Double-Gate (DG) MOSFETs, National Conference on Nanoscience and Instrumentation Technology, NIT, Kurukshetra, (2013).
 64. Purnima Hazra and S. Jit, "Electrical characteristics of Si/ZnO core-shell nanowire heterojunction diode", Physics of Semiconductor Devices (ed. by V.K. Jain and A. Verma), Springer, (2014), pp. 673-675.
 65. Purnima Hazra and S. Jit, "Study of n-ZnO/ p-SiNW heterostructures grown by thermal evaporation method," AIP Conf. Proc., (2013), pp 529-530.
 66. Mirgender Kumar, S. Dubey, P. K. Tiwari and S. Jit, A Comparative Study of Short-Channel-Effects of strained-Si on Insulator (SSOI) and strained-Si on Silicon-Germanium-on-Insulator (SSGOI) MOSFETs, in International Conference on Electrical

- and Electronics Engineering (ICEEE-2013), WCE conference proceeding, London, (2013).
67. Awadhesh Singh, Gaurav K. Pandey, Sachin Kalraiya, Hari Shankar Singh, and Manoj K. Meshram, "Design of Modified Rhomboidal Dualband Antenna for Bluetooth and UWB Applications," IEEE Students' Technology Symposium, Khadagpur, (2014), pp. 367-371.
 68. H. S. Singh, P. K. Bharti, G. K. Pandey, and M. K. Meshram, "Compact Penta-Band Coupled-Fed Printed Monopole MIMO/Diversity Antenna for Smart Mobile Phone," International Conference on Microwave and Photonics (ICMAP - 2013), Dhanbad, (2013), pp. 1-5.
 69. P. K. Bharti, H. S. Singh, G. K. Pandey, and M. K. Meshram, "Compact Six-Band Coupled-fed Planar Inverted-F Antenna for Slim Mobile Phone," International Conference on Microwave and Photonics (ICMAP - 2013), Dhanbad, (2013), pp. 1-4.
 70. G. K. Pandey, H. S. Singh, P. K. Bharti, and M. K. Meshram, "UWB Monopole Antenna with Enhanced Gain and Stable Radiation Pattern using Gate like Structures," International Conference on Microwave and Photonics (ICMAP - 2013), Dhanbad, (2013), pp. 1-4.
 71. Hari S. Singh, Gaurav K. Pandey, Pradutt K. Bharti, and Manoj K. Meshram, "Spiral shaped High Isolated Monopole MIMO/Diversity Antenna for Small Mobile Terminals (CACCS-2013), Dehradun, (2013), pp. 612-616.
 72. Hari S. Singh, Gaurav K. Pandey, Pradutt K. Bharti, and Manoj K. Meshram, "A Compact Dual Band MIMO/Diversity Antenna for WLAN Applications" Students Conference on Engineering and Systems (SCES-2013), Allahabad, (2013), pp 1-5.
 73. Mayank Agarwal, Rajesh Singh, and Manoj Kumar Meshram, "Dual-Band Linearly Polarized Planar Inverted-F Antenna (PIFA) for GPS/WiMAX Applications", Students Conference on Engineering and Systems (SCES-2013), Allahabad, (2013), pp 1-6.
 74. M.Thottappan and P.K.Jain; "Design and Simulation of Metal PBG Waveguide Mode Launcher", IEEE Region 10 Technical Symposium (TENSYSM 2014), Kuala Lumpur, Malaysia (2014).
 75. Sachin Kalraiya, Hari Shankar Singh, Manoj Kumar Meshram, and M.Thottappan; "Microstripline-Fed Dual Band Printed Monopole Antenna for WLAN/WiMAX/HIPERLAN Applications", IEEE Region 10 Technical Symposium (TENSYSM 2014), Kuala Lumpur, Malaysia (2014).
 76. Yuvaraj S. M.Thottappan and P.K.Jain "Design and Simulation of 94 GHz Metal PBG Waveguide", IEEE MTT-S International Microwave and RF Conference, Delhi, (2013).

77. Yuvaraj S. M.Thottappan and P.K.Jain, “Analytical Study of High Power Gyro-Twystron”, 9th International Conference on Microwaves, Antenna, Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).
78. Pushpalata Laxman Pakhale, M.Thottappan and P.K.Jain.; “PIC Simulation of Second Harmonic Ka-band Gyro–TWT”,9th International Conference on Microwaves, Antenna, Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).
79. Yuvaraj S., M.Thottappan and P.K.Jain, “High Power Gyro-Twystron- A Review”, VEDA KOLLEG 2013 at IIT Roorkee, INDIA, (2013).
80. Pushpalata Laxman Pakhale, M.Thottappan and P.K.Jain; “PIC Simulation of Second Harmonic Gyro –TWT Amplifier”, VEDA KOLLEG 2013 at IIT Roorkee, (2013).
81. M.Thottappan, Sukwinder Singh and P.K. Jain; “Second Harmonic High Power Gyro-TWT Amplifier”, VEDA KOLLEG 2013 at IIT Roorkee, (2013).
82. Mukul Singh, Anuj Kumar Maurya, Surya Pratap Singh and S. K. Balasubramanian, “Booth Multiplier Implemented in Modified Split-path Data Driven Dynamic Logic” 3rd students conference on engineering and systems (SCES - 2014), MNNIT, Allahabad (India), (2014).
83. Awadhesh Singh, Gaurav K. Pandey, Hari Shankar Singh, Sachin Kalraiya, and Manoj K. Meshram, “CPW-Fed Double Ring Shaped UWB Antenna with 3.5/5.5 GHz Dual Band Notched Characteristics,” Souvenir of the 9th International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), (2013).
84. Shalini, Hari S. Singh, G. K Pandey, Pradutt K. Bharti, Himanshu, and Manoj K. Meshram, “Octa-Band Monopole MIMO Antenna for Small Mobile Terminals,” Souvenir of the 9th International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).
85. Sachin Kalraiya, Hari Shankar Singh, Gaurav K. Pandey, Awadhesh Singh, and Manoj K. Meshram, “CPW-Fed Double Ring Shaped UWB Antenna with 3.5/5.5 GHz Dual Band Notched Characteristics,” Souvenir of the 9th International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).
86. Himanshu Verma, Gaurav K. Pandey, Hari S. Singh, Pradutt K. Bharti, Shalini, and Manoj K. Meshram, “Compact UWB Antipodal Vivaldi Antenna with Novel Tapering” Souvenir of the 9th International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), Jodhpur, (2013).

Machanical Engineering

87. V K Jaiswal and M Z Khan Yusufzai, "Development of flux for hardfacing applications" National Conference on futuristics in mechanical engineering, MMMUT, Gorakhpur, (2014), pp 125-130.
88. Kumar Y., & Kumar S., "Load Prediction in Single Point Micro-Incremental Sheet Forming (μ -ISF)", National Conference on Futuristics in Mechanical Engineering (FME-2014), Gorakhpur-273 010 (UP) (2014), pp 151-158
89. Santosh Kumar "Miniature Manufacturing: An Introduction" Proceedings of National Symposium on Miniature Manufacturing in 21st Century (NSMMIC 2013), (2013), IIT(BHU), pp 1-18.
90. Kumar Y., & Kumar S., "Micro-Incremental Sheet Forming (μ -ISF)" Proceedings of National Symposium on Miniature Manufacturing in 21st Century (NSMMIC 2013), (2013) pp 267-284.

Metallurgy

91. V.C.Srivastava, E. Huttunen-Saarivirta, C. Cui, V. Uhlenwinkel, A. Schulz, N.K. Mukhopadhyay, "Development of bulk quasicrystalline materials by spray forming", 5th Int. Conf. on Spray Deposition and Melt Atomization (SDMA), (2013), pp.1-15.

Mining Engineering

92. Raj K. Sharma, A. Jamal, N.C. Karmakar & R.P. Singh, 2014 Generation of SPM in Amlohri Opencast Coal Mine. International Symposium on Environmental Management and current practices in Mining and Allied Industries, (Feb 2014).
93. Narendar & A. Jamal, Neutralization of Acid Mine Drainage : A Geo Environmental Approach, International Symposium on Environmental Management and current practices in Mining and Allied Industries, (2014).
94. A. Jamal, Abhai K. Ranjan & S. Sidharth Pandey, Prediction Of Acid Drainage For Coalmines – A Case Study, International Symposium on Environmental Management and current practices in Mining and Allied Industries, (2014).
95. H. L. Jasiwal, R P Singh, A Jamal and B K Shrivastva, The effect of time dependent phenomenon on surface subsidence and ground strain pattern. International Symposium on Environmental Management and current practices in Mining and Allied Industries, (2014).
96. Prabhakar Singh, Tarence Thomas, Saurabh Upadhyay & C. S. Singh (2014) Estimation Of Lead And Zinc Concentration In Soil Along The National Highway-27 At Allahabad, International Symposium on Environmental Management and current practices in Mining and Allied Industries, (2014).

