

3.2.1.

Innovation Ecosystem Supporting Documents

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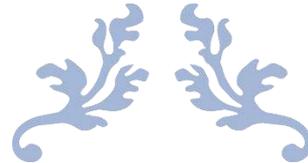
SOCIETY OF ST. FRANCIS XAVIER, PILAR'S
FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING

(Approved by AICTE & Affiliated to University of Mumbai)

Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050.

Phone : (022) 6711 4000, 6711 4101, 6711 4104

Website : www.frcoe.ac.in • Email : coe@fragnel.edu.in



RESEARCH PROMOTION POLICY

Effective from 17th Oct 2022



DR. KETKI JOSHI
In-charge Research and Development

DR. SURENDRA RATHOD
Principal

Moulding Engineers Who Can Build the Nation



Preamble:

Fr. Conceicao Rodrigues College of Engineering encourages multidisciplinary quality research related to science, engineering and technology in the domain of Computer Engineering, AI and Data Science, Electronics engineering, Mechanical engineering, Sciences and Humanity. Academic research, funded research projects, and the creation of intellectual property in the engineering and technology domains are all part of the research activities. The institute strives to create a vibrant research environment for faculty and students engaged in emerging areas. A research and development committee is formed to support the research ecosystem and channel the related activities.

Vision:

To foster an environment conducive to multi-disciplinary research in engineering and technology.

Mission:

1. To promote inventiveness and moral research among faculty, students, and alumni.
2. To encourage interdisciplinary and collaborative research that benefits various facets of society and industry.

Objectives:

- To inspire faculty and students to realize their research potential and improve their involvement in research and development activities.
- To support collaboration and interdisciplinary research projects.
- To support the students and faculty in their efforts to create, protect, and leverage Intellectual Property Rights.

In light of these goals, a research and development committee has been formed at Fr. CRCE to strengthen the institute's presence in the field of research by actively promoting research culture and facilitating research activities.

Short-Term Objectives:

- Conducting faculty and student development programmes to improve understanding of research and IPR.
- Creating awareness and encouraging quality research publications in standard journals.
- Creating awareness and encouraging students and faculty to apply and publish patents and IPR.
- Facilitating applications for research grants to various funding agencies



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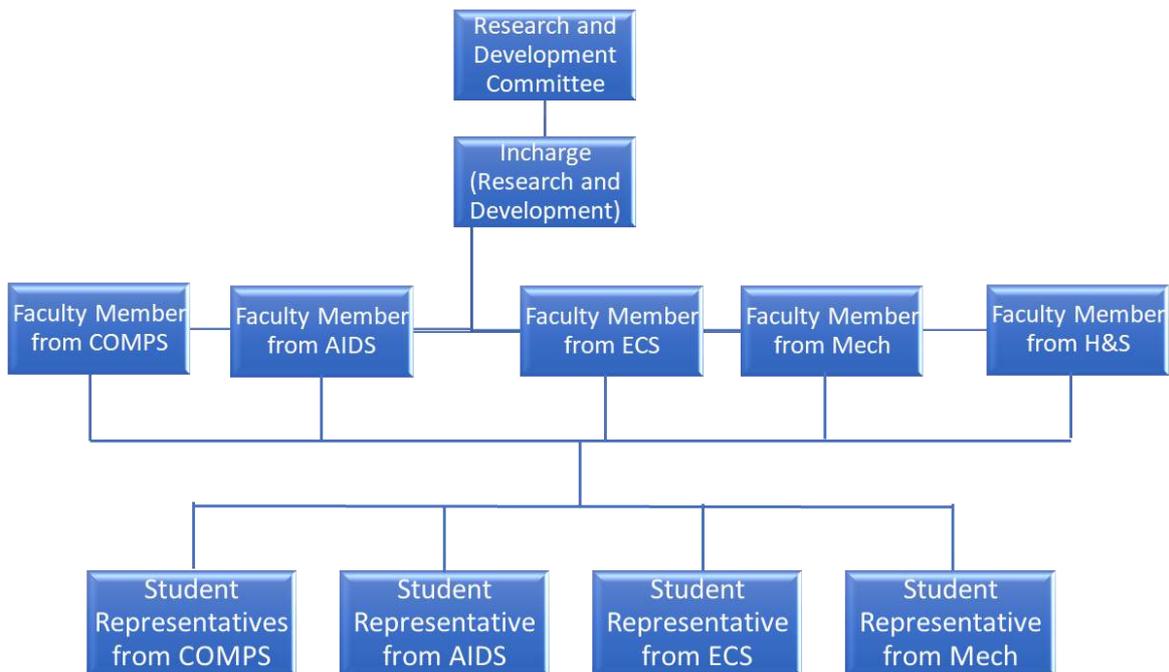
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Long-Term Objectives:

- Collaborating with national/international agencies on research projects and IPRs.
- Enhancing research contribution by the students and faculty in the institute and improve its research ranking.
- Channelizing efforts by researchers to receive grants, commercialization of Patents and IPRs and the technology transfer.
- Engaging the researchers in providing technology solutions to practical problems implementable in the industry and society.

Structure of Research and Development Committee





Roles and Responsibilities of the Committee:

Faculty Members in the Research Committee:

1. To work toward motivating Institute faculty and students to achieve R&D objectives, short-term and long-term research and development goals.
2. Encourage faculty to write effective research proposals and to provide the necessary assistance when applying to various funding agencies.
3. Encourage faculty and students to organise and attend conferences/STTP/workshops/Seminars/Training/FDP/SDP related to cutting-edge technology, research, and intellectual property.
4. Raise awareness of, and encourage, quality publications, research contributions, and IP generation among faculty and students.
5. To familiarise students with new technological innovations and research prospects.

Student Representatives in the Research Committee:

1. Assist faculty members in organising various events such as workshops, seminars, trainings, and certification courses to promote research and intellectual property rights.
2. Informing students about various R&D initiatives and research project opportunities, and encouraging them to participate in related activities.
3. Encouraging students to publish research papers or apply for patents related to minor or major projects completed during the academic course.



Department of Electronics and Computer Science

Major Thrust Areas and Research Facilities

Abstract:

The department was established in 1987 with B.E. in Electronics Engineering. From the academic year 2019-20, the course is renamed to Electronics and Computer Science to cope up with the 4th Industrial revolution. The perfect blend of knowledge of computer technologies with electronics provides the path to the new edge computing. In line with one of the missions of the department “To cultivate an ambience to encourage innovation, research and entrepreneurship skills”, the R & D cell promotes research culture and research projects in the department by providing computing as well as hardware facilities. The main focus is to develop multi-disciplinary projects that address the societal problems in real-life. One of the possibilities could be by integrating AI/ML solutions in Internet of Things (IoT) in areas like Smart farming, Healthcare, Smart Cities, etc. Novel research in solving security issues in IoT is also a desired outcome. The department also aims to produce quality research publications and competent multi-disciplinary projects by students and faculties. The department/institute also offers honours/minor Degree programs in Artificial Intelligence and machine learning, cyber security and, Block chain.

Objectives:

1. To investigate and analyse the issues related to power consumption, security, data privacy and data linking in real-world and provide solution using IoT and related technologies.
2. To design, analyse and develop automated system with appropriate consideration for public health and safety, and the cultural, societal, and environmental considerations.
3. To develop system and applications programs by optimizing, analysing and investigating the theoretical analysis of the algorithms.

Research Domains:

The department has following research domains mainly.

1. Internet of Things
2. Automation
3. Computation and Algorithms
4. VLSI Design



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Research Facilities:

The facilities available with departments/Institute are as follows:

Thrust Areas	Description	Facilities/ resources
Internet of Things	Issues related to Power consumption, Security, Data privacy, Complexity of Data, Issues related to data linking and processing	Raspberry Pi4 Model B (4GB) Kit with Sensors, Node MCU ESP8266 Board, IOT based digital electronics workbench, IOT Sensor Interface, ESA 51 E, PIC 18Fxx Board with LED USB Interface
Automation	Nonlinear Systems, Multi-agent systems and their coordinated control, Intelligent Data Mining Algorithms and Applications, Health Monitoring and Intelligent Fault Diagnosis Systems, Soft-Computing in Modelling and Control, Brain Computer Machine Learning, Unmanned Aerial Vehicles	Instrumentation and Transducer trainer with on board Sensor and Actuators, 6 Axis Robotic, Arm with 250gm Payload Capacity, Industrial 4 port I/O link IFM Germany make with Temperature and speed I/O Sensors, PLC TRAINER-10 with Allen Bradly micrologix 1400(with software license), HUMAN MACHINE INTERFACE (HMI), WINLOG PRO,32TAG WEB ENABLED SCADA SOFTWARE
Computation & Algorithms	Data structures, Algorithms, Computer organization and architecture, Operating system, Object oriented programming, Image processing, Machine Learning, Deep Learning, Artificial Intelligence	Department has three computing laboratory with state-of-the-art software/tools like Jupyter, Tensorflow, JDK, PGAdmin, Hadoop. Specialized high end Machine learning server with 32GB GPU to cater to ML projects.
VLSI Design	Analog CMOS VLSI Design, Mixed Signal Design, FPGA based System Design	FPGA prototype boards, Simulation tools



Department of Mechanical Engineering

Major Thrust Areas and Research Facilities

The department presently offers B.E. (Mechanical Engineering), M.E. (Mechanical Engineering) with specialization in CAD/CAM and Robotics and Doctoral Program in Mechanical Engineering. The department also offers honours programs in Robotics, 3D Printing, Data Science and IOT.

Having a legacy in production engineering since its establishment in 1984 and experience in offering Mechanical Engineering program at PG and PhD level, the department converted UG program in production engineering into mechanical engineering in 2019-20, in response to the changing industry requirements. With an experienced and qualified pool of faculty and state-of-art laboratories, the department has the following research domains and departmental/institute level facilities.

Research Domains:

The department has three research domains.

1. Manufacturing
2. Design
3. Automation

Research Domains	Thrust Areas	Research Facilities
Manufacturing	Design of CNC Systems Smart materials Nano materials Composite materials Material characterization Microstructure analysis Minimum quantity lubrication machining MQL Machining with nano-fluids Sheet metal forming Plastic injection moulding Additive manufacturing Computer Aided Manufacturing Manufacturing System Simulations Discrete Event Simulation Manufacturing Process Simulations Machine vision and applications	Production Grade CNC Machines MQL unit High resolution inverted microscope with material analysis software Digital UTM Fatigue Tester Metallurgical Furnace 3D Printer Arena Manufacturing System Simulation software



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Design	Computer Aided Design Computer Aided Engineering Simulation based Design and Optimization using Finite Element Analysis (FEA) Simulation based Design and Optimization using Computational Fluid Dynamics (CFD)	Modelling and Analysis softwares: Autocad, Solidworks, Ansys, NX11 Machine Learning and data analytics softwares
Automation	Mechatronics and IOT Industrial Robotics Vision Systems	Automation Softwares: Fluidsim for Pneumatics and Hydraulics PLC Systems Robotic Arm



Department of Computer Engineering

Major Thrust Areas and Research Facilities

The Department of Computer Engineering was established in 1991. The department offers B.E. in Computer Engineering, a four-year degree program with an intake of 120 students. It has excellent infrastructure and highly qualified and professionally skilled faculty. The department conducts various training programs to help faculty and students to improve their technical knowledge. The Department has received a Research Grant from the Department of Science and Technology (DST), and Mumbai University for Innovative Projects and Minor Research Grant. It has signed MoU with several companies like Tata Consultancy Services, IBM and D-Link. Graduates of our department have been recruited by major IT companies such as TCS, Accenture, Morgan Stanley, JP Morgan Chase, ZS, Seclure, SAP, Amdocs to name a few.

Abstract:

The Department of Computer Engineering has a goal to increase the number of innovative and mostly multi-disciplinary research projects through the efforts of faculty members and students. This results in the nurturing of research activities, the procurement of equipment and the development of state-of-the-art research facilities. These projects address the requirements of real-life problems. More importantly, one of the major mandates of the Department of Computer Engineering is to participate in international conferences and reputed journals. The issue of concern to society is also addressed by the faculty members and students through sponsored projects. The deliverables of the R&D endeavour are innovative and affordable technology and products.

Thrust Areas and Subareas of Computer Engineering Department:

Big Data, IoT, AI, and automation are the key components of Industry 5.0 in every industry. Therefore, it is crucial to investigate interdisciplinary fields for computer science and engineering applications. Cyber Physical Systems is one of these areas, where joint research projects are carried out with other departments.

Research domain	Description	Facility
Data Science, Artificial Intelligence and Computing	Machine Learning, Deep Learning, Natural Language Processing, Big Data Analytics, Data and Web Mining, Machine Vision, Cloud Computing	Advance Computing Lab supported with Deep Learning and Cloud server.



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Website : www.frcce.ac.in • Email : cce@fragnel.edu.in

Cyber Physical Systems	Blockchain Technology, Cryptography and Network Security, Cybernetics, Human- Computer Interaction, Robotics, Quantum Computing, Internet of Things	Network and Security Lab supported with D Link DCS wireless kit and switches.
Software and System Engineering	Algorithms, Computer Architecture, Operating system, Database Systems Software Engineering	Programming and Database Lab



Department of Artificial Intelligence and Data Science Engineering

Major Thrust Areas and Research Facilities

Globalization, fast-paced growth of data and technological advancement has created a lot of exciting career opportunities. Data Science and Artificial Intelligence are the two most important technologies in the world today. While Data Science makes use of Artificial Intelligence in its operations, modelled after the natural intelligence possessed by humans, Artificial Intelligence is the algorithmic intelligence that is possessed by the machines to perform various autonomous actions. Data Science is a multi-disciplinary field that has conquered industries around the world. It has brought about a fourth industrial revolution in the world today. This is a result of the contribution by the massive explosion in data and the growing need of the industries to rely on data to create better products. We have become a part of a data-driven society. Data has become a dire need for industries that need data to make informed decisions. Fr. CRCE offers a new-age BE program in Artificial Intelligence and Data Science with the main objective of setting up students' careers in the most high-demand industry of the twenty-first century. Department has an experienced pool of faculty and UpToDate computing lab facilities to excel in this domain. Yet, our relatively small size makes for a collaborative and cooperative environment within which a broad set of research groups flourish.

