



Indian Institute of Technology Jodhpur

Department of ____ Chemistry _____

Review Period: July 2015 to 31 July 2022

Evaluation Sheet for Internal Review of the department

Committee Members

- 1. Dr. Vinod K Singh**
- 2. Dr. Narayanan Kurur**
- 3. Dr. Subhendu Kumar**
- 4. Dr. Jitendra Bera**

Committee may provide a single combined report.

Note:

- 1. In column 2, please provide description of the committee's assessment.**
- 2. In column 3, Please choose one of the progress indicators from the below**

Excellent

Very good

Good

Average

Below Average

Due to the nature of some specific questions, it may not require any progress indicator.

- 3. Please use additional pages if required.**
 - 4. Please sign on every page and submit to the Director IIT Jodhpur**
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| Sr. No | Item | Evaluation |
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| 1. | <p>Opinion and suggestions about the curriculum of different academic programs (B.Tech/M.Sc/M.Tech) offered by the department and their relevance</p> <ol style="list-style-type: none"> 1. The credit requirement for MSc is too high 2. The number of courses in the final semester is too many 3. Students should have sufficient time to prepare for competitive exams 4. One minor and 2 semester projects are too many to be accommodated within a 2-year curriculum 5. Not too many options for elective courses: <p>Suggestion: A relook at the course curriculum with respect to load and diversity. The research project should be restricted to one semester.</p> | Good |
| 2. | <p>Comments about the teaching learning process adopted by the department. Your suggestions and advice for the same</p> <p>Department continues to have the standard classroom teaching system.</p> <p>Suggestion: Modern interactive method for teaching should be encouraged</p> | NA |
| 3. | <p>Provide your overall evaluation about outcome of the programmes and performance of the graduated students in the profession. Any suggestions will be welcome</p> <ol style="list-style-type: none"> 1. Students are placed well after completion of their MSc . 2. Number of students qualifying CSIR exams seemed to be low <p>Suggestion: As mentioned in point 1; a relook at the load and content of the curriculum would be good.</p> | Very good |
| 4. | <p>Provide your assessment about the doctoral programmes (PhD & MTech-PhD) of the department. Please indicate your suggestions for improving the same.</p> <ol style="list-style-type: none"> 1. The institute has a good faculty to student ratio 2. Almost all PhD students are funded by the institute 3. The duration of completion of the PhD program is 5 years, which is very good | Very good |

Jitendra A. Bera

APR 2018

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| | <p>4. A requirement of minimum 2 publications for thesis submission could have detrimental to the quality of research</p> <p>5. The research areas available are limited</p> <p>Suggestion: Expansion of the research focus areas for eg. Chemical Biology, Electrochemistry, Inorganic chemistry, Experimental Physical Chemistry, Polymer Chemistry etc</p> | |
| 5. | <p>Your feedback about laboratory facilities including research infrastructure and facilities in the department</p> <ol style="list-style-type: none"> Limited laboratory space which is shared between the faculties Chemistry requires independent lab space, and it is not currently available Inadequate research equipment (eg. LCMS) Major equipment's such as X-ray and NMR are not operational The time taken for repair of instruments is long Poorly designed office space for students and faculty (no ventilation and impossible to have conversation without disturbing others) Laboratories are designed poorly, with poor safety standard No freight elevators <p>Suggestion: A minimum of 800 Sq.ft lab space (in addition to office space) should be provided to each faculty. One new NMR (500 MHz), one LCMS and one X ray should be immediately procured. The current NMR and X-ray instrument are more than 10 years old. From a safety perspective, it is recommended to have a building dedicated to chemistry research.</p> | Average |
| 6. | <p>Provide committee's assessment of academic research of the department. In particular, provide your input about</p> <p>(i) Quality of the research activities pursued by the department,</p> <p>With just 12 faculty members; there is not enough diversity in the research area with less focus on challenging areas. Research topics are not relevant and does not seem to address contemporary issues / problems</p> <p>(ii) Number and quality of publications Your suggestions and advice will be of immense value</p> <p>The number of publications seems to be okay, however the quality publications of some faculty member could be better.</p> | Good |

Dr. Bera

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| 7. | <p>Provide committee's assessment of different sponsored research and consultancies undertaken by the departmental faculty members.</p> <p>Faculty members have attracted sponsored research projects in good numbers. The number of consultancy project is low in comparison. This is understandable considering that it is a new department and there are not many industries around.</p> <p>Suggestions: Faculty should be encouraged to write high-value projects and department/institute should provide additional support in such cases.</p> | Very Good. |
| 6. | <p>Provide committee's assessment of industry interface and industry linked research activities by the department.</p> <p>Industry linked research activities are not present in the department.</p> | NA |
| 7. | <p>Provide committee's assessment about outreach, continuing education/executive education programmes of the department. Please indicate committee's suggestions for improving the same.</p> <p>There are number of outreach activities in the department.</p> | Very good |
| 8 | <p>Please indicate committee's assessment about the departments linkage with the peer groups in the country and abroad.</p> <p>There are several collaborative projects with colleagues in India.</p> <p>Please assess the extent of inter-disciplinary connect with other departments in the institute.</p> <p>The extent of inter-disciplinary research within the department is satisfactory.</p> <p>Committees suggestions for improvement in these aspects will be of immense value</p> <p>Increasing the faculty strengths will improve overall collaborative research efforts in the department.</p> | Very good |
| 9. | <p>Provide committees assessment about faculty of the department:</p> <ol style="list-style-type: none"> 1. Coverage of different areas of relevance for the department in the faculty | Good |






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| | <p>Many important and core areas are missing in the faculty research profile.</p> <p>2. Quality of the faculty of the department</p> <p>The quality of faculty in the department spans from good to very good. All have good training, but they have to establish as an independent quality researcher.</p> <p>Suggestions about the areas for future growth of faculty strength will be highly appreciated.</p> <p>Here are few areas to be inducted: Physical organic chemistry, Chemical Biology, Electrochemistry, Bio-Inorganic chemistry, Experimental physical chemistry.</p> | |
| 10. | <p>Based on Vision, Mission and Goals identified by the department comment about the committee's overall assessment of the progress made so far.</p> <p>Department has made moderate progress towards the self-defined goals. Although individual faculty maintains a strong research activity, however, as a department, it has not firmly established as a visible and reputed destination for teaching and research.</p> | Good |
| 11. | <p>Overall assessment by the committee and suggestions</p> <ol style="list-style-type: none"> 1. Department needs to expand in a faster rate 2. Research infrastructure must be improved significantly 3. Institute support should be given to maintain and augment equipment facilities 4. Teaching laboratories should be larger and of better quality 5. Course curriculum should be examined to attract students 6. Department should organize regular research talks inviting reputed scientists to improve visibility 7. Mentorship is needed | Good |
| 11. | Any other aspect committee wish to note/highlight | |

Jitendra A. Bera

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