97. Abhishek James, Tarence Thomas & C. S. Singh, Mobility Effect Of Flyash On The Physico-Chemical Properties Of Soil, International Symposium on Environmental Management and current practices in Mining and Allied Industries, (2014).
98. S.Upadhyay, T. Thomas, Prabhakar Singh & C.S Singh, effect of sewage sludge application on physico-chemical properties of soil and yield of carrot (*daucus carota* L.), International Symposium on Environmental Management and current practices in Mining and Allied Industries, (2014).
99. S Prasad, M Shahbaz, Rajesh Rai and B K Shrivastva, "Social Cost Benefit Analysis with Special Reference to Economic Valuation of Air Pollution" National Seminar on "Problems of Mining Industry and Technological Advancements" on at Udaipur. (2014), pp 227-233.
100. Ashok Jaiswal, Rajesh Rai and B K Shrivastva (2014), "Social cost benefit analysis for the mining project". National Seminar on Problems of Mining Industry and Technological Advancements at Udaipur, (2014), pp 234-239.

Pharmacy

100. B. Mishra and Chaturvedi NP. Pharmaceutical nanosuspensions. Souvenir RAAS-2014. In the proceedings of international conference on "recent advances in analytical science", (2014), pp 40-43.
101. Alakh N Sahu, S Hemalatha and K Sairam, Acute toxicity study and gastric-ulcer protective activity screening of *Mesua ferrea* flowers, Proceedings of the International conference on 'Global Scenario of Traditional System of Medicine, Ayurveda, Agriculture and Education', Rajiv Gandhi South Campus, Barkachha, BHU, Varanasi, India, (2013).
102. Damiki Laloo, Alakh N Sahu, S Hemalatha and S.D.Dubey, Standardization of some commercially available nagakesar: A comparative pharmacognostical study, Proceedings of the International conference on 'Global Scenario of Traditional System of Medicine, Ayurveda, Agriculture and Education', Rajiv Gandhi South Campus, Barkachha, BHU, Varanasi, India, (2013).
101. Singh, G.K., Rai, G., Chatterjee, S.S. and Kumar, V., Biochemical mechanisms involved in neuro-psychopharmacological activity profile of a hydro alcoholic *Fumaria indica* extract. In: Traditional medicine and globalization- the future of ancient systems of medicine. Edited by Pulok K. Mukherjee. First edition. Maven Publishers, Kolkata, India, (2014), pp 632-644.

102. Sanjay Singh, Seminar cum workshop on “Concepts and applications of pharmacokinetic and pharmacodynamic modeling” at Department of Pharmaceutics, Indian Institute of Technology (Banaras Hindu University), Varanasi, (2013).

Physics

102. B. P. Singh, A. K. Parchur, S. B. Rai and P. Singh, Luminescence and Electrical Behavior of Lead Molybdate Nanoparticles, (Editors: A. K. Chauhan , Chitra Murli and S. C. Gadkari), AIP Conf. Proc. 1512 (2013) p 248.
103. Raghvendra, Rajesh Kumar Singh and P. Singh, Electrical Properties of Ba doped LSGM as Electrolyte Material for Solid Oxide Fuel Cells, (Editors: A. K. Chauhan , Chitra Murli and S. C. Gadkari), AIP Conf. Proc. 1512 (2013) p 976.
104. Shiv Kumar, S. Chatterjee and Anup K. Ghosh, Effects of Cr-Doping on Structural and Optical Properties of ZnO Nanoparticles, 57st DAE Solid State Physics Symp. (Editors: A. K. Chauhan , Chitra Murli and S. C. Gadkari), AIP Conf. Proceed. 1512 (2013) p 942.
105. G. D. Dwivedi, K. K. Shukla, P. Shahi, O. K. Jha, A. K. Ghosh, A. K. Nigam, and S. Chatterjee, Effect of Y Doping on Magnetic and Transport Properties Of $\text{La}_{0.7}\text{Sr}_{0.3}\text{CoO}_3$, 57st DAE Solid State Physics Symp., (Editors: A. K. Chauhan , Chitra Murli and S. C. Gadkari), AIP Conf. Proceed. 1512 (2013), p 254.

43.0 Invited Talks/ Lectures Delivered

Ceramics Engg.

1. L. K. Sharma, Scientist Incharge, CSIR-CGCRI, Khurja Centre deliver invited talk in the department.
2. Shri T. B. Singh has delivered invited talk on the occasion of inauguration of student Chapter, ICS

Chemistry Engg.

3. M.A. Quraishi, “Recent Trends in Green Corrosion Inhibitors”, International Conference held at New Delhi, (October 2, 2013).
4. M.A. Quraishi “The curse of corrosion” International conference on Metallurgy and Material Science held at Dubai, key note lecture, (October 4, 2013).
5. Y.C. Sharma “Nano adsorbents for the removal of metallic pollutants from water and wastewater” in the International conference on Emerging Trends in Chemical Sciences ICETS, Ahmedabad] Key Note lecture, (2013, March 2013).
6. Y.C. Sharma, “International Symposium on Biorefinery’, held at Beijing University of Chemical Technology, Beijing, China, Invited lecture, (11-13 July 2013).

Computer Science & Engineering

7. R. B. Misra, “Data Mining methods for EEG/EMG based diseases”, National Seminar on Data Mining in Health Care, IIT-Allahabad, (June 1-2, 2013).
8. R. B. Misra, “AI methods in Database Systems”, National Conference on Recent Advances Database Systems & Applications (NCRADSA-2013), sponsored by TEQIP,MMEC,Gorakhpur, (May 04-05, 2013).
9. Rajeev Srivastava, Research developments in image processing and cancer detection, G.B. Pant Engineering College, Pauri-Garhwal, (June’2013).

Electronics Engg.

10. Satyabrata Jit, “Fundamentals of CMOS Scaling: A Journey from Diode to Non-Classical CMOS Technology” delivered at the Dept. of Electronics & Communication Engineering, Jadavpur University, Kolkata on (December 21, 2013).
11. Satyabrata Jit, “E-Governance” delivered at the Management Development Program on Financial Management, Faculty of Commerce, BHU on (January 16, 2014).
12. Satyabrata Jit, “Non-Classical CMOS Technology: An Overview” delivered at the “Student’s Conference on Engineering and Systems (SCES 2013),” MNNIT, Allahabad, (April 12-14, 2013).
13. Satyabrata Jit, “A Journey from BJT to Multi-Gate CMOS Technology” delivered at the Dept. of Electronics & Communication Engineering, NIT Agartala, Tripura, on (January 11, 2013).

Materials Science & Technology

14. Pralay Maiti delivered a talk in the National Conference on Materials Science and Technology (TEQIP sponsored) at Madan Mohan, Malaviya University of Technology, Gorakhpur Nanoparticles Induced Phenomena in Polymeric Materials, on (March 10-11, 2014).
15. Pralay Maiti delivered a talk in the Asia Australasia Regional Meeting of Polymer Processing Society (PPS) 2013 at Mumbai, Nanoparticle and Process Induced Super Toughened Piezoelectric Hybrid Materials: The Effect of Stretching on Filled System, on (4 -7 December, 2013).
16. Pralay Maiti delivered a talk in the 3rd Federation of Asian Polymer Society congress and MACRO-2013 organized by Indian Institute of Science, Bangalore, Polymer composites for biomedical applications, from (May 15-18, 2013).
17. Rajiv Prakash delivered invited talk on Organic-Inorganic Hybrids and Polymer Nanocomposites: Novel Electroactive Materials for Sensor Applications in Indian Analytical Science International Conference at International Centre Goa during, (15-17 August 2013).
18. Rajiv Prakash delivered invited lecture and session chair in Recent Advances in Biotechnology & Nanobiotechnology, BIONANO-2013 in AMITY, Gwalior during, (29 and 30 October, 2013).
19. Rajiv Prakash delivered invited lecture on “Functional Conducting Polymers and Nanocomposites: Morphology Control Synthesis” in Indo-UK Seminar on "Molecular Imprinting: Strategies, Applications and Future Perspectives" at NEERI CSIR lab Nagpur during, (February 05-07, 2014).
20. Rajiv Prakash delivered invited lecture on “Novel Electroactive Materials for Sensors and Biosensors” in the Department of Physics and Nanotechnology, BB Ambedkar University, Lucknow on (26th Feb 2014).
21. Rajiv Prakash delivered invited lecture on “Advance Polymers and Sensors Application” in IIT-BHU and KIT-Japan Meet an IIT (BHU) Varanasi, (10th March 2014).
22. 9. Rajiv Prakash delivered invited lecture on “Morphology Control and Chain Ordering of Functional Polymers: Electroactive Materials for Sensor Application” in the International conference on Recent Advances in Analytical Science RAAS 2014 at IIT (BHU) Varanasi during (27-29 March 2014).
23. Pralay Maiti delivered a talk in 67th Annual Technical Meeting of the Indian Institute of Metals (IIM-NMD-ATM 2013) held at IIT (BHU), Tunable Properties of Polymer

Using 2-D Nanoparticles : Potential Nano-biomaterials,during, 12-15 November, 2013.