Thrust Areas and Subareas of AI&DS Department:

Research domain	Description	Facility
Data Science, Artificial Intelligence and Computing	Machine Learning, Neural networks and Deep Learning Data Mining Natural Language Processing, Big Data Analytics, Data and Web Mining, Machine Vision, Cloud Computing Pattern Recognition Data warehousing	Advance Computing Lab supported with Deep Learning and Cloud server and Workstations with configuration such as Intel core i7-11700, 16Mb cache, 8 core, 16GB, DDR4, 1TB HDD, Nvidia T1000



Department of Humanities and Science

Major Thrust Areas and Research Facilities

Humanities and Science department established in 1984. With an experienced and qualified pool of faculty and state-of-art laboratories, the department has the following research domains and departmental/institute level facilities.

The department has four research domains-

1. Physics
2. Chemistry
3. Mathematics
4. Communication Skills

Research Domains	Thrust Areas
Physics	Material Science Conducting Polymer and their Nanocomposites Material characterization
Chemistry	Plant Extraction Medicinal Chemistry Material Chemistry Nanotechnology Environmental Chemistry
Mathematics	Mathematical Finance Game Theory Environmental Science
Communication Skills	English Literature Communication Skills

Research Facilities:

Department has sufficient facilities to conduct experimental as well as theoretical research in mathematics, sciences and humanities. Various test and measuring instruments are available in the department.



Institute Initiatives to Promote Research and Development

International Conference on Advances in Computing, Communication and Control

A biennial multidisciplinary International Conference on Advances in Computing, Communication and Control (ICAC3) is organised by Fr. Conceicao Rodrigues College of Engineering. The primary goal of this conference is to promote research and development activities in Computing, Communication and Control in India and the rest of the world. The Conference also aims to offer a collaborative platform for the people in Academics, Research and Industry to address emerging issues and solutions in the above-mentioned areas. The previous seven editions of the Conference were organized in January 2009 (In cooperation with ACM), January 2011 (Springer), January 2013 (Springer), April 2015 (Procedia Computer Science), December 2017 (IEEE), December 2019 (IEEE) and December 2021 (IEEE Xplore) respectively. The best paper award is also given to the authors whose work represents breakthrough research in the respective field.

Anti-plagiarism software

Turnitin Anti-plagiarism software is purchased by the institute to facilitate the submission of quality research papers. It is essential that the software is extensively used by the faculty to check originality of Research Papers, Doctoral Thesis, PG and UG reports by the students.

Sponsored Research Projects:

Fr. CRCE encourages faculty to submit a research project for extramural funding to various institutions such as the All India Council for Technical Education (AICTE), Department of Science and Technology (DST), University Grant Commission (UGC), University of Mumbai etc. The Research and Development Committee will provide assistance and support in the submission of sponsored research projects to various funding agencies. The committee will facilitate proposal review by involving senior researchers from the institute related to the respective domain to evaluate and comment on necessary improvements related to the idea, methodology, feasibility, novelty, and contribution.

Even though all teachers are encouraged to apply for various research grants, it is mandatory for Professors and Associate Professors to apply for Major Research Grants in every academic year. Annual performance of Professors and Associate Professors will be judged based on the research grants applied and amount of research grant fetched.

Workshops/Seminars/FDPs/STTPs/SDPs:

Fr. CRCE has organised and shall continue to organise a variety of workshops, seminars, FDPs, STTPs, SDPs, and trainings on cutting-edge technologies, research, and intellectual property. The committee on research and development will encourage faculty and students to organise and participate in such activities. The committee will plan and carry out various Research and IPR-related activities to facilitate idea exchange and promote research culture, with the goal of improving individuals' and the institute's research profile.



Research Collaboration and Memorandum of Understanding (MoU):

The Research and Development Committee, in collaboration with the research guides of the research centre and experienced faculty members from various domains, will facilitate the signing of Memorandums of Understanding (MOU) related to research activities with various organisations. Annual performance of faculty shall be judged on successful research collaboration with industries and research

The institute has MoUs with various organizations/universities/institutes Tata Consultancy Services, IBM, D-Link, University of Texas at EL Paso. Synergy Consultancy, Christiani Sharpline to name a few.

Research Scholars Colloquium:

Research colloquium is the proposed activity which can be conducted during the international conference ICAC3 being organised by the institute biennially. The research scholars and faculty working on sponsored project will be presenting their ongoing research project or sponsored project. The activity will be open to all the faculty, students and research scholars with the objective of facilitating interaction and sharing the latest results and findings with the faculty and students interested in the related field. The award may be given to the best presentation to encourage quality research and development.

Paper publications / Patent Applications related to B.E./M.E./PhD Project Work

B.E./M.E. students are required to publish a paper or apply for patent / copyright based on the outcomes of the major project. It is essential that the students follow industry standards specific to their domain and use open-source software Latex while writing project reports. For PhD all the norms related to publications given by University of Mumbai should be followed.

Paper publications / Patent Publications by Faculty

1. Faculty publications and patents are integral part of ranking and accreditation of programs and institutes. Good quality publications indicate research culture of the institution and can bring laurels to the institute and faculty involved. Hence faculty are required to publish paper or file a patent every year. It is mandatory for every faculty to publish at least one journal paper in an academic year.
2. Quality of publication has always been a matter of concern and hence it is necessary to set minimum acceptable standards. At Fr. CRCE, publication by faculty would be claimed if it is published in **SCI, Scopus or Web of Science index journal**.
3. It is mandatory for everyone to write '**Fr. Conceicao Rodrigues College of Engineering**' as an affiliation in the papers. Affiliation should be mentioned in full and not the acronyms like CRCE.
4. All faculty members should create and use **ORCHID ID** and should be linked to the Scopus.



Incentives / awards for research achievements:

Financial support to Undergraduate students for paper presentation at national / international conference: Undergraduate students are eligible to get financial assistance in the form of partial reimbursement of the conference registration fee on successful presentation of the paper at national / international conference with necessary prior approvals. Research and Development committee can scrutinise the applications and institute financial supports will be based on quality of paper, quality of journal/conference and impact of research.

Best Ph.D. Thesis: Ph.D. thesis of all the research scholars completing Ph.D. from the college research centre during the academic year will be evaluated by an expert panel. Best Ph.D. Thesis will be awarded to the researcher having most significant research contribution among the candidates. The evaluation will be based on the criteria related to publications in national and international journals, conferences and transactions, book chapters, awards and recognitions, collaborative research, funding and IPRs. Rubrics for evaluation of best thesis shall be developed.

Research Grant: A faculty member working on a research project funded by external agency will be provided necessary support from the institute for its completion and will be permitted to use the infrastructure and research equipment available in the institute, with prior approval through proper channel. Institute may issue 'Letter of Appreciation' to a faculty member who successfully complete the funded research project.

Annual Reports:

The research and development committee will prepare the following annual reports at the end of academic year:

- R&D activities conducted during the year
- Faculty and student contribution to research
- List of publications by faculty and students



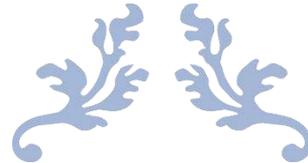
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RESEARCH ETHICS POLICY

Effective from 17th Oct 2022



DR. B. S. DAGA
Member Secretary (Institutional Ethics Committee)

DR. SURENDRA RATHOD
Principal

Moulding Engineers Who Can Build the Nation



Section 1: Objective

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING, a premier Engineering College, is committed to develop best quality technical personnel with sound knowledge in basic engineering principles, technical skills, innovative research capabilities and exemplary professional conduct to use technology for the benefit of society with the highest ethical values. The college is established to impart uninterrupted dissemination of knowledge to top ranking students from all sections of the society. The college is responsible to cultivate higher values of honesty, integrity, responsibility, mutual respect for persons and property and respect for human rights.

In order to achieve this, appropriate guidelines are framed to enforce professional ethics in the personal conduct which will be binding on all the students and staff in the college. Institutional Ethics Committee is constituted to formulate Research Ethics Policy for FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING.

Section 2: Institutional Ethics Committee (IEC)

The Institutional Ethics Committee shall be comprised of senior faculty members with Principal as the Chairman of the committee. An IEC is established to formalize institutions commitment to the promotion of high scientific and ethical standards in the interest of communities and researchers. All research involving human subjects or data related to human subject as a patient should be conducted in accordance with the three basic principles, namely Beneficence, Respect for Persons and Justice.

Section 3: Responsibilities of Institutional Ethics Committee

- Formulate the Research Ethics Policy for Fr CRCE
- Provide independent and competent review of all ethical aspects of research proposals
- Review research proposals submitted to it within a reasonable time and document its views in writing to the applicant's
- Safeguard the dignity, rights, safety, and well-being of all study participants and communities paying special attention to investigations that may involve vulnerable participants
- Consider the suitability of Investigator(s) for the proposed study with respect to relevant qualification, training and experience.
- Report breaches of Research Ethics Policy or non-compliance of ethical practices among students, faculty and staff to the Principal for taking necessary actions.
- Recommend actions on non-compliance of ethical practices among students, faculty and staff
- Propose corrective actions on report of non-adherence to the Policy.
- Remain trained and up to date on the regulatory requirements



- Make amendments and clarity to the Policy as and when required.
- If required then review following documents to arrive at the conclusion:
 - (i) Experimental Methodology
 - (ii) Protocols followed during experimentation
 - (iii) Investigators profile
 - (iv) Investigators agreement with sponsor
 - (v) Investigators undertaking

Section 4: Responsibilities of the Students/Scholars

It shall be the responsibility of the students and scholars to:

- (i) Read, understand and be aware of this Research Ethics Policy and subsequent amendments brought to it.
- (ii) Respect the laws of the country, rights of individuals and to conduct in a responsible and dignified manner at all times. One must show due respect to people while interacting for academic purposes by way of data collection, and surveys for student projects.
- (iii) Obtain written consent from human subjects/participants and prior approval of Research Ethics Committee in projects involving any kind of direct measurement of human physiological parameters such as ECG/EMG etc.
- (iv) Ensure that, the rights of an individual will be respected and their property and life will not be put under threat at any circumstances. Academic work must not pose a risk or danger to people or the environment. Necessary clearances and permits/licenses must be obtained while handling, storing and disposing of radioactive, toxic or harmful materials.
- (v) Follow ethical practices in publications/thesis/project reports etc. by checking plagiarism and by avoiding self-plagiarism. Be cautious to avoid so-called "predatory journals" which publish papers with minimal or no review. It is unethical to publish in such journals of this nature.
- (vi) Carefully avoid data fraud and all unacceptable forms of data manipulation, such as or subtracting data points at will, editing images to produce a false result, creating images artificially and presenting them as data or using the same figure or table to describe different experiments. The conclusions claimed in a research paper must be genuine.
- (vii) Honestly claim authorship of documents. The list of authors in research papers, reviews, books, monographs or policy documents should not be manipulated to give undue credit to those who have not contributed ("honorary authorship") or deny credit to those who have contributed sufficiently.



(viii) Improve the balance of under-represented sections and provide supportive environment by avoiding bias, favouritisms and discrimination of any kind. Academic communities are enriched by the presence of people of different ethnicities, genders, religions, castes, tribes, socio- economic strata, affiliations, backgrounds and sexual orientations. There must not be direct or indirect bias or discrimination against any individual based on the above categories.

Section 5: Responsibilities of Staff

It shall be the responsibility of the members of staff to:

- (i) Read, understand and be aware of this Ethics Policy and subsequent amendments brought to this Research Ethics Policy.
- (ii) Respect the rights of individuals and to conduct in a responsible, unbiased and dignified manner at all times. One must show due respect to people while interacting for academic purposes by way of data collection, and surveys for student projects.
- (iii) Obtain written consent from human subjects/research participants and prior approval of Ethics Committee in projects involving direct measurement of human physiological parameters such as ECG/EMG etc.
- (iv) Ensure that, the rights of an individual will be respected and their property and life will not be put under threat under any circumstances. Academic work must not pose a risk or danger to people or the environment. Necessary clearances and permits/licenses must be obtained while handling, storing and disposing of radioactive, toxic or harmful materials.
- (v) Follow ethical practices in publications/thesis/project reports etc. by checking plagiarism and by avoiding self-plagiarism. Be cautious to avoid so-called "predatory journals" which publish papers with minimal or no review. It is unethical to publish in such journals.
- (vi) Avoid data fraud and all unacceptable forms of data manipulation, such as adding or subtracting data points at will, editing images to produce a false result, creating images artificially and presenting them as data or using the same figure or table to describe different experiments. The conclusions claimed in a research paper must be genuine.
- (vii) Honestly claim authorship of documents. The list of authors in research papers, reviews, books, monographs or policy documents should not be manipulated to give undue credit to those who have not contributed ("honorary authorship") or deny credit to those who have contributed sufficiently.



Section 6: Procedures for Corrective Action

This Policy is envisaged to employ procedures for dealing with allegations of research misconduct, as well as any other kind of misconduct as described in this document, against its staff and students.

It is compulsory for researchers to adhere to norms of engineering practice and follow all safety guidelines. Researcher should take more pre-caution when human subjects are involved or design & development of products to be used on human subjects are involved. Institute strongly discourages the unethical practices or data collection, data analytics, data reproduction or drawing inference from the data.

(i) Corrective action:

If a publication or report/thesis is found to contain plagiarism or manipulated data, the concerned department must ensure that a correction or retraction is published in the same place as the original paper.

On the other side, if a decision is found to have been made based on a bias or conflict of interest, then it should be overturned and the process must be repeated from first step, if necessary.

In general, every effort must be made to ensure that an unethical action does not succeed in propagating false knowledge or incorrect decisions.

(ii) Punitive action

Should be as per the norms of regulating bodies, publication houses and government agencies.

University of Mumbai

Phone - 022-2270 3248

Phone - 022-2270 8729

E-mail - universitythesis2011@gmail.com



Thesis Section,
UNIVERSITY of MUMBAI
Fort Campus, M.G. Road,
Mumbai - 400 032

Th./ICD/2018-19/ 3684

18th November, 2018.

- ✓ The Principal,
- St. Francis Xavier Pilar's,
Fr. Conceicao Rodrigues College of Engineering,
- Fr. Agnel Ashram, Bandstand,
Bandra (W), Mumbai - 400 050.

