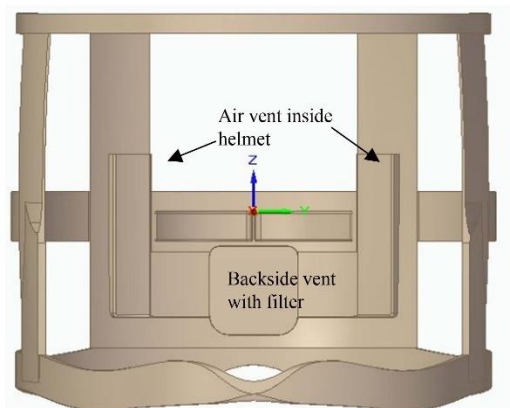


COVID-19 Research Initiative:

Sl.	Field	Inputs
1.	Area : Please select any one of the following A. Personal Protective Care Unit	Personal Protective Care Unit
2.	Project Title	Design and Development of a Powered Air-purifying Respirator Incorporating Nano-coated Filters along with Headgear for Healthcare Workers Involved in Treatment of COVID-19
3.	Expected Outcome	<p>Design and development of complete head and face protection gear for frontline medical personals engaged in treatment of COVID-19 infected patients</p> <p>Establishing suitable technology for cost effective manufacturing of protective headgear along with nano antiviral material coated filter and associated cover for donning and doffing.</p> <p>Transfer of the design and manufacturing technology to the industry partner for mass production which will enable Indian industry to produce and supply of PPEs for COVID-19 in the line of make in India initiative.</p> <p>At least 1000 protective gear would be distributed among the health workers around the state (Chhattisgarh) and the worst affected areas of the country free of cost within the scope of the project.</p>
4.	Expected Timeline	12 months
5.	Remarks	Submitted to CRG, SERB
6.	Attach PDF file (Format : PDF)	
7.	URL	
8.	PI Name	Dr. Kaushik Bandyopadhyay, Co-PI: Dr. Udayraj and Dr. Soumya Gangopadhyay
9.	PI Email	kaushik@iitbhilai.ac.in
10.	PI Phone number	9433794230

## COVID-19 Research Initiative:

Sl.	Field	Inputs
1.	Area : Please select any one of the following A. Personal Protective Care Unit	Personal Protective Care Unit
2.	Project Title	Design and Development of a N95 equivalent helmet for Healthcare Workers Involved in Treatment of COVID-19
3.	Expected Outcome	Design and development of low-cost protective helmet for complete head and face protection which may replace current PPE kits  Development of die with industry partner for mass production
4.	Expected Timeline	6 months
5.	Remarks	Communication with various industry partner for die manufacturing and mass production
6.	Attach PDF file (Format : PDF)	
7.	URL	
8.	PI Name	Dr. Kaushik Bandyopadhyay, Co-PI: Dr. Soumya Gangopadhyay
9.	PI Email	kaushik@iitbhilai.ac.in
10.	PI Phone number	9433794230



(a)



(b)

COVID-19 Research Initiative:

<b>Sl.</b>	<b>Field</b>	<b>Inputs</b>
1.	Area : Please select any one of the following D. Testing Kit	Testing fixture
2.	Project Title	Development of independent fixture for portable X-ray machine
3.	Expected Outcome	Development fixture to enhance capability of portable X-ray set up.
4.	Expected Timeline	24 months
5.	Remarks	Interactive communication with AIIMS, Raipur for the development of extended fixture to portable X-ray
6.	Attach PDF file (Format : PDF)	
7.	URL	
8.	PI Name	Dr. Kaushik Bandyopadhyay
9.	PI Email	kaushik@iitbhilai.ac.in
10.	PI Phone number	8116093902