24. Pralay Maiti delivered a talk in UGC sponsored National Seminar on “Current Trends in Chemistry” at Sripat Singh College, Jiaganj, West Bengal, Biodegradable Polymers for Sustainable Development, during 23-24 December, 2013.
25. Pralay Maiti delivered a talk in the National School on Sustainable Polymers at IIT Guwahati, Processing of Biodegradable Polymers and its Composites during (6-8 January, 2014).
26. Chandana Rath delivered a talk on “Ferromagnetism in non-stoichiometric $Ti_{1-x}Co_xO_2$ thin films by Swift Heavy Ion Irradiation, International conference on solid state physics symposium ISM Dhanbad, (November 18-20, 2013).
27. Chandana Rath delivered a talk on “Development in Engineering Materials: Nanomaterials, their synthesis, Micorstructure, Physical and Magnetic Properties, “Nanomaterials Technology: Application of structural and functional nanomaterials” Gyan Ganga Group of Institute, Jabalpur, (27-28th September 2013).
28. Chandana Rath delivered a talk on “Tuning of Spiral ordering temperature (T_s) and Curie temperature (T_c) in nanoparticles of $CoCr_2O_4$ Multiferroic, Condensed Matter Days , Department of Physics, NIT Rourkela,(29-31 August 2013).
29. A.K. Singh delivered two Invited talks in “Summer School on Development and Characterization of Advanced Material (SSDCAM-2013) from (22 Feb.-14 March-2013).
30. A.K. Singh delivered invited talk in “National Workshop on Recent Advances in Materials Sciences (NWRAMS), Department of Physics, University of Lucknow, Lucknow, (15-16th March, 2013).
31. A.K. Singh delivered an invited talk in “International Conference on Multifunctional Materials, Energy and Environment”, at Sharda University, Greater Noida,during (August 21-23, 2013).

Mathematical Sciences

32. T. Som delivered at the National Workshop on “Predictive Mathematical Models in Science and Engineering (PMMSE 2013)”, at NIT, Kurukshetra, May 24 - 25, 2013.
33. T. Som delivered on “ $(\psi;\eta;\phi)$ - weak contraction principle in ordered cone metric space”, at NATIONAL CONFERENCE ON ADVANCES IN MATHEMATICS AND ITS APPLICATIONS (AMA-2013), INDIA AT NIT, HAMIRPUR, (25-27 JUNE 2013).
34. T. Som delivered “A Novel Soft theoretic AHP Model for Project Management in Multi-Criteria Decision Making Problem” at the International Conference on “Facets of Uncertainties and Applications” jointly held by ORSI-Calcutta Chapter, Dept. of

Applied Maths, Calcutta University and Ramakrishna Institute of Culture, Kolkata, (Dec. 5-7, 2013).

35. S.K.Upadhyay delivered at International conference of International Academy of Physical Sciences, IIT, Jabalpur, (March 20-22, 2014).

Mechanical Engg.

36. Santosh Kumar, Talk on 'In-house development of Processes and Machines' at DRDL, Hyderabad. (Feb 14, 2014).
37. Santosh Kumar, talk on 'My Experiences of solar Energy Device fabrication, Workshop on Advances in Energy Engineering & Technology' at Department of Mechanical Engineering IIT (BHU) Varanasi,(June 28-30, 2013).
38. Mohd Zaheer Khan Yusufzai, talk on "micro welding and joining" in Short Term Course entitled "Micromanufacturing: Materials, Processes and Systems at MNNIT Allahabad, (MMPS-2013).

Pharmacy

39. Mishra B, "Pastillation technology based design and development of oral modified release multiparticulate drug delivery system", "New Insights into Disease and Recent Therapeutic Approaches", 2nd Pharm. Tech IAPST International Conference, Jadarpur University, Kolkata, (Jan 17-19, 2014).
40. Mishra B, "Awareness of effective medication", 66th orientation course, Academic Staff College, BHU, (24 Jan 2014).
41. Sanjay Singh, "Nanotechnology: A solution for bioavailability problems" in AICTE sponsored QIP at BIT, Mesra, Ranchi,(2013).
42. Sanjay Singh, "Nanomedicine: Challenges in development" in Indian Pharmacological Society North Zone Conference on "New Horizons in Pharmacy and Pharmacology" organized by Institute of Pharmaceutical Research, GLA University, Mathura, (U.P.), (15th-16th February, 2014).

Physics

61. B.N. Dwivedi, European Space Agency to attend the IAU Symposium 300 on "Nature of Prominences and their Role in Space Weather", Paris and present a paper on "Estimation of Plasma Properties and Magnetic Field in a Prominence-like Structure as Observed by AIA/ SDO", (10-14 June 2013).
62. B.N. Dwivedi, keynote address on "Swami Vivekananda and Modern Science" given at the National Seminar on 'Swami Vivekananda's Contribution to India',
63. Ramakrishna Advaita Ashrama, Varanasi:, during, (28-30 October 2013).

64. B.N. Dwivedi, invited talk, Department of Science and Technology, Government of India, innovative scheme called INSPIRE, at the KIT, Varanasi, on (9th January, 2014).
65. B.N. Dwivedi, invited talk on “Solar Plasma Line Diagnostics and Coronal Seismology” in the Indo-UK Seminar, Indian Institute of Astrophysics, Bangalore, January 21-23, 2013.
66. D. Giri, “Single polymer gating of channels under a solvent gradient”, 25th IUPAP International conference on Statistical Physics (STATPHYS25), Seoul National University, Seoul, Korea, (July 22-26, 2013).
67. P. Singh invited talk on “Scaling Behaviour of Crystalline and Amorphous Materials” BARC, Mumbai, (September 5, 2013).
68. A. K. Srivastava, invited talk on “Diagnostics of the Magnetized Plasma using MHD Wave Harmonics”, Indo-UK Seminar on Plasma Processes in the Solar and Space Plasmas: The upcoming challenges in science and instrumentation, ARIES, Nainital, India, (26-28 March 2014).
69. S. K. Singh, “Low temperature synthesis, nano-crystalline structure and observation of dual-mode luminescence”, Indo-German Conference on Laser Applications and Nanoscience, Humboldt Club of Kerala and The Goethe-Zentrum, Kerala University, Trivandrum, India, (December 06, 2013).
70. S. K. Singh, “Physics of multi-mode emission: Optical properties of rare-earth doped phosphors”, Winter School on Advances in Laser Spectroscopy and Applications, Banaras Hindu University, Varanasi, India, (March 25, 2014).

44.0 RESEARCH PAPER PRESENTED IN CONFERENCES (Not Published)

Ceramics Engg.

1. Nandini Jaiswal, Devendra Kumar and Om Parkash, "Synthesis and characterization of $Ce_{0.85}Ca_{0.13}Sr_{0.02}O_{1.85}$ solid electrolyte prepared by Auto-combustion for IT-SOFCs", Oral Presentation in the "International Conference on Ceramic Science, (SNTI Jamshedpur)" (19-20 December, 2013)..
2. Nandini Jaiswal, Devendra Kumar and Om Parkash, "Lanthanum and strontium co-doped ceria ($Li_2CO_3-Na_2CO_3$) composite electrolyte and its electrical properties at low temperature" "International Conference on Functional Materials IIT, Kharagpur", (Feb 5-7, 2014).
3. Pallav Gupta, Devendra Kumar, Om Parkash and A. K. Jha, "Effect of Sintering Parameters on the Properties of Fe- Al_2O_3 - ZrO_2 Hybrid Metal Matrix Composites", Proceeding of "International Conference on Multifunctional Materials Energy and Environment" ICMFMEE-2013 Sharda University, Greater Noida (Uttar Pradesh) (21-23 August, 2013).
4. Pallav Gupta, Devendra Kumar, Om Parkash and A. K. Jha "Material Property Evaluation of Metal Matrix Composites for Wide Engineering Applications", Proceeding of "National Conference on Emerging Frontiers in Mechanical Engineering (EFIME-2014) at Harcourt Butler Technological Institute, Kanpur (Uttar Pradesh), (15-16 February, 2014).
5. Pallav Gupta, Devendra Kumar, Om Parkash and A. K. Jha "Mechanical and Metallurgical Behavior of MMCs during Open Die Cold Upsetting", Proceeding of "National Conference on Futuristics in Mechanical Engineering(FME-2014), at Madan Mohan Malviya University of Technology, Gorakhpur (Uttar Pradesh), (08-09 March, 2014).
6. Burhanuddin, A. Ghosh and H. S. Tripathi, "Densification and Properties of Almora magnesite in presence of additive" poster paper presented (ARMM 2013) at CGCRI, Kolkata, (12-13 Nov., 2013).
7. Burhanuddin and A Kumar " Effect of additive on the densification and properties of almora magnesite (IREFCON 2014) at IRMA, Kolkata, (15-18 January, 2014).