Sub :- Your Proposal for **Continuation of Recognition** to enroll students for **Ph.D.(Science & Technology)** degree course in the subjects of **Mechanical Engineering and Electronics Engineering** from the Academic Year 2018-19.

Ref. :- Your letter No.CRCE/2017/438, dated 26th September, 2017.

Madam / Sir,

With reference to the subject above, I am directed by the Hon'ble Pro-Vice-Chancellor to inform you that the report of the Local Inquiry Committee for **Continuation of Recognition** for the **Ph.D.(Science & Technology)** degree course in the subjects of **Mechanical Engineering and Electronics Engineering** was placed before the Board of Deans at its meeting held on **4th September, 2018**, vide item No.34, when it was resolved as under :-

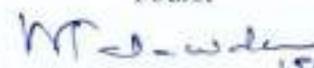
"be granted Continuation of Recognition to enroll 10 students Ph.D.(Technology) degree course in the subject of Mechanical Engineering and Electronics Engineering from the Academic Year 2018-19 to 2022-23 subject to yearly review of compliance of conditions stipulated by the LIC Committee & recovery of dues towards recognition fees, if any & the same be recommended to Vice-Chancellor for his consideration & approval."

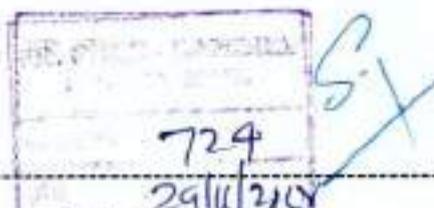
Pursuant to the above resolution of the Board of Deans, I am to inform you that the College/Institute has been granted permission for **Continuation of Recognition** to enroll students for the **Ph.D.(Science & Technology)** degree course in the subjects of **Mechanical Engineering (10 ten Students) and Electronics Engineering (14 fourteen students)** from the Academic Year to 2018-19 to 2022-23.

You are therefore, requested to pay the remaining fees of Rs.4,50,000/- (Rupees Four Lakh Fifty Thousand Only), towards the Continuation of Recognition from the academic year 2020-21 to 2022-23, within 15 days, as a precondition for approval of continuation of recognition.

Further, you are also requested to submit the proposal for continuation of recognition for the academic year 2023-24 onwards, on or before 30th September, 2022.

Yours,


15/11/18
Deputy Registrar
(Thesis Section)



Copy to -

1. The Jt. Director, Higher Education, Maharashtra State, Mumbai Region, Elpistone Technical High School Building, Mahapalika Marg, Mumbai - 400 001.
2. The Assistant Registrar, A.P.D. Section, for information and it may be treated as an action taken report on the resolution of vide item No.34 of the Board of Deans meeting held on 4th September, 2018.
3. The Co-Ordinator, University Computerisation Centre, University of Mumbai, Idol Building, Vdyanagari, Kalina, Mumbai - 400 098.

University of Mumbai



Phone - 09167563793
E-mail - rapc@mu.ac.in

Research Administration
Promotion Cell,
UNIVERSITY of MUMBAI
Kalina Campus, Vidyanagar

Th/ICD/2023-24/1014

23rd June, 2023

The Principal,
Fr. Conceicao Rodrigues College of Engineering,
Fr. Agnel Ashram,
Bandstand, Bandra,
Mumbai - 400 050.

Sub :- Your Proposal for **Extension of Recognition (for new Course under same faculty) for Ph.D. (Science & Technology) degree course in the subject of Computer Engineering for the academic year 2022-23.**

Madam / Sir,

With reference to the subject above, I am directed by the Hon'ble Vice-Chancellor to inform you that the report of the Local Inquiry Committee for **Extension of Recognition (for new Course under same faculty) for Ph.D. (Science & Technology) degree course in the subject of Computer Engineering** was placed before the Academic Council at its meeting held on 6th April 2023, vide item No. 3.4, when it was resolved as under :-

"The recommendations passed by the Board of Deans at its meeting held on 8th December, 2022 vide item No. 3.76 to consider the reports of the Local Inquiry Committee appointed by the Board of Deans, on the applications received from various Research Centres who had applied for First Time Recognition (02 reports), Continuation of Recognition (04 reports) and Extension of Recognition (06 reports) be accepted accordingly subject to fulfillment of the following condition :-

1. NAAC Accreditation
2. P.G. Degree Programme in the concerned Subject
3. Approved Principal and Teachers
4. No dues certificate of recognized institution."

Pursuant to the above resolution of the Academic Council, I am to inform you that the College/Institute has been granted permission for **Extension of Recognition (for new Course under same faculty)** to enroll 10 (Ten) students for the **Ph.D. (Science & Technology) degree course in the subjects of Computer Engineering** from the academic year 2022-23.

You are therefore, requested to submit the proposal for Continuation of Recognition for the academic year 2023-24 and pay the remaining fees towards the Continuation of Recognition for the same within 15 days, as a precondition for approval of continuation of recognition.

Yours,

Umesh Avhad
Assistant Registrar
(RAPC)

University of Mumbai



No.PG/2/ICD/ 2017-18/ 171
Mumbai- 400 032
13th October, 2017

To,
Dr. (Smt.) Prabhu Sapna Uday
A/31, Savita CHS,
Off. J.P. Road,
Seven Bungalows, Andheri (W),
Mumbai - 400 061

Sir/ Madam,

This has reference to your application dated 9th June, 2017 which was forwarded through the Principal, **Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram Bandstand, Bandra (W), Mumbai -400 050**, for recognition as a teacher of the University.

In this connection, I am directed to inform you that you have been granted recognized as a teacher to guide student for the **Ph.D.** degree in the subject of **Electronics Engineering** of the University with effect from 28th July, 2017 upto superannuation of your services through **Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram Bandstand, Bandra (W), Mumbai -400 050**.

Further, a copy of the Ordinances prescribing duties of recognize teacher of the University is enclosed, for your perusal.

Yours faithfully,

Assistant Registrar
Post Graduate Studies Section

University of Mumbai



No. PG/L.C.D./2014-15/ 2480
Mumbai - 400 032.

30th March, 2015.

To,
Dr. Surve Sunil Krishnaji
C - 185,
Sector-4, Airoli,
Navi Mumbai - 400 708.

Sir/ Madam,

With reference to your application dated 6th August, 2014, through the Principal, **Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050**, for recognition as a teacher of the University, I am directed to inform you that you have been recognized as a teacher of the University for the **Ph.D. (Tech.) Degree in Electronics Engineering** with effect from **5th March, 2015**.

A copy of the Ordinances prescribing duties of teacher of the University is enclosed.

Yours faithfully,

Sd/-
Offg. Deputy Registrar
Post Graduate Studies Section

No. PG/ICD/2014-15/ 2480

30th March, 2015.

Copy forwarded with compliments to the Principal, **Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050**, for information.


Offg. Deputy Registrar
Post Graduate Studies Section

FR. CRCE - BANDRA INWARD MAIL	
Inward No.	106
Date	10-4-2015
Sign	



University of Mumbai



No. PG/I.C.D./2014-15/ 19643
Mumbai - 400 032.

30th March, 2015.

To,
Dr. Bhoir Deepak Vishnu
102, Akanksha,
The Bank of Baroda
Thane Employees CHS Ltd.,
Panchpakhadi,
Thane - 400 601.

Sir/ Madam,

With reference to your application dated 6th August, 2014, through the Principal, **Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050**, for recognition as a teacher of the University, I am directed to inform you that you have been recognized as a teacher of the University for the **Ph.D. (Tech.) Degree in Electronics Engineering** with effect from **5th March, 2015**.

A copy of the Ordinances prescribing duties of teacher of the University is enclosed.

Yours faithfully,

Sd/-
Offg. Deputy Registrar
Post Graduate Studies Section

No. PG/ICD/2014-15/ 19643

30th March, 2015.

✓ Copy forwarded with compliments to the Principal, **Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050**, for information.

FR. CRCE - BANDRA INWARD MAIL	
Inward No.	105
Date	10-4-2015
Sign	[Signature]

[Signature]
Offg. Deputy Registrar
Post Graduate Studies Section

University of Mumbai



No. PG/L.C.D./2015-16/51234
Mumbai - 400 032.

15th June, 2015.

To,
Dr. Rathod Surendra Singh Sardarsingh
202 - A, Plot : 83,
Gorai Shree Ganesh Chs,
Gorai - 2, Borivali (W),
Mumbai.

Sir/ Madam,

With reference to your application dated 13th March, 2015, through Sardar Patel Institute of Technology, Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai - 400 058, for recognition as a teacher of the University, I am directed to inform you that you have been recognized as a teacher of the University for the Ph.D. (Tech.) Degree in Electronics Engineering with effect from 25th May, 2015.

A copy of the Ordinances prescribing duties of teacher of the University is enclosed.

Yours faithfully,

Offg. Deputy Registrar
Post Graduate Studies Section

University of Mumbai



No. PG/L.C.D./2014-15/ 28050
Mumbai - 400 032.

3rd April, 2014.
mny

To,
Dr. Rathod Surendrasingh S.
202-A, Plot :83,
Gorai Shree Ganesh,
Gorai - 2, Borivali (West),
Mumbai - 400 092.

Sir/ Madam,

With reference to your application dated 13th March, 2013, through the Principal, Sardar Patel Institute of Technology, Mumbai - 400 058, for recognition as a teacher of the University, I am directed to inform you that you have been recognized as a teacher of the University for the Ph.D. Degree in Electronics & Telecommunication Engineering with effect from 11th April, 2014.

A copy of the Ordinances prescribing duties of teacher of the University is enclosed.

Yours faithfully,

Offg. Deputy Registrar
Post Graduate Studies Section

University of Mumbai



No. PG/21.C.D./2015-16/ 6447
Mumbai - 400 032.
30th June, 2015.

To,
The Principal,
Fr. Conceicao Rodrigues College of Engineering,
Fr. Agnel Ashram,
Bandstand, Bandra (W),
Mumbai - 400 050.

Sir,

With reference to your letter No. CRCE/2015/287 dated 20th May, 2015, regarding Continuation of Recognition as guide for Ph.D. (Tech.) Degree of Dr. Patil Bhushan Tryambak in the subject of Mechanical Engineering. I am to inform you that the matter was placed before the Board of University Teaching and Research at its meeting held on 25th May, 2015 vide Item No. 07 when the Board of University Teaching and Research resolved as under :-

Resolved that Continuation for recognition as guide for Ph.D. (Tech.) Degree in Mechanical Engineering be granted from Fr. Conceicao Rodrigues College of Engineering, Bandra (W), Mumbai - 400 050.

Ph.D. (Tech.) Degree in Mechanical Engg. :-

Name of the Teacher	Recommendations
Dr. Patil Bhushan Tryambak Assistant Professor, Fr. Conceicao Rodrigues College of Engineering, Bandstand, Bandra (W), <u>Mumbai - 400 050.</u>	Continuation for recognition be granted as Ph.D. guide from Fr. Conceicao Rodrigues College of Engineering, Bandra.

In pursuance of the above resolution passed by the Board of University Teaching and Research, the continuation of Ph.D. Guideship of Dr. Patil Bhushan Tryambak in the subject of Mechanical Engineering has been granted from the date of his joining in Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050.

Yours faithfully,

Offg. Deputy Registrar

University of Mumbai



No. Thesis/ICD/2022-23/ 1068
Mumbai-400 098
24th June, 2022

To,
Dr. Shaikh Vasim Abdul Majid
A/402 Chandresh Arcade CHS Ltd,
Lodha Road, Opposite Laxmi Park,
Mira Road (E),
Thane – 401 107

Sir/ Madam,

This has reference to your application dated 10th December, 2021 which was forwarded through the Principal, Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram Bandstand, Bandra (W), Mumbai – 400 050, for recognition as a teacher of the University.

In this connection, I am directed to inform you that you have been granted recognition as a teacher to guide student for the Ph.D. degree in the subject of Mechanical Engineering of the University with effect from 02nd May, 2022 upto superannuation of your services through Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram Bandstand, Bandra (W), Mumbai – 400 050.

Further, a copy of the Ordinances prescribing duties of recognized teacher of the University is enclosed, for your perusal.

Yours faithfully,

W. A. W. S.

Deputy Registrar 27/6/22
Research Administration & Promotion Cell

Copy forwarded with compliments for information and necessary action:-

- 1) The Principal, Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram Bandstand, Bandra (W), Mumbai – 400 050.
- 2) The Deputy Registrar, AAMS, University of Mumbai, Fort Campus, Mumbai-400 032.
This is action taken report of the Board of Deans at its meeting held on 02nd May, 2022 vide item no. 3.25.

University of Mumbai



No. PG/ICD/2019-20/ 1956
Mumbai- 400 032
09th January, 2020

To,
Dr. (Smt.) Deshmukh Sujata Prashant
A-502, Royal Tower,
Sector - 8A,
Airoli,
Navi Mumbai

Sir/ Madam,

This has reference to your application dated 17th March, 2017 which was forwarded through the Principal, Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050, for recognition as a teacher of the University.

In this connection, I am directed to inform you that you have been granted recognized as a teacher to guide student for the Ph.D. degree in the subject of Computer Engineering of the University with effect from 05th December, 2019 upto superannuation of your services through Fr. Conceicao Rodrigues College of Engineering, Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050.

Further, a copy of the Ordinances prescribing duties of recognize teacher of the University is enclosed, for your perusal.

Yours faithfully,

P. S. Dhurmal

Assistant Registrar
UG & PG Section

University of Mumbai



No. Thesis/ICD/2021-22/ 567
Mumbai- 400 032
11th June, 2021

To,
Dr. Kanthe Ashok Mallayya
Plot No. C-3, A-206,
Millenium Orchid, Sector- 12,
Kharghar,
Navi Mumbai -

Sir/ Madam,

This has reference to your application dated 23rd October, 2020 which was forwarded through the Principal, Pillai HOC College of Engineering & Technology, Pillai HOCL Educational Campus, HOC Colony, Rasayani, Via. Panvel, Dist. Raigad -410 207, for recognition as a teacher of the University.

