BRIEF NOTE ON OVERALL PROGRESS MADE UNDER THE IoE SCHEME UNDER DIFFERENT VERTICALS

Institute of Eminence Cell
Indian Institute of Bombay
08 December 2021
Social impact

- IIT Bombay developed a simple and the fastest solution to convert Nitrogen generator to Oxygen generator to solve the Oxygen shortage during pandemic stage during May 2021.
- Team under Prof Santhosh Noronha designed a prototype of a breathing device called 'The Rebreather' which will facilitate recirculation of exhaled breath by scrubbing out Carbon di oxide and blending in fresh oxygen. This will go a long way in minimizing wastage of oxygen in the current system when hospitals are facing acute shortage during May 2021.

Research and development

- Developed the first indigenous semiconductor memory technology to help manufacturing 180nm node in India.
- Developed a real time surveillance analysis system using AI.
- Following World Class Research Labs are being setup and these under different stages of progress.

<table>
<thead>
<tr>
<th>#</th>
<th>WCRL Name</th>
<th>Budget allocated(Cr)</th>
<th>No of PR created</th>
<th>Value of PR created(Cr)</th>
<th>No. of PO created</th>
<th>Total Amount in PO(Cr)</th>
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<tr>
<td>1</td>
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- Central Research Facilities: Towards augmenting central research facilities, an amount of ₹122. 42 Cr have been earmarked for infrastructure funding. High end
research equipment are being procured under this scheme. As on date 45 projects are under various stages of completion. In this direction 103 Purchase Requisitions worth ₹105.22 have been created and 79 Purchase Orders issued. Action under progress related to 24 PRs.

- 153 PDFs (including IPDFs) joined during the year 2021-22 and total number of PDF reached to 407.
- Total 59 patents filed during 2021-22 (upto Sep 2021).

Courses and interdisciplinary centers

- An Interdisciplinary Centre for Digital Health is planned with a donation from alumni who will have strong connections with hospitals example Tata Memorial Hospital and will undertake research to make an impact in data-driven healthcare.
- IIT Bombay is launching an IDDDP and minor program in Healthcare Informatics, starting from the academic year 2021-22. Digital Health and Informatics needs cross-functional expertise – computer science, bioinformatics, statistics, AI/ machine learning, and medical science. The program offered will be covering all this and more.
- The Senate has approved 2 academic programs, a minor and an interdisciplinary dual degree program in Healthcare Informatics, to be hosted by the centre.
- Senate is approved to setting up of a Centre for Quantum Information, Science and Technology (CQuIST) at the meeting held on 17th November 2021.

Academics

- Recruited 14 numbers of faculty during 2021-22 (Up to Sept). Total number of faculty is 688. Current student faculty ratio improved to 1:16.2

Ranking

- QS World ranking 177 - top university from India
- NIRF: 3rd rank.
Achievements

- IIT Bombay Professor, Prof. Roop Malik from BSBE has been elected as an associate member of the European Molecular Biology Organization.

- Established new partnership with HDFC ERGO General Insurance in the insurance sector and is aimed at operationalising high-impact projects across the insurance value chain and developing solutions to relevant business challenges with strategic business solutions.

- Parag Agrawal, an alumni of IIT Bombay appointed as the CEO of Twitter.