Chemical Engineering & Tech.

8. Mahendra Ram, Sanjay Singh and Bhawna Verma, "Heavy metal adsorption on agro-waster based activated carbon," International Conference on Advances in Chemical engineering, NIT Raipur , (5-6 April, 2013).

9. Sanjay Singh, Mahendra Ram and Bhawna Verma, "Color and COD removal of dye waste water using Fenton's Reagent," International Conference on Advances in Chemical engineering, NIT Raipur , (5-6 April, 2013).
10. Bhawna Verma, V.L. Yadav and K.K. Srivastava, "Heat Transfer studies in a closed loop pulsating heat pipe," 17th International Conf. on Heat Pipe, IIT Kanpur, (13-17 Oct 2013).
11. Pramanik, H., Rathoure, A.K. and Rahut, S., "Electrooxidation Study of Methanol in a Laminar Flow Membraneless Microfluidic Fuel Cell", 66th Annual session of IChE, Chemcon 2013, Mumbai, (Dec 27-30, 2013).
12. Majumder, A., Shukla, K. and Pramanik, H., "A review on Pyrolysis of Polystyrene for the Production of Valuable Hydrocarbons", 66th Annual session of IChE, Chemcon 2013, Mumbai, (Dec 27-30, 2013).
13. Pramanik, H., Rathoure, A.K., Jain, V. and Srikanth, P.V.K., "Electrooxidation Study of Methanol in a Laminar Flow Membraneless Microfluidic Fuel Cell-A Review", 2014 1st International Conference on Non Conventional Energy' Kalyani, India, (Jan 16-17, 2014).
14. Ram and B.Verma, Removal of Arsenic from waste water by electrocoagulation, International Conference on Advances in Chemical Engineering, NIT Raipur, (April 2013).

Chemistry Engineering

15. Priyanka Singh, M.A. Quraishi, A. Dandia and S.L. Gupta, Ultrasonic Assisted synthesis of 4-(4-hydroxyphenyl)-3-methyl-6-oxo-4,5,6,7-tetrahydro-2H-pyrazolo[3,4-b]pyridine-5-carbonitrile (APH) and its Investigation as corrosion inhibitor for mild steel in acid medium. NMD – ATM, IIT, Varanasi, (November 12th - 15th 2013).
16. P C Pandey and Ashish K Pandey, Functionalized alkoxysilane mediated synthesis of nanomaterials and their applications, in "Advances in Bioceramics and Biotechnology II, John Wiley & Sons, INC, Hoboken, NJ, USA, (2014).
17. Uma and Y.C. Sharma, Evaluating the adsorptive capacity of bio-waste for removal of a malachite green from aqueous solutions, National Conference on enhancing water productivity in agriculture, (Institute of agriculture, BHU), March, 6-8, 2013.
18. Uma, Y.C. Sharma, Removal of malachite green from aqueous solutions by adsorption onto timber waste, 2nd International Conference on "Agriculture, Food Technologies and Environment – New Approaches" (AFTENA - 2013) at JNU, New Delhi, on (19th and 20th October, 2013).

19. Varsha Srivastava and Y.C. Sharma ,Synthesis of nanoparticles from an agro waste material and its application for the removal of Cr(VI) ions from synthetic wastewater” National Seminar on “Enhancing Water Productivity in Agriculture”, .Department of Agronomy, (Institute of Agricultural Sciences Banaras Hindu University) Varanasi, India, (March 08-09,2014).
20. Punita Mourya, R.B. Rastogi and M.M. Singh, Experimental and theoretical evaluation of thiosemicarbazone derivative as corrosion inhibitor, International conference on Recent Advances in Analytical Science (RAAS-2014), at Senate Hall, Swatantrata Bhavan, BHU, Varanasi, (27-29 March 2014).
21. Punita Mourya, Sitashree Banerjee and M.M.Singh, Marigold flower extract as a green corrosion inhibitor for mild steel in 0.5M H₂SO₄, Poster presented at 15th CRSI-National Symposium In Chemistry (CRSI NSC-15), at Department of Chemistry, Banaras Hindu University, Varanasi, 1-3 February 2013.
22. I.Sinha,”Small Angle X-Ray Scattering (Saxs) Analysis of Silver Nanoparticles, IASC-2013 Conference held at Goa (15 – 17 August 2013).
23. Prakash Narayan Singh, D.Tiwary and I. Sinha, Synthesis and characterization of starch coated iron oxide nanoparticles”, IASC-2013 Conference held at Goa, (15 – 17 August 2013).
24. Alkadevi Verma, Rajiv Kumar Mandal and Indrajit Sinha, "Synthesis of fine Cu nanoparticles in aqueous medium", MRSI-AGM at Indian Institute of Science, Bangalore, (12-14 February 2014).
25. Rakesh Madri, Ritambhara Gond, Dhanesh Tiwary and Indrajit Sinha, S.C Tripathi, “Synthesis And Characterization Of Mesoporous Silica, A Greener Approach” International Conference on Recent Advances in Analytical Science (RAAS-2014) (27-29 March 2014).
26. Prakash Narayan Singh, D.Tiwary and I. Sinha, “Synthesis and characterization of starch Functionalized magnetic nanoparticles,” International Conference on Recent Advances in Analytical Science (RAAS-2014), (27-29 March 2014).

Electronics Engineering

31. Mukul Singh, Anuj Kumar Maurya, Surya Pratap Singh and S. K. Balasubramanian, “6*6 Booth Multiplier Implemented in Modified Split-path Data Driven Dynamic Logic” 3rd students’ conference on engineering and systems, Proc. IEEE student branch (SCES-2014), MNNIT, Allahabad (India), (May 28-30, 2014).
32. Awadhesh Singh, Gaurav K. Pandey, Hari Shankar Singh, Sachin Kalraiya, and Manoj K. Meshram, “CPW-Fed Double Ring Shaped UWB Antenna with 3.5/5.5 GHz Dual Band Notched Characteristics,” Souvenir of the 9th International

Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), Jodhpur, India, (Dec 11-14, 2013).

33. Shalini, Hari S. Singh, G. K Pandey, Pradutt K. Bharti, Himanshu, and Manoj K. Meshram, "Octa-Band Monopole MIMO Antenna for Small Mobile Terminals," Souvenir 9th International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), Jodhpur, India, (Dec 11-14, 2013).
34. Sachin Kalraiya, Hari Shankar Singh, Gaurav K. Pandey, Awadhesh Singh, and Manoj K. Meshram, "CPW-Fed Double Ring Shaped UWB Antenna with 3.5/5.5 GHz Dual Band Notched Characteristics," Souvenir 9th International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), Jodhpur, India, (Dec 11-14, 2013).
35. Himanshu Verma, Gaurav K. Pandey, Hari S. Singh, Pradutt K. Bharti, Shalini, and Manoj K. Meshram, "Compact UWB Antipodal Vivaldi Antenna with Novel Tapering," Souvenir of the 9th International Conference on Microwaves Antenna Propagation & Remote Sensing (ICMARS-2013), Jodhpur, India, (Dec 11-14, 2013).

Materials Science & Technology

36. V. P. Singh and Chandana Rath, Hexagonal to Monoclinic Structural Transformation accompanied with intense White light emission in SrAl₂O₄ induced by ZnO IUMRS-International Conference in Asia (ICA 2013) at Indian Institute of Science, Bangalore, (December 16-20, 2013).
37. P. Mohanty, N. C. Mishra, R. J. Choudhary and Chandana Rath, Effect of Oxygen Partial Pressure and Swift Heavy Ion Irradiation on Properties of Undoped and Co doped TiO₂ Thin Films IUMRS International Conference in Asia (ICA) IISc. Bangalore (December 16- 20, 2013).
38. V. P. Singh, S.B. Rai and Chandana Rath, Stabilisation of high temperature hexagonal phase at room temperature in ZnO-SrAl₂O₄ Composite, International conference on solid state physics Department of Applied Physics, Indian School of Mines (ISM), Dhanbad, Jharkhand (November 18-20, 2013).
39. P. Mohanty, N. C. Mishra, D. K. Avasthi, D. Kanjilal, Chandana Rath, Structural and Magnetic Properties of 100 MeV Ag⁺⁷ Ion Irradiated Co Doped TiO₂ Thin Films, Condensed Matter Days NIT Rourkela (29-31 Aug 2013).