In this connection, I am directed to inform you that you have been granted recognition as a teacher to guide student for the Ph.D. degree in the subject of **Computer Engineering** University with effect from 20th May, 2021 upto superannuation of your services through Pillai HOC College of Engineering & Technology, Pillai HOCL Educational Campus, HOC Colony, Rasayani, Via. Panvel, Dist. Raigad -410 207.

Further, a copy of the Ordinances prescribing duties of recognized teacher of the University is enclosed, for your perusal.

Yours faithfully,

Deputy Registrar 11/6/21
Research Administration & Promotion Cell

Copy forwarded with compliments for information and necessary action:-

- 1) The Principal, Pillai HOC College of Engineering & Technology, Pillai HOCL Educational Campus, HOC Colony, Rasayani, Via. Panvel, Dist. Raigad -410 207.
- 2) The Deputy Registrar, AAMS, University of Mumbai, Fort Campus, Mumbai- 400 032. This is action taken report of the Board of Deans at its meeting held on 20th May, 2021 vide item no. 3.52.

Research Centre Statistics (as on 30-11-2023)

Research Centre	Electronics Engineering	Mechanical Engineering	Computer Engineering
Year of Introduction	2014	2015	2023
Sanctioned Intake	14	10	10
No. of Candidates pursuing Ph.D.	7	9	6
No. of Candidates Registered	5	5	-
No. of Candidates with Thesis Submitted	-	1	-
No. of Candidates with Ph.D. Awarded	8	1	-
Total Vacancies	7	1	4

Electronics Engineering

Sr. No	Name of Guide	Designation	No. of Candidates with Ph.D. Awarded from the Research Centre	No. of Candidates with Thesis Submitted from the Research Centre	No. of Ph.D. Candidates currently Admitted to the Research Centre	Total Ph.D. Candidates Admitted to date
1	Dr. Deepak V. Bhoir	Professor	02	-	02	15
2	Dr. Sunil K. Surve	Professor	01	-	02	
3	Dr. Sapna U. Prabhu	Professor	00	-	03	
4	Dr. Surendra S Rathod	Professor	-	-	-	
5	Dr. Srijia Unnikrishnan	Professor	05	-	-	

Mechanical Engineering

Sr. No	Name of Guide	Designation	No. of Candidates with Ph.D. Awarded from the Research Centre	No. of Candidates with Thesis Submitted from the Research Centre	No. of Ph.D. Candidates currently Admitted to the Research Centre	Total Ph.D. Candidates Admitted to date
1	Dr. Bhushan T. Patil	Professor	01	01	06	10
2	Dr. VasimA Shaikh	Associate Professor	-	-	03	

Computer Engineering

Sr. No	Name of Guide	Designation	No. of Candidates with Ph.D. Awarded from the Research Centre	No. of Candidates with Thesis Submitted from the Research Centre	No. of Ph.D. Candidates currently Admitted to the Research Centre	Total Ph.D. Candidates Admitted to date
1	Dr. Sujata Deshmukh	Professor	-	-	04	06
2	Dr. Ashok Kanthe	Associate Professor	-	-	02	

Patents

Sl. No.	Patent Application No.	Design Patent/ Utility Patent	Status	Faculty Inventor/s Name	Title of the Patent	Patent Filed Date	Patent Published Date / Granted Date
1	202321020315	Utility Patent	Published	Prof. Kalpana Deorukhkar	Detection of Video Duplication and Integrity Verification using Blockchain Technology	23/03/2023	05/05/2023
2	202321027909	Utility Patent	Published	Dr. Sujata Deshmukh Prof. Dipali Koshti Prof. Supriya Kamoji	EDU-VQA- A Multimodal Multi-Knowledge Open Domain Visual Question Answering Model For Education	17/04/2023	19/05/2023
3	202321015188	Utility Patent	Published	Prof. Sangeeta Parshionikar Prof. Archana Lopes	Verbal Agreement Signing using Blockchain & Speech Recognition	07/03/2023	31/03/2023
4	202321018653	Utility Patent	Published	Prof. Archana Lopes Prof. Sangeeta Parshionikar	Metastore- An Image-Based 3d Garment-Making System For Virtual Try-Ons	19/03/2023	14/04/2023
5	202241051449	Utility Patent	Published	Dr. Sujata Deshmukh	IoT and Artificial Intelligence based fruit recognition, calorie estimation and suggestion for healthy life using Deep learning algorithms	08/09/2022	16/09/2022
6	202221060823	Utility Patent	Published	Prof. Monali Shetty	Blockchain based system for project funding and CSR funding	25/10/2022	18/11/2022

7	202221070479	Utility Patent	Published	Dr. Sujata Deshmukh, Prof. Supriya Kamoji, Dr. Bhushan Patil	Floodknow: A Ai Based Hybrid System For Flood Severity Prediction Based On Leveraging Both Textual And Visual Features Using Deep Neural Networks	07/12/2022	16/12/2022
8	379051-001	Design Patent	Granted	Dr. Bhushan Patil Dr. Ketaki Joshi Dr. Sujata Deshmukh	Corner set punch for springback elimination in v sheet metal bending	10/02/2023	22/03/2023
9	375204-001	Design Patent	Granted	Dr. Ketaki Joshi, Dr. Bhushan Patil, Dr. Sujata Deshmukh	Football Thrower	7/12/2022	13/01/2023
10	374640-001	Design Patent	Granted	Dr. Bhushan Patil Dr. Sujata Deshmukh Dr. Ketaki Joshi	Article for Printing 3D parts using Electrochemical Deposition	25/11/2022	27/01/2023



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 Department of Industrial Policy & Promotion,
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 Government of India

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Application Details

APPLICATION NUMBER	202321020315
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	23/03/2023
APPLICANT NAME	1 . PROF. KALPANA DEORUKHKAR 2 . RACHEL SEQUEIRA 3 . RAJ HARINDAR MOURYA 4 . AAYUSHI THAKUR
TITLE OF INVENTION	DETECTION OF VIDEO DUPLICATION AND INTEGRITY VERIFICATION USING BLOCKCHAIN TECHNOLOGY
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	sgowthami12@gmail.com
ADDITIONAL-EMAIL (As Per Record)	sgowthami12@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	05/05/2023

Application Status

APPLICATION STATUS	Awaiting Request for Examination
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➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

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Application Details

APPLICATION NUMBER	202321027909
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	17/04/2023
APPLICANT NAME	1 . Sujata P Deshmukh 2 . Dipali Koshti 3 . Dr. Ashutosh Gupta 4 . Dr. Mukesh Kalla 5 . Supriya Kamoji
TITLE OF INVENTION	EDU-VQA - A MULTIMODAL MULTI-KNOWLEDGE OPEN-DOMAIN VISUAL QUESTION ANSWERING MODEL FOR EDUCATION
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	Senanipindia@gmail.com
ADDITIONAL-EMAIL (As Per Record)	dipasavadarti@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	10/06/2023
PUBLICATION DATE (U/S 11A)	19/05/2023
REPLY TO FER DATE	11/10/2023

Application Status

APPLICATION STATUS	Reply Filed. Application in amended examination
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➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

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Application Details

APPLICATION NUMBER	202321015188
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	07/03/2023
APPLICANT NAME	1 . Sangeeta Parshionikar 2 . Syed Irfan Amjad Abidi 3 . Lance Garrick Soares 4 . Alan Anthony Almeida 5 . Archana Lopes
TITLE OF INVENTION	VERBAL AGREEMENT SIGNING USING BLOCKCHAIN AND SPEECH RECOGNITION.
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	dr.bksarkar2003@yahoo.in
ADDITIONAL-EMAIL (As Per Record)	sss.svk25@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	31/03/2023

Application Status

APPLICATION STATUS	Awaiting Request for Examination
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➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

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Application Details

APPLICATION NUMBER	202321018653
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	19/03/2023
APPLICANT NAME	1 . Archana Lopes 2 . Gautam Manuel 3 . Jyothis Shajan Maniyamkattuthadatil 4 . Rendell Rocky Padu 5 . Rohit Rishikesan Nair 6 . Sangeeta Parshionikar
TITLE OF INVENTION	METASTORE- AN IMAGE-BASED 3D GARMENT-MAKING SYSTEM FOR VIRTUAL TRY-ONS.
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	dr.bksarkar2003@yahoo.in
ADDITIONAL-EMAIL (As Per Record)	sss.svk25@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	14/04/2023

Application Status

APPLICATION STATUS	Awaiting Request for Examination
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➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

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Application Details

APPLICATION NUMBER	202241051449
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	08/09/2022
APPLICANT NAME	1 . Dr.D.Amarnath 2 . Dr. Dande Swapna Sree 3 . Dr.P.Periyasamy 4 . ADITYA DUBEY 5 . Dr.KarthikeyanPalaniappan 6 . Mrs.P.Joy Suganthi Bai 7 . Somnath Das 8 . MANICKAM.S 9 . Sujata Prashant Deshmukh 10 . Dr K Nagaiah
TITLE OF INVENTION	IOT and Artificial Intelligence based fruit recognition, calorie estimation and suggestion for healthy life using Deep learning algorithms
FIELD OF INVENTION	CHEMICAL
E-MAIL (As Per Record)	senanipindia@gmail.com
ADDITIONAL-EMAIL (As Per Record)	admin@senanip.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	16/09/2022

Application Status

APPLICATION STATUS	Awaiting Request for Examination
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➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

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 Department of Industrial Policy & Promotion,
 Ministry of Commerce & Industry,
 Government of India

(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

Application Details

APPLICATION NUMBER	202221060823
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	25/10/2022
APPLICANT NAME	1 . ISHAAN LOOMBA 2 . COLIN DSOUZA 3 . PROF. MONALI SHETTY
TITLE OF INVENTION	BLOCKCHAIN BASED SYSTEM FOR PROJECT FUNDING AND CSR FUNDING
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	sgowthami12@gmail.com
ADDITIONAL-EMAIL (As Per Record)	sgowthami12@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	18/11/2022

Application Status

APPLICATION STATUS	Awaiting Request for Examination
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➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

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Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

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Application Details

APPLICATION NUMBER	202221070479
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	07/12/2022
APPLICANT NAME	1 . Sujata P Deshmukh 2 . Supriya Kamoji 3 . Dr. Mukesh Kalla 4 . Kartick Hariharan 5 . Ashley Lobo 6 . Prashant Deshmukh 7 . Bhushan T Patil
TITLE OF INVENTION	FLOODKNOW: A AI BASED HYBRID SYSTEM FOR FLOOD SEVERITY PREDICTION BASED ON LEVERAGING BOTH TEXTUAL AND VISUAL FEATURES USING DEEP NEURAL NETWORKS.
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	sujata.deshmukh@fragnel.edu.in
ADDITIONAL-EMAIL (As Per Record)	sujata.p.deshmukh@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	16/12/2022

Application Status

APPLICATION STATUS	Awaiting Request for Examination
--------------------	---

[View Documents](#)

➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

In case of any discrepancy in status, kindly contact ipo-helpdesk@nic.in



ORIGINAL

मूल/No : 126482



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CERTIFICATE OF REGISTRATION OF DESIGN

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देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **FOOTBALL THROWER** से संबंधित है, का पंजीकरण, श्रेणी **21-02** में 1.Dr. Ketaki Narendra Joshi 2. Asiya Mohammed Hanif Shaikh 3. Shaun Jose Geevarghese 4. Raghav Omprakash Rawat 5. Ainesh Suresh Shenava 6. Dr. Bhushan Tryambak Patil 7. Dr. Sujata Prashant Deshmukh के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

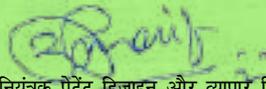
Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class **21-02** in respect of the application of such design to **FOOTBALL THROWER** in the name of 1.Dr. Ketaki Narendra Joshi 2. Asiya Mohammed Hanif Shaikh 3. Shaun Jose Geevarghese 4. Raghav Omprakash Rawat 5. Ainesh Suresh Shenava 6. Dr. Bhushan Tryambak Patil 7. Dr. Sujata Prashant Deshmukh.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्याधीन प्रावधानों के अनुसरण में।

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निर्गमन की तारीख/Date of Issue : 20/01/2023


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तारीख / Date : 25/11/2022
पारस्परिकता तारीख / Reciprocity Date* :
देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **ARTICLE FOR PRINTING 3D PARTS USING ELECTROCHEMICAL DEPOSITION** से संबंधित है, का पंजीकरण, श्रेणी **15-09** में 1.Dr. Bhushan Tryambak Patil 2. Janhavi Sachin Shinde 3.Jaydenmario Joseph Fernandes 4.Shubham Dinesh Sawant 5.Aayush Devendra Patil 6.Dr. Sujata Prashant Deshmukh 7.Dr. Ketaki Narendra Joshi के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

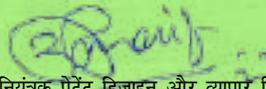
Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class **15-09** in respect of the application of such design to **ARTICLE FOR PRINTING 3D PARTS USING ELECTROCHEMICAL DEPOSITION** in the name of 1.Dr. Bhushan Tryambak Patil 2. Janhavi Sachin Shinde 3.Jaydenmario Joseph Fernandes 4.Shubham Dinesh Sawant 5.Aayush Devendra Patil 6.Dr. Sujata Prashant Deshmukh 7.Dr. Ketaki Narendra Joshi.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्याधीन प्रावधानों के अनुसरण में।

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CERTIFICATE OF REGISTRATION OF DESIGN

डिजाइन सं. / Design No. : 379051-001
तारीख / Date : 10/02/2023
पारस्परिकता तारीख / Reciprocity Date* :
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प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **CORNER SET PUNCH FOR SPRINGBACK ELIMINATION IN V SHEET METAL BENDING** से संबंधित है, का पंजीकरण, श्रेणी 15-09 में 1.Sonia Mahendra Pol 2. Dr. Bhushan Tryambak Patil 3.Dr. Ketaki Narendra Joshi 4.Dr. Sujata Prashant Deshmukh के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

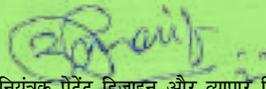
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डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्याधीन प्रावधानों के अनुसरण में।

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Annual Report 2022-2023
IIC- FrCRCE

A. About IIC Institute

Vision of IIC established at the Institute

“Moulding Engineers Who Can Build The Nation”

Mission of IIC established at the Institute

To Facilitate a platform for innovative minds to transform their ideas into viable business propositions to start a business venture.