Mechanical Engineering

40. D.S. Yadav, M. Z. Khan Yusuf Zai and M. Vashista, "Microstructural characterization of different steels using Barkhausen Noise measurement"

,International Conference on Advances in Mechanical, Automobile and Aerospace Engineering, 21-22 Sept., 2013, Jawaharlal Nehru University, New Delhi, (2013).

Pharmacy

44. Patel RR, Kumar N, Khan G, Chaurasia S and Mishra B, Investigation of critical variables of core-cell polymer lipid hybrid nanoparticles by using placket-burman screening design. International conference on Nanoscience and Nanotechnology (ICNN-2013), BB Ambedkar University, Lucknow, (Nov 18-20, 2013), pp. 134- 176.
45. Patel RR, Kumar N, Khan G, Chaurasia S and Mishra B., Modeling of parameters involved in optimization of solid lipid nanoparticles carrying hydrophilic drug by using artificial neural network. ICON-NANO 2013 - International conference on surface science and nanotechnology, Dharm Singh Desai University, Gujarat (Dec 10-12, 2013), pp.13-54.
46. Pandey G, Pande C and Mishra B., Formulation, optimization, validation and evaluation of microspheres of Lamivudine and Isoniazid. 65th IPC, Amity University, Noida, Abs no. A444, Delhi (NCR), (Dec 22, 2013).
47. Chaturvedi NP, Chaubey P and Mishra B., Formulation development and optimization of silymarin nanosuspension by 3² factorial design, International conference on nanoscience and nanotechnology, Aligarh Nano IV International Conference 2014, , Aligarh, (March 8-10, 2014), pp. 137- 129.
48. Chaubey P and Mishra B., Formulation and optimization of curcumin-loaded mannosylated chitosan nanoparticles using response surface methodology for treatment of visceral leishmaniasis, Aligarh Nano IV International Conference (2014), Aligarh, (March 8-10, 2014), paper id: 151 Page 136.
49. Chaurasia S, Kumar N, Patel RR and Mishra B., Optimization of parameters for the fabrication of curcumin loaded polymeric nanoparticles using taguchi robust design. International conference on Nanoscience and Nanotechnology (ICNN-2013), BB Ambedkar University, Lucknow, (Nov18-20, 2013).
50. Kumar N, Chaurasia S, Patel RR and Mishra B., Development and optimization of atorvastatin calcium loaded oral biodegradable polymeric nanoparticles using central composite design. International conference on Nanoscience and Nanotechnology (ICNN-2013), , BB Ambedkar University, Lucknow (Nov18-20, 2013).
51. Alakh N Sahu, Nanotechnology in Phytomedicines and Cosmetics, 17th Annual Convention of Society of Pharmacognosy & International Symposium on Frontier in Herbal Cosmetics and Nutraceuticals, , GIS Institute of Professional Studies, Mussoorie Diversion Road, Dehradun Uttarkhand, (February 23-24, 2013).

52. Srivastava RS, Synthesis, characterization and anti-cancer activity of transition metal complex derived by tridentate ligands 4-amino-1,2-naphthoquinone-2-thiosemicarbazone and 4-amino-1, 2-naphthoquinone-2-semicarbazone, 2nd International conference on Medicinal Chemistry and Computer Aided Drug Design, Las Vegas, USA, (15-17 Oct. 2013).
53. Vijayakumar M.R, Lakshmi, Priyanka K, Kosuru R and Singh S. Polymeric nanoparticles of trans resveratrol, an anticancer agent, for enhancing bioavailability: formulation, characterization and pharmacokinetic studies. 4th International Conference on Stem Cells and Cancer (ICSCC-2013): Proliferation, Differentiation and Apoptosis at Durbar Hall, Haffkine Institute, Parel, Mumbai, India. (October 19-22, 2013).
54. Dadhania P, Srivastava S, Vuddanda PR and Singh S., Development and evaluation of surface modified pH sensitive curcumin loaded solid lipid nanoparticles for colon targeting. 6th Bangalore India NANO Conference, The Lalit Ashok, Bangalore, (December 5-6, 2013).
55. Gupta R.K, Patel K.K, Singh S.K and Singh S., Development and characterization of raloxifene hydrochloride solid lipid nanoparticles. 65th Indian Pharmaceutical Congress, Amity University, Delhi, (December 20-22, 2013).
56. Ramoji K, Rao B.N, Sharma A.K, and Singh S,. Hepatoprotective and anti-stress activity of eugenol for the treatment of hepatic encephalopathy in chronic hyperammonemic rats. New horizons in Pharmacy and Pharmacology, Indian Pharmacological Society North Zone Conference, GLA University, Mathura, U.P. (February 15-16, 2014).

Physics

57. D. Giri, Single polymer gating of channels under a solvent gradient, Bio-Complex-Taiwan 2013 at National Taiwan University, Taipei, (July 17 – 20, 2013).
58. Raghvendra, R.K. Singh and P. Singh, Electrical conductivity of Barium substituted LSGM Electrolyte for IT-SOFC, SSI-19, Kyoto, Japan (2013) p 109.
59. Raghvendra, P. Singh, Electrical conductivity of bismuth doped calcia stabilized zirconia as electrolyte material for SOFC, ICSEM, Sharda University, Grater Noida (2014) p 78.
60. Pravin Kumar, RK Singh, P. Singh, Structural and Electrical behaviour of double perovskite Material $\text{Sr}_2\text{NiMoO}_{6-\delta}$, RTCMP, SOA University, Bhubaneswar, Odissa (2014) p 19.
61. Bipin K Singh and P. C. Pandey “Photonic Band Gap from a Stack of Linearly Graded

Dielectric Material” A Focused discussion meeting on Matamaterials and Photonic Nanostructures” organized by The Department of Physics, Indian Institute of Technology, Kanpur, (2013).

62. P. C. Pandey, Bipin K Singh and V. Vidhya Lakshmi “Analysis of Two Dimensional Graded Photonic Crystals towards Negative Index Medium” A Focused discussion meeting on Matamaterials and Photonic Nanostructures” organized by The Department of Physics, Indian Institute of Technology, Kanpur, (2013).
63. S. K. Mishra and Arul Lakshminarayan, Quenching and generation of random states in a kicked ising model, Meeting on Quantum Information Processing and Applications (QIPA-2013) held at Harish-Chandra Research Institute (HRI), Allahabad, India, (2 - 8 December 2013).

45.0 PATENTS AND TECHNOLOGIES DEVELOPED

Biomedical Science

1. Neeraj Sharma, Dr Shiru Sharma, Md Koushik Chowdhury, Anuj Srivastava, School of Biomedical Engineering, IIT(BHU), Varanasi, “Non invasive blood glucose meter based on modulated ultrasound & optical technique”, Patent Application No. 3877/DEL/2012, (2013).

Ceramic Engineering

2. Swati, Om Parkash, “A Bone Implant System”, Our Ref. No.: PAA 1692; NRDC Ref.: PAT/FA/12075-L/2013 under Application No.: 2464/Del/2013, August, (2013).

Chemical Engineering & Tech.

3. Kamal Kumar Gupta, Pradeep Kumar Mishra, Pradeep Srivastava, Indian patent: "3-Dimensional Polymeric hybrid material for Bone and Cartilage Lesions" (2013).

Chemistry

4. P.C. Pandey, “Contribution of Functional alkoxy silanes in nanomaterial synthesis “, (Indian patent 2153/DEL/2013), (2013).
5. P.C. Pandey,” A process for the organic hydroperoxide-mediated synthesis of noble metal nanoparticles, bimetallic nanosol and prussian blue nanoparticles”, Indian Patent 2153/DEL/2013, (2013).
6. Y.C. Sharma,” Maiden approach for the removal of chromium from water using nanocrystalline zirconia”, (Indian patent), (2013).

Electrical Engineering

7. R.A.McMahon, F. Guedon, S.K.Singh and P.J. Garsed, "Switching Circuits", PCT/GB2012/051673, Publication no. WO2013011289, Applied in July 2012 and awarded in (Jan 2013).

Materials Science & Technology

8. Ida Tiwari , Mandakini Gupta and Rajiv Prakash, "Chemical Process for Formation of Anthraquinone Moiety/Cysteamine Functionalized-Gold Nanoparticle/Chitosan based Composite and Application in Detection of Dissolved Oxygen", Application no. 3150/DEL/2013,(2013).

46.0 SPONSORED RUNNING PROJECTS

Ceramics Engineering

1. Devendra Kumar and Pallav Gupta, “Characterization of Doped Iron-Alumina Nanostructured Metal Matrix Composites (MMC) Synthesized using Powder Metallurgy (P/M) Technique”, The Institution of Engineers (INDIA), Rs. 1,50,000.00, 2 Years (2012-2014).
2. Mr. Pallav Gupta, “Effect of Processing Parameter on the Properties of Nanostructured Iron -Alumina ($\text{Fe-Al}_2\text{O}_3$) Metal Matrix Composites (MMC) Produced Using Powder Metallurgy (P/M) Technique”, Council of Science and Technology, Uttar Pradesh, Rs. 11,40,000.00, 3Years (2012-2015).

Chemistry

3. M.A. Quraishi, Microwave Assisted synthesis of heterocyclic compounds and their application in corrosion inhibition, UGC New Delhi, 10 Lakh, (2011-14),
4. Y.C. Sharma, A low cost production of methane from the by-products (glycerol and wastewater) generated during synthesis of biodiesel, CSIR New Delhi, 25 Lakh, (2012-15).
5. Y.C. Sharma, Synthesis of Nano Structured Adsorbents and study of their Adsorption characteristic for the removal of selected Metallic Pollutants from Water and Waste Water, DRDO New Delhi, 44.57 Lakh, (2012-15).
6. Devendra Kumar, Om Prakash, M.M. Singh (Co-PI), Exploring the Effect of Processing Parameters on the Corrosion Behaviour of Iron – Alumina / Zirconia Metal Matrix Nanocomposites (MMNC), CSIR (New Delhi), 23.92 Lakh, February (2013-15).

Computer Science & Technology

7. S. K. Singh, Design and Development of E-content for Digital Video Processing, MHRD, New Delhi, 9.50 Lakh. (2013-15).
8. Rajeev Srivastava, Design and Development of an interactive E-content for the Subject Digital Image Processing and Machine Vision, MHRD, New Delhi, 6.50 Lakh, (2013-15).
9. R. S. Singh, Next Generation e-content on High Performance Computing, MHRD, New Delhi, 4.75 Lakh, (2013-15).

Electrical Engineering

10. S. P. Singh, D. Singh, R. Mahanty, R K Misra, Improved operation of distribution networks incorporating load models, CPRI, Bangalore, Rs. 30.60 Lakh, (2012-14).

Electronics Engineering

11. M K Meshram, “Design and Development of wide band Vivaldi Antenna Array for Airborne Application”, DARE, DRDO, Rs. 7,09,693.00, (2012-2014)..
12. M.THOTTAPPAN, “Analysis, Design and Simulation of S-band MILO”, DRDO, Rs. 45.85 Laks, (2013-2016).

Materials Science & Technology

13. Rajiv Prakash, “Electrochemical sensors for heavy metal ions (Zn, Cu, Ni) in Industrial waste water”, NLC Nalco, Pune, Rs. ~5 Lakhs, (2012-14).
14. Rajiv Prakash (PI), C. Upadhyay (Co-PI), “DNA based Molecular Electronics”, DBT, Rs. ~40 lakhs, 3 years, (2012-15).
15. Rajiv Prakash (Co-PI) Joint project with BHU, “A Strategic Approach to Develop “Ideal” O₂ Sensor Platforms Based on Doped Ormosils”, DBT, Rs. ~30 lakhs, 3 years, (2012-15).
16. Rajiv Prakash, “Development of Azidothymidine (Anti HIV drug) and its Reactive Phase-I Metabolite Electrochemical Sensor based on Low Cost Screen Printed Electrodes”, DST, Rs. ~40 lakhs, 2years, (2013-15).
17. Pralay Maiti, “Synthesis and characterization of novel segmented polyurethane-graphene nanocomposites for biomedical applications”, CSIR, Rs. 22 lakhs, (2013-2016).
18. Pralay Maiti, “Porous polymeric membrane using swift heavy ions”, IUAC, New Delhi, Rs. 5 lakhs, (2011-2014).
19. Chandan Upadhyay & Dhananjai Pandey, “Synthesis of Ni-Zn, Co-Zn and Ni-Co-Zn ferrites and studies effect of shape, size and composition on their microwave properties”, Defense Laboratory, Jodhpur (DRDO), Rs. 9.95 L, (2012-2014).
20. Rajiv Prakash & Chandan Upadhyay, “DNA Based Molecular Electronics”, Department of Bio-Technology, Rs. 38 Lakhs, (2013-15).
21. Chandana Rath, “Growth of Nanowires and Nanotubes of Transition Metal Doped TiO₂: Structure, Properties and Photocatalytic Application”, University Grant Commission, New Delhi, Rs. 11.5 Lakhs, (2012-2015).
22. Chandana Rath, “Size dependent electric, magnetic and magnetoelectric coupling behaviour in Chromite Spinels: ”Department of Science and Technology, Rs. 22.0 Lakhs, (2011-2014).

Mechanical Engineering

23. S. K. Panda & D. Khan, “Study of Weibull statistical design criterion for nuclear graphite components”, BRNS, Rs. 68 lakhs, (2012-Jan, 2015).

24. A. P. Harsha & Rajnesh Tyagi, “Development of tribological test method to measure galling resistance for various metal pairs under dry, lubricated and water lubricated environment”, BRNS Mumbai, Rs. 22,71,900, (2012-15).
25. Arnab Sarkar & S. K. Panda, “Study on wind Climatology on Slender structures using weibull and generated extreme value distribution”, BRNS Mumbai, Rs. 23.5 lakhs, (2013-15).
26. P. Ghosh, “Quenching of dry heated rod using nanofluids”, BRNS, Rs. 33,80,500, (2014-16).

Metallurgical Engineering

27. Vakil Singh, “Effect of Surface Nanocrystallization on Fatigue Behaviour of Aeronautical Alloys: Timetal 834 and Superalloy IN718” Department of Science and Technology, 33.71 lakhs (2010-13).
28. NC Santhi Srinivas, “Evaluation of Cyclic deformation behaviour of Structural Materials for advanced nuclear reactor applications”, Board of Research in Nuclear Science (BRNS) – (Mumbai) Rs.71.94 Lakhs, (2009-2014).
29. R. Manna, “Development of Bulk Ultra Fine Grained Steel of High Strength and High Ductility through Severe Plastic Deformation”, DST, Rs.44.6 Lakhs for (2011-2014).
30. N. K. Prasad, “Development of low Curie temperature magnetic Nano-particles for bio-applications”, DST, Rs. 42.6 Lakhs, (2011-14).
31. K. Chattopadhyay, “Study of Weibull Statistical Design Criterion for Nuclear Graphite Components” by Board of Research on Nuclear Sciences (BRNS), BARC, Rs.79.15 Lakhs (2011-2014).
32. S. N. Ojha, “Setting up an Advanced Research Center for Iron and Steel at IIT (BHU)”, Steel Development Fund, Ministry of Steel, GOI grant, Rs 3098 lakh (2013-16).

Mining Engineering

33. Suprakas Gupta, Prof N C Karmakar, “Development of a methodology for human error classification analysis and reduction to improve safety and productivity for underground coal mines”, CSIR, Rs. 20.0 Lack, (2012-14).
34. N C Karmakar, Suprakas Gupta, “Development and Scaled-up Synthesis of Anionic, Cationic and Nonionic Flocculants Based on Amphoteric Amylopectin for Mineral Industry Effluents & Municipal Waste Water Treatment”, DST, Rs. 19.332 Lack, (2012-14).

Pharmacy

35. S K Singh, Design and synthesis of novel matrix metallo proteinase (MMP-2 & 9) inhibitors as therapeutic agents for Alzheimer's disease, DBT, New Delhi, 68 Lecs, (2013-15).
36. Sanjay Singh, Novel crystal engineering approaches for efficient delivery of herbal medicines in the treatment of brain tumours, STINT, Sweden. Senior Researcher, 1,50,000 Swedish Krona of Rs. 13,63,273, (2013-14).

Physics

37. P. Singh, Preparation and Characterization of Alkaline Earth Co-doped Lanthanum Gallate for Intermediate Temperature Solid Oxide Fuel Cell Electrolyte Materials, DST (Under FAST Track Scheme), 13.5 Lecs, (2011-13).
38. P. Singh, Dynamics of Ions in Tellurite Glasses of Variable Composition, HRDG-CSIR, Rs.20,64,250/-, (2013-15).
39. S. Chatterjee, A systematic investigation on the transport and magnetic properties of $\text{LiV}(\text{Cu}_{1-x}\text{V}_x)\text{O}_4$: A change-over from multiferroic to heavy fermion metallic state, CSIR, Rs.19,56,000.00, (2010-12).
40. P. C. Pandey, Analysis and Applications of Different QuasiPeriodic Photonic Band Gap Structures of Different Materials and Grading Profiles, Fast Track DST-SERC, Rs. 13,08000.00, (2011-13).
41. A. K. Srivastava (Indian); Robert Erdelyi (UK-PI), Study of MHD Waves and Instabilities in Localised Solar Jets, Royal Society, UK, Approx Rs. 10 Lakh, (2014-14).
42. A. K. Srivastava, Ramesh Chandra (Indian PI), Ivan Zhelyazkov (Bulgarian PI), Study of Waves and Eruptive Phenomena in the Solar Atmosphere, DST, India, Rs. 14,55,000.00, (2013-15).
43. S. K. Singh, Rare-earth doped luminescent nanostructures for bio-imaging and photovoltaic applications, DST, New Delhi, (Inspire Prog.), Rs. 35 Lakh, (2013-14).
44. S. K. Mishra, Magnetization dynamics of antiferromagnetic nanoparticles arranged on the geometrically-frustrated arrays, DST, New Delhi (Inspire Prog.), Rs. 35 Lakh, (2013-15).