Journey of IIC established at the Institute

IIC-FrCRCE is established in November 2018 with objectives to create a vibrant local innovation ecosystem to develop innovative mindset and nurture the innovative ideas of technology students by providing support for start-up mechanism. The IIC-FrCRCE team is formed comprising the members from all departments along with startup cell, E-cell, IPR cell, Internship cell coordinators and students.

The IIC–FrCRCE initiated various innovation, start-up, entrepreneurship related **activities** such as Workshops, Boot Camps online, Seminars, Hackathons, Mini Challenges, success stories and interactions with professionals, Alumni Entrepreneurs in the institute. The main events are **Idea Competition, PoC Competition, Business Model Canvas and Demo Day**. IIC celebrated most of the **celebration** activities announced by MOE. The top three teams of Idea Competition are felicitated during the annual function with **best innovation prize**. The student cell organizing startup and innovation activities enthusiastically is awarded with **Innovation Trophy**. The IIC president and NISP coordinator have conducted session on innovation and creativity for First Year students **Induction Program**. Nominated Faculty of CRCE representing all departments have completed Basic Level and Advanced Level **IATraining**. These Faculty have Proactively mentored students by conducting session in different domains required to build a startup.

In continuation with IIC activities, our Institute has joined the Campaign of implementing National Innovation and Startup Policy (**NISP**) in Higher Educational Institutions (HEI) initiated by MoE Innovation Cell in June 2020. We have successfully completed the policy formulation and in the Policy implementation stage. The action plan is prepared. NISP awareness session is conducted by NISP coordinator Prof. Swati Ringe to motivate and understand the faculty and students on 6th January 2021. NISP dedicated web page is created on the college website for reference.



Year 2018-2019- 4.5 Star Certificate

– 4 Star Certificate



Year 2020-2021 4 Star Certificate



Year 2021-2022 4 Star Certificate

Year 2022-2023– IIC-FrCRCE Activities snapshot





MEETING FOR QUARTER REVIEW WITH IIC MEMBERS AND STUDENTS

IDEA COMPETITION IN 4 PHASES

IDEA COMPETITION POC COMPETITION BUSINESS_MODEL_CANVAS DEMO DAY



DEMO DAY



Mentoring KAVACH STUDENTS



Felicitation of Mentor and Winning team







Fr. Conceicao Rodrigues College of Engineering
Fr. Agnel Ashram, Bandstand, Bandra (W) - 400 050
Department of Mechanical Engineering

Seminar Presentation

**Incubation Opportunities
for
Early Stage Entrepreneurs**

Scheduled on: 01st August 2023 (Tuesday)
Time: 2.00 PM - 4.00 PM Venue: Room 407



FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
FR. AGNEL ASHRAM BANDRA (WEST)

IEEE-CRCE

**PERFECT PITCH DECK
PRESENTATION**

SPEAKER
PROF. VAIBHAV
GODBOLE

DEPARTMENT OF ELECTRONICS
AND COMPUTER SCIENCE

Wednesday
23rd August 2023

11:00 A.M - 12:00 P.M

3rd Floor, 300



FR. CONCEICAO RODRIGUES COLLEGE OF
ENGINEERING
FR. AGNEL ASHRAM BANDRA (WEST)

**LEAN START-UP AND MINIMUM VIABLE
PRODUCT/BUSINESS**

GAIN A DEEP UNDERSTANDING OF LEAN
METHODOLOGY, LEARN HOW TO DEVELOP AND
VALIDATE BUSINESS IDEAS EFFICIENTLY, AND
ACQUIRE PRACTICAL STRATEGIES FOR
BUILDING AND TESTING MINIMUM VIABLE
PRODUCTS TO LAUNCH SUCCESSFUL VENTURES
WITH MINIMIZED RISKS AND ACCELERATED
GROWTH POTENTIAL.

4TH AUGUST
2:30 PM
SEMINAR HALL

**SAURABH
KULKARNI**
SPEAKER
DEPARTMENT: ARTIFICIAL
INTELLIGENCE AND DATA SCIENCE




FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
FR. AGNEL ASHRAM BANDRA (WEST)

**ACHIEVING VALUE PROPOSITION FIT AND MARKET FIT
CONVERTING INNOVATION INTO STARTUP**

LEARN
PROVIDING SUCCESSFUL PRODUCT AND
SERVICES WITH
VALUE PROPOSITION CANVAS FOR
ACHIEVING PRODUCT-MARKET FIT

PROF. SWATI RINGE

IIC-NISP COORDINATOR
DEPARTMENT OF AI AND DS

DATE
WED 23RD, AUGUST

TIME
10:30 AM



MENTORING BY INNOVATION AMBASSADORS

PRAKALP 2K23 IEEE

Date: 10/03/2023
Registration Fee: Rs.250/- (IEEE members)
Rs.300/- (Non-IEEE members)

PRAKALP 2K23 is a project competition. This is a great opportunity to showcase exceptional ideas/solutions that benefit human being. Shortlisted participants will get an exposure to exhibit their projects and win exciting prizes.
Prize Money: 1st - Rs.25000/-
2nd - Rs.15000/-

SHARK TANK CRCE

Join us for the ultimate pitch competition: Shark Tank CRCE! A chance to show the world your innovative ideas and cutting-edge products. Impress our panel of investors and industry experts with your pitch and walk away with funding, mentorship, and valuable exposure. Don't miss this exciting opportunity to take your business to the next level.
Registration Amount: Rs.75/-

Prize Money: ● 1st - Rs.3500/-
● 2nd - Rs.1600/-
FE Prize - ● Rs.750/-

INNOVIZE

Come All, Come Fast, Present Big, Win BIGGER! Present your innovative ideas which are total 100%. You will be given 20 minutes to make a ppt of your idea topic (yes, you heard right, Only the idea ppt, not the code or model), and guess what! You are allowed to bring a Plus One.
Registration Amount: Rs.90/-

Prize Money: ● 1st - Rs.3500/-
● 2nd - Rs.1500/-
FE Prize - ● Rs.750/-



EVENTS ORGANISED :1)PRAKALP: DEMONSTRATING INNOVATIVE PROJECTS (G20 EVENTS)2)SHARK TANK: PITCHING EVENT FOR INNOVATIVE & CUTTING EDGE PRODUCTS 3)INNOVIZE: PRESENTATION OF INNOVATIVE IDEAS.



Diversified representation in the IIC established at the institute from industry, Interdisciplinary & Departments/ Units etc. (Academic Year – 2021-2022)

The Institute have four departments: Mechanical Department, Electronics and Computer Science Department(ECS), Computer Engineering department and Artificial Intelligence and Data Science.



SOCIETY OF ST. FRANCIS XAVIER, PILAR'S
FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING

(Approved by AICTE & Affiliated to University of Mumbai)

Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400 050.

Phone : (022) 6711 4000, 6711 4101, 6711 4104

Website : www.frccce.ac.in • Email : crce@fragnel.edu.in

Ref.: CRCE / 2022 /372

Date: October 28, 2022.

Declaration Form

Dear Sir,

This is to inform the Ministry of Education Innovation Cell (MIC) that our Institution's Innovation Council (IIC-FrCRCE) has been formed as per the format prescribed by MIC under the Presidentship of **Dr. Surendra Singh Rathod**. As an institution, we are committed to support activities suggested by MIC as per the prescribed schedule and timelines. Please find below the details regarding council members.

Institution's Innovation Council Composition

Position	Designation	No.	Name
President	Principal	1	Dr. Surendra Singh Rathod
Vice President	Assistant Professor	1	Prof. Ashwini Pansare
Convener	Assistant Professor	1	Prof. Kranti Wagle
NISP Coordinator	Assistant Professor	1	Prof. Swati Ringe
Innovation Activity Coordinator	Assistant Professor	1	Prof. Dipali Koshti
Startup Activity Coordinator	Associate Professor	2	Dr. V. S. Jorapur
	Assistant Professor		Prof. Prachi Patil
Internship Activity Coordinator	Assistant Professor	1	Prof. Unik Lokhande
IPR Activity Coordinator	Assistant Professor	2	Dr. Ketaki Joshi
	Assistant Professor		Prof. Garima Tripathi
Social Media Coordinator	Assistant Professor	1	Prof. Jayen Modi
ARIIA Coordinator	Professor	1	Dr. D.V Bhoir
NIRF Coordinator	Assistant Professor	1	Prof. Supriya Kamoji
E-Cell in-charge	Assistant Professor	1	Prof. Prajka Bhangale
Member- Collaborations	Assistant Professor	1	Prof. Swapnali Mahadik
Tinkering Lab	Assistant Professor	1	Prof. Saurabh Kulkarni
Network Enabler	Training and Placement	1	Mr. Mahesh Sharma
Innovation Coordinator(Student)	Student Coordinator	1	Anwaya Belwalkar
Startup Coordinator (Student)	Student Coordinator	1	Riddhi Oza
IPR Coordinator	Student Coordinator	1	Bilal Ahmed
Social Media Coordinator	Student Coordinator	1	Chris Gracias
Internship Coordinator	Student Coordinator	1	Upmanyu Jha
Representative from nearby Incubation Centre	Member	1	Prof. K. T. Talele, SPTBI, Mumbai
Representatives of SIDBI / NABARD / Lead Bank / Investor	Member	1	Sr. Manager, Union Bank of India, Hill Road, Bandra-West, Mumbai 50
Technical Experts from nearby Industry	Member	1	Mr. Govind Gaundalkar, Microdevice Tech
Alumni Entrepreneurs	Member	1	Mr. Ayush Jain, UthopiaTech
Students from the host institution	Council in-Charge Student	27	Ivan Dsilva , Deon Gracias, Mathew Lobo, Christina Tomy, Anshula Raina, Rachana Chavan, Santo Sunny, Esha Sharma, Kyle Dsouza, Hudah Ansari, Ayush Batra, Grace Perelra, Prachi Mohare, Pratham Kambli, Joel Sam, Chirag Jadhav, Vijay Prajapati, Sahil Bane, Keith Mendonca, Eric Fernandes, Sandra Thayyil, Shaunak Aital, Deon Gracias, Shibu Mathew, Andrea Pinto, Ayushi, Joseph William

(DR. S.S. RATHOD)
PRINCIPAL





B. Brief mention of key functionaries at the IIC Institute

President	Main Point of Contact with MHRD Innovation Cell(MIC). To constitute the IIC council, Plan Quarterly Council Meeting To ensure the effective implementation of IIC activities.
Vice President	To ensure the effective implementation of IIC activities.
Convenor	To work in coordination with IIC president and To provide help for smooth conduction of activities.
Innovation activity coordinator	To promote innovation related activities in the institute
Start-up activity coordinator	To boost startup generation and perform related activities.
Internship coordinator	To arrange student internships in startups.
IPR activity coordinator	To promote IPR awareness and conduct related activities.
Social Media Coordinator	To create and manage IIC page/account on Facebook, Twitter and YouTube and Instagram
ARIIA Coordinator	Coordinate for ARIIA related activities
NIRF coordinator	Coordinate for NIRF related activities.

C. Portfolio/graphical/Tabular representation of Resource strength (human +capital and Physical capital) of the IIC institution

Total No. of IIC Members	22
Total No. of Innovation Ambassadors	10(basic level) + 8(Advanced level) = 18
Total No. of faculty Mentors From Portal	11
Pre-Incubation Units, If any	Yes
Incubation Units, If any	No
IP Facilitation Unit, If any	Yes

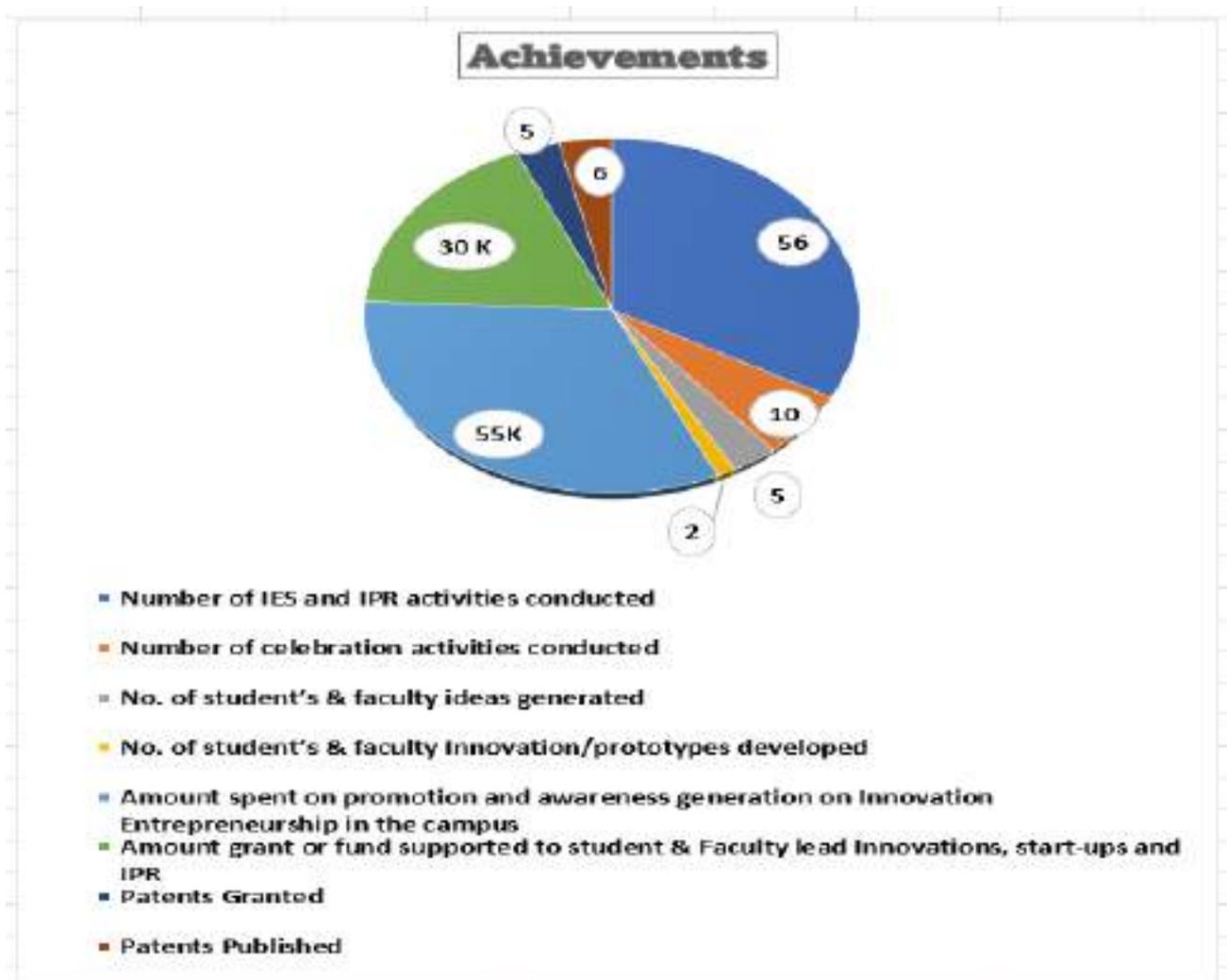
D. Highlight Facilities, Infrastructure of Pre-Incubation & Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus.

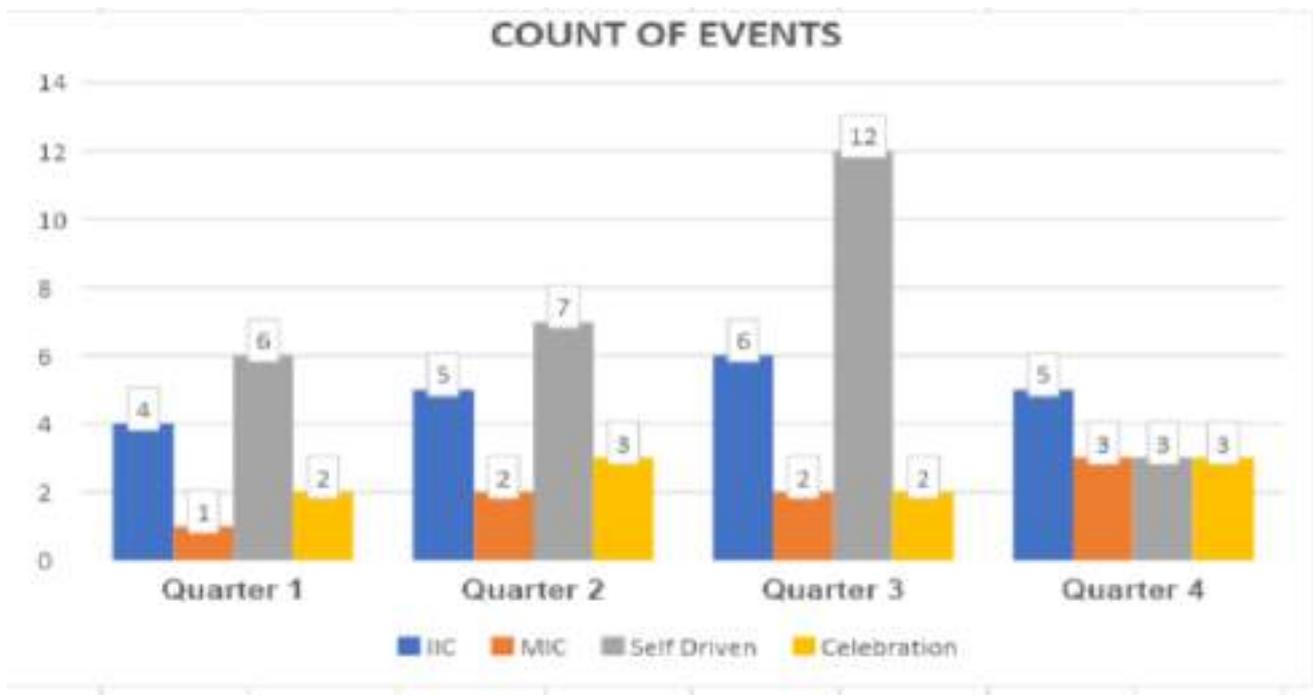
1. Under the chairmanship of Principal Dr. Srija Unnikrishnan pre-incubation unit facility is established.
2. Dedicated workspace is allocated in Laboratory.
3. Institute is providing financial assistance and attendance to Staff and faculties in its best possible way.
4. Professional Consulting Support is provided(Naman Angels)
5. Startup Cell, Entrepreneurship cell, IPR Cell are actively engaged in the promotion of Innovation and Entrepreneurship activities in the campus.
6. Dedicated IPR centre is available in the Campus. Project space and Internet facility is provided.
7. Dedicated Pre-incubation Unit in each Department.



E. Highlight Achievements (Narrative/Graphical/tabular representation)

Sr.No.	Title	Number
1	Number and Different types of I&E and IPR activities Conducted	66
2	No. of student's & faculty ideas generated	5 shortlisted/ 22(Total)
3	No. of student's & faculty Innovation/prototypes developed	05
4	No. of IPs generated, published and granted	11
5	No. of Student & Faculty Start-ups/Ventures established.	Nil
6	Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus	20,000
7	Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR	30,000
8	No. of Technology Transfer and Commercialisation happened	Nil





F. Highlight few best IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum

Faculty Name-Designation	Profile
Dr.S.PRathod ,Principal CRCE	NPTEL TOPPER, Continuous Learning
Dr. Sapna Prabhu won the “Most Influential Professor Award”	Received World Education Congress EDUTECH LEADERSHIP AWARD on 13 th July 2023
Prof.Monali Shetty won the “Best Paper Award”	At International Conference on Recent Advances in Information Technology ICRAIT 2023 Organised by MET Bhujbal Knowledge City.
Prof. Swati Ringe (25 Years) NISP coordinator IIC Member	Won in AI hackathon an initiative of SINE-IITB supported by MSH, MEITY and organized by DERBI Foundation in the month of Aug 21
Prof. Vaibhav Godbole (23 Years) Assistant Professor IIC Member	Won The Best Hardware Solution Award E-yantra Innovation Challenge IIT Bombay (2021-2022)
	Participated in Regional Finals “ Eyantra Startup Sprint ” Eyantra Innovation Challenge IIT Bombay (2020-2021)
	Won The Best Hardware Solution Award E-yantra Innovation Challenge IIT Bombay (2019-2020)
Dr. Deepak .V. Bhoir (27 Years) Dean Students Affair Professor ECS Department	Finalists at “ Quest Ingenium ”.Participated in Regional Finals E-yantra Mumbai.
	Shortlisted Under “ AICTE-Chhatra Vishwakarma Awards ”for the year 2020.
	Participated in E-yantra Innovation Challenge, and semi- finalists.
Prof. Kranti Wagle (17 Years) Assistant Professor	Won the “ Most Innovative Solution Award ” E-yantra Innovation Challenge IIT Bombay



IIC President Innovation Ambassador	Semi-finalists 3 times E-yantra Innovation Challenge IIT Bombay
	Final Round of Avishkar Research Convention 2020-21, Mumbai University.
	Won the “Young Investigator Award.”
	Participated in DST and Texas Instruments India Innovation Challenge Design Contest powered by AICTE competition.
Prof. Kalpana Deorukhkar (20 Years) Assistant Professor Computer Department	Won the “Most Innovative Solution Award” E-yantra Innovation Challenge IIT Bombay
	Won the “Best Algorithm Design Award” E-yantra Innovation Challenge IIT Bombay.
	Participated in Regional Finals “ Eyantra Startup Sprint” Eyantra Innovation Challenge IIT Bombay (2020-2021)
	Won The Best Hardware Solution Award E-yantra Innovation Challenge IIT Bombay (2021-2022)
Prof. SupriyaKamoji Assistant Professor	Final Round of Avishkar.Research Convention 2020-21 , Mumbai University for the Project Titled “Prediction of Parkison’s Disease”
Prof. UnicLokande Assistant Professor	Mentor of SIH Team 2020 “SURGE1” Problem statement by “CISCO DEVNET” Winner at SIH 2020

G. Highlight selected best Innovations & images with mention of inventor/innovation name

Sr. No.	Innovator Name with Innovation
1	<p>“Dockicraft” Receiving hard copies of certificates and documents is very difficult for students as it is a very time consuming process because it consists of a lot of paperwork. Also, sometimes students are not able to come to college to get their certificates and documents due to several reasons. To solve these problems, we propose a system which will provide hard copies as well as soft copies(soft copies only for bonafide) of documents after verifying the data of the student from the database. System consists of 3 main pillars - Offline system, Online system and Courier Service</p> <p>“Won Award at GMRT Science Day– Arnav Chawathe , Prof. Vaibhav Godbole”</p>
	 
2.	<p>Asthagraha–Santo Sunny, Prof. Swati Ringe Educational Space Game - Create free games which help in learning concepts.</p>  



PARTICIPATION IN INNOVATION DESIGN ENTREPRENEURSHIP (IDE) BOOTCAMP

INVITATION TO MEGA EVENT CELEBRATING 3RD ANNIVERSARY OF NEP AND 2ND EDITION OF AKHIL BHARTIYA SHIKSHA SAMAGAM

8/24/23, 10:18 AM

Gmail - Invitation to the Mega Event: Celebrating the 3rd Anniversary of NEP 2020 and 2nd Edition of Akhil Bhartiya Shiksha Sa...



CRCE_9161_Santo_Sunny <crce.9161.ecs@gmail.com>

Invitation to the Mega Event: Celebrating the 3rd Anniversary of NEP 2020 and 2nd Edition of Akhil Bhartiya Shiksha Samagam with the Hon'ble Prime Minister - Regarding

3 messages

All India Council for Technical Education(no-reply) <admin@aicte-india.org>
To: crce.9161.ecs@gmail.com

Thu, Jul 13, 2023 at 6:15 PM

Dear SIH Alumni,

We are excited to announce that the Hon'ble Prime Minister of India will grace the upcoming mega event celebrating the 3rd Anniversary of the National Education Policy (NEP) 2020 and the 2nd edition of the Akhil Bhartiya Shiksha Samagam. This prestigious event will be held from July 29th to July 30th, 2023, at Pragati Maidan, New Delhi.

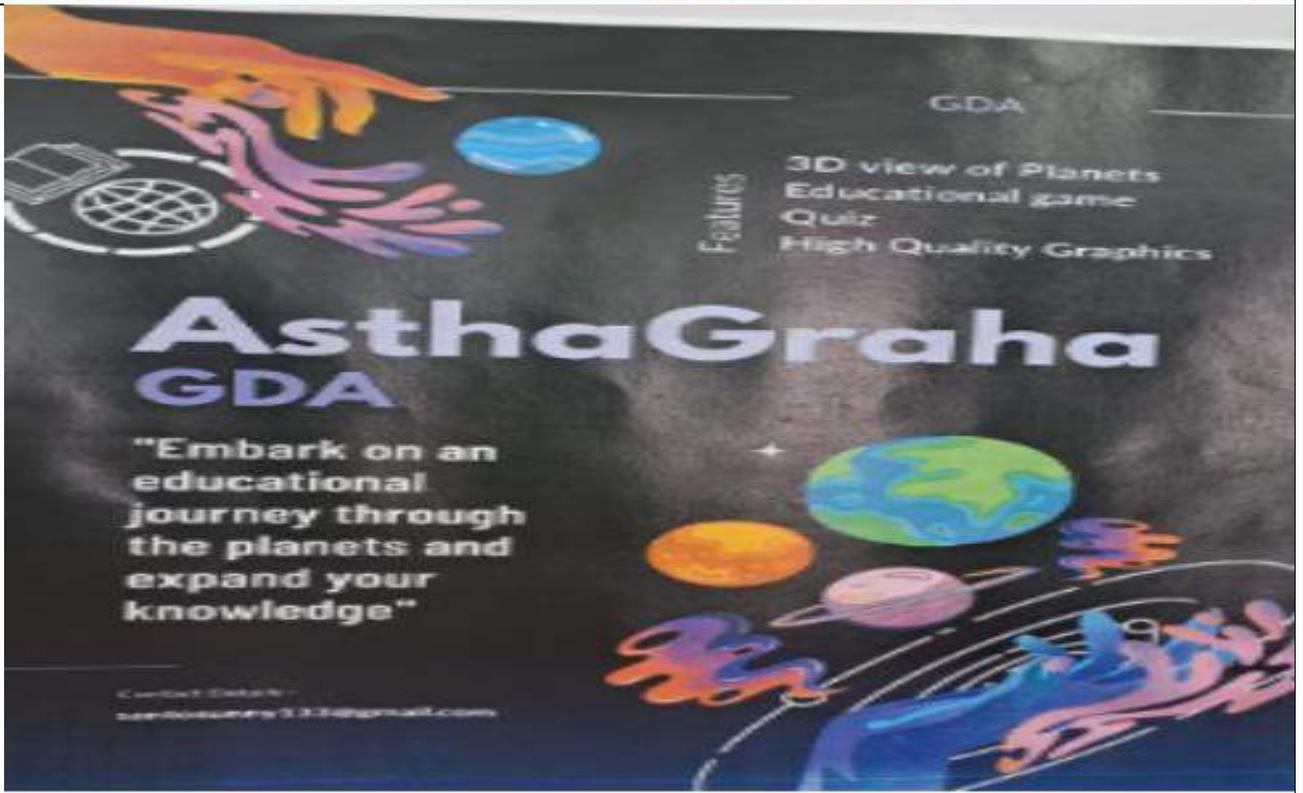
The mega event will witness the presence of ministers from different ministries of the central and state governments, foreign embassies in India, industry leaders, and other esteemed guests. It will feature over 12 thematic sessions, exhibitions, and cultural programs, providing an exceptional platform for networking, visibility, and recognition.