47.0 EQUIPMENT PROCURED

Bio-Medical Engineering

Sl. No	Name of Equipments	Amount
1.	Spectrophotometer	1,86,000.00
2.	Gel Documentation System	6,77,313.00
3.	Freeze Dryer (Lyophilizer)	10,75,863.00
4.	Mini 51-PE Basic 8051 Trainer kit	1,16,500.00
5.	Microbalance (AND)	9,97,500.00
6.	Analytical Balance	1,24,00.00
7.	Upright Chiller & Freezer	2,00,000.00
8.	Microplate Multimode Reader	13,76,450.00
9.	Ordinary Centrifuge	85,155.00
10.	Refrigerated Centrifuge (C-30Plus)	1,95,500.00
11.	UPS (Online Numeric)	3,51,146.00
12.	Microscope (Trinacular)	1,73,280.00
13.	Del Computer	3,23,483.00
14.	Refrigerated Microcentrifuge	2,62,500.00
15.	Microplate Washer	2,39,854.00
16.	AD Instruments Data Acquisition System	19,31,000

Ceramic Engineering

Sr. No.	Equipments	Amount (Rs. In Lakh)
1.	Float Shink Apparatus (02 nos.)	1,59,390-00
2.	Softening Point Measurement (02 nos.)	2,07,480-00
3.	Viscosity Measurement (02 nos.)	
4.	Auto Clave (02 nos.)	2,07,900-00
5.	ISI Apparatus	49,508-00
6.	Dilatometer (01 no.)	8,01,500-00
7.	Diamond Cutter (01 no.)	3,51,500-00
8.	FT-IR	Euro 19571-00 (Rs.17,00,000)
9.	Hot Air Oven (02 nos.)	49,770-00
10.	Platinum Crucible (10 nos.)	10,64,430-00
11.	UTM	9,68,472 + other expenses
12.	Diamond Polishing Machine	6,48,540-00
13.	Ultrasonic Thickness Gauge Meter	USD 6698-00 (Rs.4,02,215)
14.	Radiation & Optical Pyrometer (01+01 no.)	1,70,000+80,050
15.	Torsion Viscometer Gallen Kemp Type (03 nos.)	5,05,421-00
16.	Porosity & Bulk Density	4,93,500-00
17.	Thermal Conductivity tester for Refractory bricks	9,99,585-00
18.	Corrosion Apparatus for Refractory bricks	98,543-00
19.	High Temperature Furnace (02 nos.)	11,97,000-00
20.	Gray King Index	1,01,798-00
21.	Bomb Calorimeter	5,95,000-00
22.	Ram Say- carbon Residue Apparatus	87,675-00
23.	Junkar's Gas Calorimeter	1,01,800-00
24.	Water Retention Value (02 nos.)	24,150-00
25.	Sub. Sieve Sizing Unit (1 set + 1 set)	38,272-00
26.	Magneto Resistance Measurement Setup	2,81,250-00
27.	Four Probe Resistivity Measurement Setup	5,35,950-00
28.	(BH Loop Tracer) Ferro Hysteresis Loop	5,22,675-00

29.	D ₃₃ meter	4,83,203-00
30.	Globar Furnace 1400 ⁰ C	2,97,540-00
31.	Muffle Furnace 1400 ⁰ C	
32.	Cup Board Fumming	1,36,250-00
33.	Hot Plate with Magnetic Strier (02 nos.)	28,980-00
34.	Centrifuge (02 nos.)	35,753-00
35.	Vickers & Rockwell Hardness Tester	2,87,513-00
36.	Table Top giggers & jolly	1,02,200-00
37.	Keithly High Voltage Source (Sciencetech)	5,49,841-00
38.	Electronic Balance with density kit	49350-00
39.	Airport handling services	42500-00
40.	UTM Plateform	20815-00
41.	UTM Oil	14974-00
42.	Temp Programmer	1,52,775-00
43.	SMF Battery	1,02,484-00
44.	Computer For UTM (02 nos.)	1,16,340-00
45.	06 KVA UPS (02 nos.)	1,49,932-00
46.	UTM Loading & Unloading Charges	15000-00

Chemical Engineering & Tech.

X – Ray Diffractometer

Ball Viscometer

Inductively coupled plasma (ICP) Spectrophotometer

Thermal Analyzer (DTA/ TG)

Gas Chromatograph (GC)

High Performance Liquid

Minor Equipment in Various UG/ PG Laboratories

Chemistry

Sl. No	Name of Equipments	Amount Rs. Lacs
1	XRD	35
2.	FTIR	10
3.	UV Spectrophotometers (02)	10
4.	Ultra Sonicator (01)	05
5	Pin-on-disc friction and wear monitor	05 lakhs

Civil Engineering

Sl. No.	Description of Assets	Value (Rs.)
1.	Francic Turbine with Base Module/Hydraulic Bench	4,14,574.00
2.	Base Module/ Hydraulic Bench	4,67,199.00
3.	HM 284 Series and Parallel	11,85,426.00

	Connected Pumps.	
4.	Base Module/ Hydraulic Bench	4,67,199.00
5.	Marshal Stability Test Apparatus	68,900.00
6.	Marshal Stability Test Apparatus complete set	2,28,800.00
7.	C.B.R. Test Apparatus	1,85,900.00
8.	Universal Automatic Compactor Fully Automatic	1,38,700.00
9.	AIM 332 - 100 kN Flexure Testing Machine Electrically Operated	1,52,672.00
10.	Core Cutting and Grinding Machine – 100 mm dia.	1,37,703.00
11.	Unconfined Compression Tester for Load Measurement	1,10,622.00
12.	Mu Compression Testing Machine	5,30,667.00
13.	NSW-152 BOD Incubator Make - NARANG	2,00,235.00
14.	Kjeldahl Digestion Unit Model : Probloc, Make : Brog	91,000.00
15.	Complete Microbiological Test Kit for Total Coliform, FecalColoform and E. Coliform (MEL/MPN)	2,94,622.00
16.	Inolab Cord 7110 set	1,29,870.00
17.	Dissolved Oxygen Analyzer with Probe	1,02,375.00
18.	Vickers Hardness Tester Cap. : 5 – 50 Kg.	3,71,250.00
19.	Single Channel Digital Resistivity Meter	1,50,000.00
20.	Automatic Electrolab Electromagnetic Sieve Shaker with 8 Nos Test Sieves	2,75,000.00
21.	Dewinter Trinocular Microscope	1,62,750.00

22.	Dewinter Trinocular Microscope	1,62,750.00
23.	Turbidity Meter M-100 W/L, 100/240W	1,19,130.00
24.	Silver Schimdt Hammer PC Type (Make- Proceq SA) Model No. 34141000	2,45,000.00
25.	MIDAS Soilworks Full Version	3,67,500.00
26.	SOKKIA Dual Frequency GPX2 with accessories	14,56,647.00
27.	External Radio for RTK Radio Modem (500 MW) with accessories	3,60,000.00
28.	MATLAB along with Optimization, Global Optimization, Neutral Network Network, Wavelet , Image Processing, Mapping & Fuzi Logic Toorbox	4,01,494.00
29.	Dell Power Edge R720, 2 Socket Server	3,12,900.00
30.	Computer : DELL i-7 with TFT Monitor	12,51,811.57
31.	On Line UPS S400D- 10 KVA. Make : EMERSON	1,81,000.00
32.	Pundit PL-200 (Touchscreen- Pundit Lab Model)	6,85,000.00
33.	Rebound Test Hammer NR Type for Testing Concrete	4,20,000.00
34.	Digital Rebound Hammer (Silver Schimdt) PC Type N	2,43,000.00
35.	AIM 384 Concrete Impermeability Apparatus	1,25,000.00
36.	Rebar Locator (Profometer 5+ Type S)	4,68,000.00
37.	AIM 65109 Electronic Extensometer Strain Gauge type	1,90,000.00
38.	B&K Pulse Data Acquisition	24,54,384.00

	System and Impact Hammer	
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Computer Science & Technology

Name of Equipment		Amount
Monosek Real Time Packet Analyzer CSE 2014		2467500.00
1.	LAN Trainer kits	550000.00
2.	Security trainer	225000.00
3.	Wireless Sensor Network Nodes	911505.00