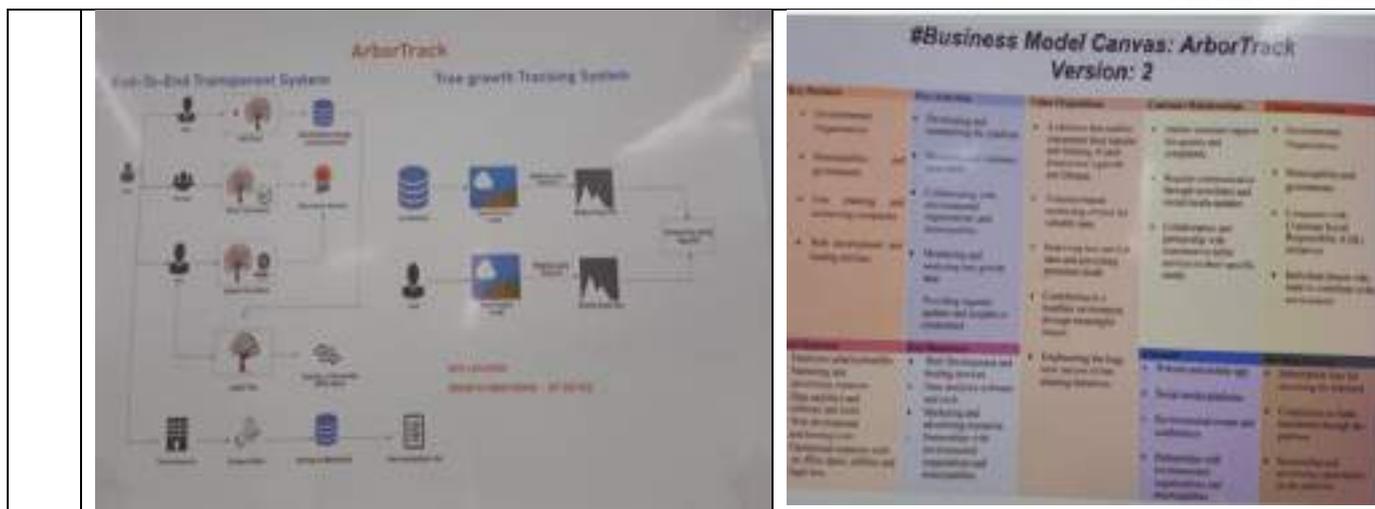
We invite you to be a part of this momentous occasion, where you can connect with influential personalities, explore educational innovations, and engage in insightful discussions. The event is expected to attract more than 50,000 participants, ensuring a vibrant and enriching experience.

If you are interested, please fill out the Google form by 14th July 2023: <https://forms.gle/S3yrgP1qs2yqcdTWA>

All India Council for Technical Education (AICTE) will provide support for travel, accommodation, and meals, similar to the National Technology Week celebration held at Pragati Maidan. This is aimed at facilitating your participation and ensuring a comfortable experience during the event.

We encourage you to make the necessary arrangements to have a demonstrable product ready for showcasing. This will greatly enhance your chances of being selected for the interaction session with the Prime Minister.





PARTICIPATION IN THE YUKTI INNOVATION CHALLENGE 2023(PROJECT TITLE ARBOR TRACK)



3. "BLOCKCHAIN ENABLED SKILL ATTESTATION SYSTEM"

Mr.Jonathan Duarte,Prof.Monal ShettyWant to ensure that your team has the skills they need to succeed? A skill- based verification system is your answer! By using a variety of assessments, this system can objectively evaluate an individual's abilities, providing reliable verification of their skills. Whether you are hiring new employees or evaluating job performance, a skill-based verification system can help ensure that your team is up to the task. Say goodbye to guesswork and hello to success with a skill-based verification system.By implementing a blockchain-based device, organizations can streamline the process of validating skills and enhance confidence in managing abilities and competencies within their workforce. The utilization of an open community on the blockchain allows for the examination and certification of workers's skills based on feedback from their previous employers. This creates a secure and transparent ability chain; on the blockchain, providing employers with trust in the skills, level of expertise, and professional growth of each employee. Furthermore, it becomes evident who has endorsed the employee's abilities, adding credibility to the verification process. This empowers the company to leverage skilled personnel effectively,

matching them to specific business requirements for optimal results.



4. **“MACHINE LEARNING BASED WAGES INCREASE THROUGH EMPLOYEE PERFORMANCE MONITORING”** Recent digitalization has brought about vast renewal in labour virtually in every sector of the economy during the past few decades. It is currently the beginning of an even larger and faster change because of recent advancements in machine learning (ML), which can accelerate the pace of automation itself. Even though it is clearly visible that ML is a "general purpose technology", at par with the steam engine and electricity, which inspires several different innovations and capacities, there is little agreement on the projected consequences on the workforce and the economy. This research determines each employee's salary increase at a particular organization based on several factors and the datasets that are available. To determine which machine learning algorithm is most apt and appropriate for the task, two machine learning algorithms are compared. The use of machine learning, a useful tool, is being made to facilitate and ease the work of business management systems.



5. **Tree Transparency:** The proposed platform has several unique and distinctive features that set it apart from traditional tree planting initiatives. The platform emphasizes the importance of proper monitoring and evaluation of the trees planted, which is often overlooked in traditional tree planting initiatives. To monitor the growth of trees based on a reward system. Analysis of trees planted with the help of geo tag, sensors and image detection. It promotes transparency and accountability by enabling NGOs and government bodies to track the growth and lifespan of each tree planted, as well as the usage of funds using Blockchain. Transparent adoption of trees. Our proposed platform for planting and monitoring trees stands out due to its focus on transparency, citizen involvement, and data-driven decision-making. NGOs and government bodies can transfer funds and track tree growth, ensuring accountability and effective use of funds. Citizen volunteers monitor trees and receive rewards, promoting community involvement and proper care. Data collected is used to make informed decisions on future planting and care initiatives. Sustainability-focused: Our platform is focused on ensuring the long-term survival of trees planted. By preventing premature death, we can contribute to a healthier environment and a more sustainable future.

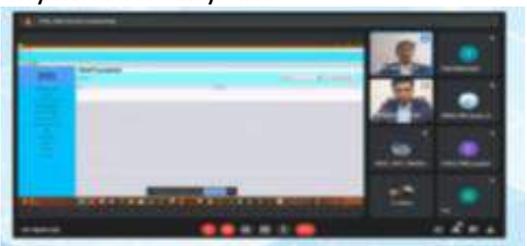
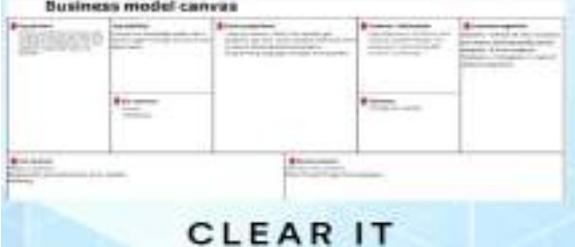
“The above Project Team has Participated in Yukti Innovation Challenge”

Automatic Electric Vehicle Charging Station

Achievements:

- Achieved First place in PRAKALP 2023 (Hardware) category held on 10th March 2023 organized by CRCE, Mumbai
- Selected for round 3 of SPIT innovation cup and shortlisted in top 12 among 140 teams. The team was awarded amount 5000/- as a sponsorship.
- Successfully completed Evaluation in Innovation Cup 23 AICTE- SPICES and AICTE IDEA lab sponsored event conducted on 8th April 2023 by IEEE- WIE, SPIT, Mumbai.



	<p>Meta Store - Shop Virtualizer Although e-commerce is a very old term, it remained a luxury in India for a long time until Reliance launched Jio. It had a very big role to provide internet to everyone in India in turn promoting online shopping. The introduction to cash on delivery and 30 day return policy gave confidence to the young Indian adopters. In today's global economy, advanced technology plays an important role in the fashion retail industry. With advances in technology like Augmented Reality, retailers can offer customers the ability to try on clothing virtually. Our project acts as an intermediary step to combine offline and online shopping. This is the crux to the idea of virtual shops. It gives the users the security of offline shopping with the modern and slick experience of online shopping.</p> <p>The purpose of metastore is to fill in the gap existing between online and offline shopping. The shopkeeper can click pictures of the apparel in the given format and then develop materials and textures for the 3D model. The user can then virtually try different apparel on the web app.</p> <p>Objectives:</p> <ul style="list-style-type: none"> ● To develop a web application to virtualize the store catalog. ● To build a convolutional neural network to convert apparel images to 3D Models. ● To try the different apparel on a 3D human model. ● To view the created outfits in Augmented Reality <p>Published Indian patent.</p> <p>Application Number: 202321018653</p> <p>Date of filing: 19/03/2023</p> <p>Publication date: 14/04/2023</p>	
5.	<p>PetCare - To build a website on rescuing stray/wounded animals using GPS with the help of NGOs</p> 	<p>6. D-Byte Pharmacare - PharmaCare is an application which can make the medical history/data of the patients accessible from anywhere at any time</p> 
7.	<p>Business model canvas</p>  <p>CLEAR IT</p>	<p>Clear It- A platform to connect the knowledge seeker with a domain expert through live one onone video meets where they can clarify their doubts, get guidance, get their issues resolved and much more in various technical areas like projects, programming language concepts, etc</p>
8.	<p>Pushing medical content on Blockchain for the secure medical database : Ishaan Loomba, Prof. Swati</p>	 <p>Ringe</p>



H. Highlight selected start-ups established by students/faculties with mention of founder/cofounder name

Selected Innovations : TRL level 3-4

1.	Asthagraha – Santo Sunny, Prof. Swati Ringe
2.	ArBOR Track-Prof.MonaliShetty,VijayPrajapati,Deon,Ryan
3.	Organ Donation and Transplantation- Sahil Bodhke, Prof. Kranti Wagle
4.	Coconut Harvester – Arnav Chawathe , Prof. Vaibhav Godbole
5.	Mediblock: A One stop Destination for Interoperability between Patients and Doctors - Ishaan Loomba, Prof. Swati Ringe



I. List if any break through Innovations / Technology Developed at the institute (2-3 technology with 2-3 lines about technology and innovation

Sr.No.	Title of the Project	Mentor Name	Abstract(Short Description)
1.	Your Virtual Dressing Room -(Deep learning for virtual try on clothes .)	JabirKhan ShreyashSingh VincentBarnes	The "Trendify" project introduces an advanced 2D-based Virtual Try-On Clothes System, revolutionising online shopping. Powered by AI/ML and computer vision, users can virtually try on clothes through images, curate their virtual wardrobe, and mix and match outfits. With precise clothing fitting, personalised recommendations, and a focus on reducing returns, "Trendify" offers an immersive and interactive experience, empowering users to confidently make informed fashion decisions in the digital realm. Embrace the future of virtual fashionwith "Trendify" and elevate the online shopping experience to new heights
2.	Autiscape	Prof. Kranti Wagle Rincy Fernandes	AutiScape is a computer-assisted technology (CAT) solution to assist kids withautismspectrumdisorder(ASD)usingInt eractivegameandmultilevelfadingtechniqu e. One of the issues that many autistic youngsters have is their inability toquickly recall words by their meanings. But one of these kids' advantages is that they can retain visual or graphical in format ion more readily and for a longer amount of time.By creating an app that will assist them in comprehending word meanings through their visual representations, we want to leverage their strengths in order to compensate fortheir weaknesses. The intended platform would consist of two phases: an assessment phase and a learning phase. Using the visual fading technique, the learning phase would involve teaching the kids how to memorise various words and their correspondingmeanings. In this stage, a multi-step visual fading technique that has been shown to beeffective in teaching autistic youngsters will be used. The children would also beevaluated by having them match the pictures with the related words, either by clicking on the correct option or by pronouncing /speaking the correct option. At the conclusion, the score would be displayed to show the children's



			<p>progress. Additionally, the software will be created in a way that is appealing to autistic children and beneficial to them. As the research on autism may not be sufficient, this will be accomplished through research from research publications as well as autistic centres. This app was created using theUnity Game Engine, Bark, an AI model based on text to speech, Google Colab, and Visual Studio linked with UnityforC# scripting. The project makes use of 3Dmodelling, multi-level fading, sprite slicing animations, text-to-speech conversion using Bark, anAI-based model, the Dynamic Assessment approach, and other visualisation and user interaction methods.</p>
3	Electrochemical3D printing	Dr. Bhushan T. Patil	<p>By altering product creation, the advent of 3D printing has upended markets. 3D printing, also referred to as additive manufacturing, entails layer-by-layer combining of materials to create products from 3D digital models. The advantages of 3D printing are commonly mentioned, including design flexibility, part consolidation, the lack of need for tooling, just-in-time inventories, etc. Today's engineers can think of countless technical benefits. With all of these advantages, one would assume that 3D printing would have been as widespread as the internet by now. However, this is not the case. The main issue with 3D printers is their high cost of both the products and the equipment. The price of 3D printers for metal increases. We have been working on creating a low-cost metal 3d printer to overcome this difficulty. The idea of electroplating is the cornerstone of our printer. We commenced our research by examining various forms of electrodeposition. We found the electroplating process under electrodeposition. Studying 3D printers and their basic operation was the next step. We developed a preliminary model of the 3D printer we're considering using the findings from the two studies to determine its viability. On the conductive substrate, the metal will be deposited using the electroplating procedure. The metal inside the electrolyte will melt due to a DC source that will be supplied. By using a rotational plate to maintain the deposition pen in place rather than moving the deposition pen, we were able to reduce the cost of the printer.</p>



			In our project, the deposition pen is a syringe in which the entire electroplating procedure is contained. To close the air gap between the nib and the plate surface, this syringe is inhibited on the rotating disc. With our strategy, we will be able to address another problem in addition to the high cost, namely printing multiple metals.
5	On Hybrid Power Charger for Electric Vehicle using Vertical Axis Wind Turbine and Solar Panel	Prof M V B Rao	The demand for the electricity is increasing rapidly and most of this demand is been supplied by fossil sources of energy. In recent years, the prices of fossil fuels are increasing and there is a concern about the environmental consequences of greenhouse gas emissions. Due to increase in the power consumption, conventional sources of energy are depleting day by day. Also, as the Electric Vehicle sector is emerging, the demand for the electricity is also increasing day by day. Considering this and issue of the global warming and pollution, attention has moved towards the renewable energy sources like Solar and Wind. Also, there is a need of clean, reliable and continuous supply of power. Hybrid energy system using wind energy and solar energy gives uninterrupted power supply and the electrical power from such a system can be used for various purpose. This project deals with alternative electricity generation for EV charging using vertical axis wind turbine (VAWT) and solar panel at affordable cost without disturbing the balance in the nature. Wind power is the conversion of wind energy and Vertical axis wind turbine (VAWT) is capable of extracting power form wind regardless of the direction of wind flow. The solar energy is free and clean sources of energy which is available throughout the year. The system has two basic components: one for generation of electricity using Wind Energy and another one for generation from Solar Energy. Even in the absence of either of the two sources, the other remaining source can be used to provide the required power demand.
3	E-sports data analysis with the help of neural networks	Prof.Sushma N. OmkarShisat Raj Lad Prathmesh G.	This project is our attempt to support Esports in India by providing it an analytical approach as analytics is a common practice on International scene but it is still missing in Indian Esports.

4	IoT based Smart Bag for Women's Safety using Machine Learning and AI	Prof. Kranti Wagle Mayank Tanna Rohin Vaidya Nimisha Bhoir	The idea is to create a solar powered IOT based smart bag. This bag will be useful for students to view daily schedules displayed on it. It should have security features which, by pushing an SOS button, the bag should send the live location and a live camera feed of the user to the user's guardians.
5	Contactless Attendance System	Prof. Garima Tripathi	Develop face recognition attendance system.

J. Participation of IIC-institute in various programs of Central and Stage Govt. Highlighting specially for the schemes or programs

- **ARIIA** – Participation and Rank
- **IA**–Faculty Participation (18 Faculty)
- **NISP** Adoption status – Joined the campaign
 - Trained Faculty- Yes
 - Policy Formulation – Done and Approved.
 - Policy Implementation – Action Plan Prepared and On-going
- **YUKTI** - Number of Ideas submitted – 19
- **SIH, MANTHAN, BINANCE HACKATHON, KAVACH INTERNAL HACKATHON PARTICIPATION**
- **IIC REGIONAL MEET PARTICIPATION** – Presentation of I &E by NISP coordinator
- **ATLLINKAGES-**

ACCEPTED 64478345 -HANSRAJ MORARJI PUBLIC SCHOOL AND JUNIOR COLLEGE
AWAITING 65147458 -VIDYANIDHI V.P. HIGH SCHOOL

TINKERING LAB is a platform where creative and enthusiastic students from all the departments of the institute can try out their ideas with experimentation with the goal of making designs, prototypes, and products. During the entire process of tinkering in the lab, students will learn the process of problem-solving, designing, prototyping, product development, product testing, and marketing. Since students from different departments are joining the tinkering lab, it acts as a facility where the exchange of ideas from different domains takes place.

<http://fragnel.edu.in/index.php/thinking-lab>



TINKERING LAB ACTIVITY AT SCHOOL HANSRAJ MORAJI PUBLIC SCHOOL MUMBAI ON 14TH NOVEMBER 2022

<https://youtu.be/QaW-G44T8q0?feature=shared>

PREINCUBATION UNIT:



PREINCUBATION UNIT:



**CHANDRAYAAN MAHOTSAV CELEBRATION
(4TH SEPTEMBER 2023)**



**TEAMS FELICITATED AT ANNUAL FUNCTION WITH
BEST INNOVATIVE SOLUTION TROPHY**

INTERNAL SMART INDIA HACKATHON(55 TEAMS) 16TH SEPTEMBER 2023



SMART INDIA HACKATHON 2022

Team Digital Pirates – Winner in Final -Software Edition- Theme :Transportation and Logistics
Ministry of Ports, Shipping and Waterways

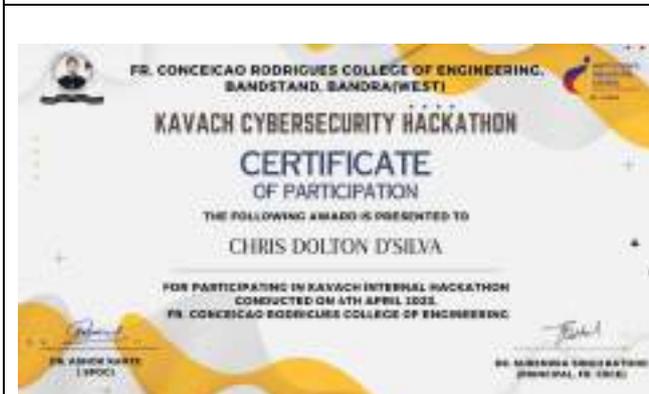


Team – Infura – Participated in Finals at IIT GandhiNagar – Software edition
National Disaster Management Force (NDRF)





KAVACH PARTICIPATION INTERNAL HACKATHON(35 TEAMS)



BINANCE HACKATHON PARTICIPATION
Ishann Lambaa, Rachel Sequeira, Rissa Chettiar, Mann Sanghvi, Mentor-Swati Ringe

Team Explorers - Wonin **AI hackathon** an initiative of **SINE-IITB** supported by MSH, MEITY and organized by DERBI Foundation in the month of Aug 21. Prof. Swati Ringe, Nicola Mascarenhas, Yash Khasgiwala, Mario Dias



Prof. Monali Shetty- SIH Team Mentor

Prof. Jagruti Save
Received World Education Congress EDUTECH LEADERSHIP AWARD on 7th July 2022

PARTICIPATION AT **IIC REGIONAL MEET** AT SYMBIOSIS INTERNATIONAL UNIVERSITY 01-08-2022-



NISP Coordinator Prof. Swati

Ringe invited as speaker in NISP track



OTHER ACHIVEMENTS



PARTICIPATION IN HP SOLVE 2.0 HACKATHON

FIRST PLACE IN RECURSION 4.0



FIRST POSITION IN ML BASED HACKATHON ORGANISED BY IIT DHARWAD

SECURED SECOND POSITION IN BIT N BUILD HACKATHON ORGANISED BY GOOGLE DEVELOPER'S CLUB



PARTICIPATION IN ENGAGE HACKATHON ORGANISED BY NORTHCAP UNIVERSITY



PARTICIPATION IN SYNERGY HACKATHON 2022



Participation in Flipkart Robotics Challenge to solve the Real world Problem



Participation in NASA Global Hackathon on Earth





K. Detail of Social Media & Connections of IIC institute

IIC-CRCE Instagram Link: <https://www.instagram.com/agnelcrcebandra/>

IICCRCE Twitter: <https://twitter.com/agnelcrcebandra>

IIC Facebook Link: <https://www.facebook.com/iicfrcrce>

College website: <http://www.frcrce.ac.in/>

YouTube Channel : https://www.youtube.com/channel/UCOpSiHmOCy4_j5aP14XYThg

L. Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation Cell

Testimonial



Mohit Pensare,

President, NSS CRCE 2022-23

9004649658

IIC CRCE is a body that helps in developing an entrepreneurial attitude among the students and boosting their innovation. Over the year, IIC CRCE organised various webinars, seminars and competitions that would help students analyse and understand real life problems and motivate them to come up with innovative and practical engineering solutions to those problems. Throughout my time working alongside IIC CRCE, I have been witness to their unwavering commitment to nurturing innovation and promoting a culture of forward-thinking. One of the most inspiring aspects of my collaboration with IIC CRCE has been witnessing their dedication to inclusivity and collaboration. They have seamlessly integrated the non-technical aspects of our college's mission into their innovative projects, emphasizing the importance of a multidisciplinary approach. My experience working with the IIC CRCE has been an incredible chapter in my college journey. It has equipped me and all of the students with the knowledge, skills, and inspiration to continue championing innovation and creativity in all our future endeavours.

Mohit Pensare

04/09/2023



IIC Fr.CRCE is a dynamic example of innovation and excellence and has been instrumental in shaping my educational journey. The myriad of events and workshops they organize is a testament to their commitment to fostering creativity and forward thinking. From hackathons that challenge your problem-solving skills to workshops on cutting-edge technologies, IIC Fr.CRCE provides a platform where innovation thrives. I've had the privilege of participating and also organizing their events, and each one has been a transformative experience. The tireless dedication of the faculty organizers, along with the collaborative spirit of fellow students, makes IIC Fr.CRCE an ideal council for aspiring innovators. It's not just an institutional council; it's a hub of inspiration.

Special thanks to Prof. Kranti Wagle, Prof. Swati Binge for always guiding and supporting me and Thank you, IIC Fr.CRCE, for igniting the spark of innovation within me and for equipping me with the skills to navigate the ever-evolving world of technology.

Yours Sincerely



Vijay Prajapati



Being the Technical Secretary of the Students' Council and student in-charge of the Institute's Innovation Council (IIC) has been a transformative journey. Overseeing diverse activities, learning from seminars, and orchestrating innovation-focused events honed my leadership and organizational skills. IIC's focus on innovation and entrepreneurship allowed me to contribute to a culture of creativity while learning from experts and motivated peers. Grateful for the opportunity to drive positive change and foster innovation within our institute.



Ivan Dsilva
Technical Secretary (Students' Council 2022-23)

Video Testimonial by Higher Authority: Dr. Surendra Rathod – Head of the Institute

<https://youtu.be/J7rsYYwyDgk>

Dr. Deepak Bhoir – ARIIA coordinator

<https://youtu.be/Jkzk0rjNtKo>



Prof. Kranti Wagle
Convener IIC – Fr.CRCE

Experiential learning and innovations by technical project teams Project Cell:

Established in 2014, PROJECT CELL is an endeavour to promote innovative thinking amidst young minds. We work towards accomplishing tasks that could be gradually developed on a large scale and solve many social problems that exist today. At Project Cell, we tread towards learning new concepts, techniques and gaining practical experiences on implementation of Creative ideas out. The main goal of the Cell is to learn new technologies while developing new projects. The project cell has worked on projects involving technologies like IoT, Machine Learning, Artificial Intelligence. Some of the projects developed by project cell are face recognition based door lock , Automatic medicine vending machine, Delivery robot , Agrirobot , Room automation using remote control. Project cell participates in E-yantra Robotics and Innovation challenge competitions held at IIT Mumbai. Project “sowing seeds and removing weeds using SWARM ROBOTICS and functional programming” reached the final stage of the E-yantra robotics challenge. many projects like Pani Puri Vending Machine, Automatic shopping Robot and Robotic Assistance for TB patient have won an award in E-Yantra Inovation Competition (E-YIC).

<https://projectcellcrce2021.web.app/>

Team Abadha:

TEAM ABADHA CRCE is a cadre of ardent & assiduous students from Fr. Conceicao Rodrigues College of Engineering. Team Abadha CRCE builds a One-Manned Electric-All Terrain Vehicle which is capable of keeping its ground in the roughest of terrain and in the most challenging conditions. The team was founded in the year 2012 and is the oldest team in our college. It was initiated by inquisitive coterie of students under the guidance of Prof. D.S. Sudhakar. Living up to its name (Abadha means Unstoppable in Sanskrit) the team every year overcomes all the impediments and is achieving greater heights. We participate in SAE E-Baja Competition. Every year the team makes a fresh start and is sedulous to achieve its goal. The performance graph over the years is improving at a remarkable rate. The team has come a long way from being Overall AIR 78 in its very first attempt to being Overall AIR 5 in 2020. The team also secured AIR 1 in Sales Presentation. Team Abadha secured overall 15th rank at Baja SAE India and 15th rank at ATVC 2021.

<https://teamabadhaofficial.web.app/>

Team CFR:

Team CRCE Formula racing, established in the year 2016, involves aspiring and promising engineering students of various branches and encourages them to come together with an idea of building their own “Formula Student’s Race Car” and compete with various other teams nationally and internationally in competitions like Formula SAE (*established in 1980, Texas*). The team involves the collaboration of Production, Electronics, Computers and IT to build a race car which performs to its best in various dynamic events such as Technical Inspection, involving mechanical Inspection, Tilt test, Noise test, Brake test, Skid pad, Acceleration, Autocross, Endurance and Efficiency. Static events such as Cost and manufacturing analysis, Design report, Business Plan Presentation are also conducted. The team members Design, analyze, manufacture and test their car in the given deadlines based on their own criteria.

Team CRCE Formula Racing received Overall 5th Rank at Pi-EV and 7th rank at Formula Bharat in 2022-23.

<https://crceformularacing.com/index.html>

Team Mavericks:

The maverick's team of FRCRCE is a technical team that works on the development of drones and other aerial vehicles. The team focuses on creating UAV's that are better, cost effective and efficient than the other UAV's available in the market. Team takes part in different national and international competitions as a way to test their abilities with the motto 'To do the best we can do.' With each competition that they take part in, they try to bring in something new to the world of aerial flight systems.

<https://mavericks-7734b.firebaseio.com/>

Team Vaayushastra:

Team Vaayushastra was established in the year 2012 to represent Fr. Conceicao Rodrigues College of Engineering in the SAE Aero Design Competition. Since that year, team have participated annually in the advanced class of the SAE Aero Design Competition, held in the United States, 9 times. They have been one of the most consistent teams by finishing in the worldwide top 10 rankings, 7 times. The team is formed by 30 undergraduate students from different departments of the college who have the aptitude and interest conducive to the competition. Team Vayushastra secured 10th Rank in design and overall rank of 11th at SAE AERO DESIGN competition at Florida, USA in 2022-23.

<https://vaayushastra.com/>

Team Robocon:

Team Robocon CRCE is a *robotics team* from Fr. Conceicao Rodrigues College of Engineering, Bandra (W). We are a group of budding undergrad engineers who make robots to participate in Robocon India. We are a group of robotics enthusiasts with diverse technical backgrounds, constantly striving to solve real-life problems using artificial intelligence and robotics mechanisms. Launched in 2013 to compete in Asia's largest competition, ABU Robocon, Robocon CRCE has since diversified into various competitions and research directions. In every contest we participate in, we strive to bring something new to the world of robotics. Our team consists of computers, electronics, and production subsystems that work together to build a functioning and usable bot. Team Robocon secured AIR 9 with 96 points out of 100 in stage 1 of DD Robocon 2023.

<https://roboconcrce.org/>

ECell CRCE:

The mission of ECell CRCE (Entrepreneurship Development cell) is to germinate the idea of entrepreneurship and develop the students to face the entrepreneurial challenges of tomorrow. The vision is to develop a strong relation between our students with our experienced alumni and experienced members of the business fields, allowing our students to have a dynamic mindset before starting their entrepreneurial voyage. With this Mission, Vision, and Values, this council plans to follow as a group and as individuals for the betterment of the entrepreneurial ecology of our prestigious institution and thus helping the students of Fr. Conceicao Rodrigues College of Engineering.

www.Ecell.github.io