Electrical Engineering

S.N.	Name of Equipment/ Software	Amount
1.	Feedback Equipment	11,36,044.00
2.	Lucent Technology	22,05,000. 00
3.	Techtronix (Meter, Voltmeter, Galvanometer	9,30,510. 00
4.	Solar PV Emulator	10,68,250.00
5.	Aplab Equipment	10,70,288. 00
6.	Aplab Equipment	7,18,739.00
7.	C&S Electric Equipment	8,29,742.00
8.	QualNet Software	22,47,000. 00
9.	Digsilent Power Factory Software	14,73,500.00
10.	Simulation Software (CASPOC)	5,09,250.00
11.	NI System India Pvt. Ltd.	7,39,207. 00
12.	NI System India Pvt. Ltd.	11,00,000. 00

Electronics Engineering

Sl. No	Name of Equipments	Amount Rs.
1	Computer	10,000,00.00
2.	Anritshu Vector Network Analyzer	19,20,000.00

Mathematical Sciences

Sl. No.	Name of Equipments	Quantity
1	Server	2 lack
2	Desktop PC	40 lack

Mechanical Engineering

S.No	Name of the equipment	Amount
1.	Auto furnace 1500°C	4,72,500.00
2.	Four ball tester with PC & data system	1635060.00
3.	WP 140, Fatigue testing M/C	5,26,765.00
	WP 140,01 set of 3 specimens steel	11370.00
	WP140,20-PC data acquisition system	3,18,233.00
	WP 600, creep testing M/C	2,72,195.00
4.	FL170 deformation of curve axis	267425.00
	FL 160 unsymmetrical bending	313312.00
	WP 950 deformation of straight bar	579726.00
	WP 100 deformation of bars under bending & torsion	229576.00
5.	TM6 25 whirling shaft apparatus	7,79,663.00
	TMG 620-30 software for data acquisition	3,01,704.00
	TM 180 balance of reciprocating masses	73,132.00
6.	WL352 free and forced convection	15,87,859.00
7.	ET 350 changes of state in the refrigeration circuit	13,90,260.00
8.	WL202 Fundamentals of temperature measurement	10,98,223.00
9.	Computerized Engine set up multi fuel power 3-5	20,86,875.00
10.	Centrifugal pump	9,57,459.00
11.	Welding M/C 400 Amp	105,500.00
	Fillet welding m/c trolley	78900.00
12.	Clean energy trainer with solar panel table top wind turbine fuel cell	5,56,875.00
13.	High precision Elector	75,000.00
	Voltage controller with battery backup	32,00.00
14.	Micro hardness tester	1,40,625.00
15.	Trinocular metallurgical microscope	1,41,875.00
16.	Mounting M/C	85,303.00
17.	Belt grinder	35,000.00

	Standard double disc	61,500.00
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Mining Engineering

Sl. No	Name of Equipments
1.	Portable Gas Analyzer
2.	Jaw Crusher 150/200
3.	Jaw Crusher 100X150
4.	Ambient Air Monitor System
5.	Water Quality analysis Kit
6.	Digital Electronic Balance
7.	Infered Thermometer
8.	Microscope Reflection
9.	Microscope Transmitted
10.	GPS
11.	GIS Mapping Software
12.	Biological Miscroscope
13.	Multiparameter
14.	Ambient Fine Duster
15.	Belt Conveyner
16.	Mineral Jig
17.	Roll Crusher
18.	Sesimograph
19.	Vernior Calorimeter
20.	Mufle Furnish 1000
21.	Methenometer
22.	Mufle Furnish 450X225X225
23.	Tanco Sieve Shaker
24.	Gas Safety Lamp
25.	Armod Software 8.2
26.	Incubator convener

Pharmacy

Sl. No	Name of Equipments	Amount in INR
1	Distillation unit	490470.00
2	UV-Vis. Spectrophotometer	504583.00
3	Rotary evaporator	409500.00

4	Digital microscope	173250.00
5	Brookfield digital viscometer	348075.00
6	Fume hood	230081.00
7	Digital refractometer	199500.00
8	Digital automatic polarimeter	378000.00
9	Vacuum filtration and centrifugal unit	283710.00
10	Digital disintegration apparatus	160500.00
11	Digital plethometer & potentiometer	272385.00
12	Tablet compression machine	437692.00
13	Digital moisture balance	152250.00
14	Six station dissolution apparatus	315000.00
15	Lyophilizer	692000.00
16	Karl Fisher titration unit	198608.00
17	Electro Chemical Detector and Degasser for HPLC System	15000USD (889387.5INR)

Physics

SI No.	Name of Equipments	Amount
1.	Simultaneous Thermal Analyzer (TGA,DTA and DSC)	23 Lacs
2.	Model: FL3C-21, Research Spectro-fluorometer	24 Lacs
3.	Microwave Analog Signal Generator & Microwave Power Meter	25 Lacs
4.	Basic+Interferometry+Polarimetry+Polarimetry Interferometry modules of Sarscape Software	15.65 Lacs
5.	OptiFDTD Software (Five user License)	5.5 Lacs
6.	He-Ne Laser source, Lock in Amplifier (SR-830) & Optical Chopper (SR 540)	6 Lacs
7.	LCR meter and accessories	6.75 Lacs
8.	Different setups for B.Tech/IDD/IMD Part-I Physics Lab	25 Lacs
9.	Different setups for IMD Part-II Physics Lab	10 Lacs
10.	Digital & Microprocessors Lab, Computer Interface Lab	10 Lacs

48.0 AWARDS

Bio-Medical Engineering

1. Pralay Maiti, Nira Misra, Govinda Kapusetti, “National award for technology innovation-2013 by Ministry of Chemicals & Petrochemicals, Govt. of India.”, 2013

Ceramics Engineering

2. Vaibhav Chalishgaonkar and et al, “The paper entitled “Studies on in vitro bioactivity of SiC/Bioactive glass composites” presented at the 77th Annual Session of Indian Ceramic Society was selected 1st and awarded as the best paper award.”, Jamshedpur, 19-20 Dec., 2013.

Chemical Engineering & Tech.

3. Sinha A S K, IT BHU Global Alumni -2013 Award for Publications (Cash of Rs. 5000/- and Certificate)

Chemistry

4. M.A. Quraishi, “NIGIS Award for Excellence in Corrosion Science & Technology”, New Delhi, 2013.
5. M.A. Quraishi,” Best publication award under the category of star performance for publishing highest number of publications among the applicants by IIT (BHU) Global Association (USA)”, IIT (BHU) Varanasi, 2013.
6. M.A. Quraishi, “awarded Fellow Royal Society of Chemistry”, U.K., 2013-14.

Computer Science & Technology

7. Rajeev Srivastava, “2014 IIT BHU Publication Award” From IIT BHU Global Alumni Association, USA. Award Declared in March, 2014. Received at IIT BHU , Varanasi by Director, IIT-BHU on 21st April , 2014.

Materials Science & Technology

8. Rajiv Prakash, Awarded Fellowship Asia Pacific Academy of materials (Elected in 2013)
9. Rajiv Prakash, Best poster award in the International Conference in Asia of International Union of Materials Research Society (IUMRS-ICA 2013), held at IISc, Bangalore during December 16-20.

Mathematical Engineering

10. S. Das, received 2013 IIT-BHU Publication Award under 1st Prize category for the faculty presented by IT-BHU Global Alumni Association.
11. S Das, received 2014 IIT-BHU Publication Award under Star Prize category for the faculty presented by IIT-BHU Global Alumni Association

Mechanical Engineering

12. S. K. Shukla, GYTIA2013 Reviewer in Gandhian Young Technological Innovation Award 2013, IIM Ahemdebad.

13. S. K. Shukla *VidyaUdyamSetu Award 2014*, National Award for Building Bridges in Academia & Industry by PGK Mandal's H.V.Desai College Pune, University of Pune and Rotary Club of Pune.

Mining Engineering

14. B K Shrivastva, "Dr Rajendra Prasad Memorial Prize", 2013.
15. Rajesh Rai, "Dr Rajendra Prasad Memorial Prize", 2013.

Pharmacy

16. B. Mishra, "2014 IIT (BHU) Publication Award" – Ist Prize under faculty category", IIT-BHU, 2014.
17. Sanjay Tiwari and Brahmeshwar Mishra, "Gandhian Young Technological Innovation (GYTI) awards – 2014, under Technology Edge category for innovative research work on "Inhalable multiparticulate carrier systems for sustained and targeted delivery of isoniazid", IIM-Ahmedabad, 2014.
18. Pramila Chaubey and Brahmeshwar Mishra, "Gandhian Young Technological Innovation (GYTI) awards – 2014, under Technology Edge category for innovative research work on "Macrophage-specific targeting of mannose functionalized biodegradable polymeric nanoparticles of some anti-leishmanial drugs – development. characterization and efficiency evaluation", IIM-Ahmedabad, 2014.
19. Sanjay Singh, "IIT (BHU) publication award by IIT (BHU) global alumni association", Varanasi, 2014.