

## Annual Report 2022-23

### **A. About IIC Institute**

#### **Vision of IIC established at the Institute**

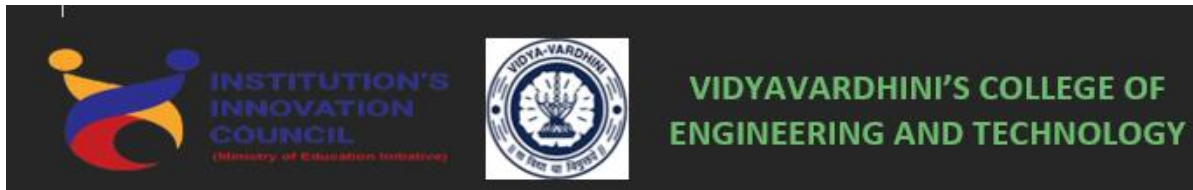
To be a premier institution of technical education, aiming at becoming a valuable resource for innovation, start-up and incubation.

#### **Mission of IIC established at the Institute**

- To provide technical innovation environment for learners and protection of it.
- To promote start up, entrepreneurship activities
- To inculcate ethical and moral values

#### **Journey of IIC established at the Institute**

• IIC established in the institute in Nov 2020 with an objective of fostering the innovation ability among students. Thereby learners will be motivated to do research in their field of interest to develop something of their own. This could be a building block for the establishment of start-up of their own. The institute support for all the incubation of those start ups in coordination of Incubation Cell, University of Mumbai. The faculty members across all departments are the council members who could guide learners on integrated ideas, innovations for successful implementation. The Vice-president and one council member from industry are nominated for the technical and legal procedures for establishing the start up and function of it with their own human resource. If the research and innovation is novel then they must be protected as intellectual property, IIC council IPR attorney member from Khurana and Khurana Associates support for the innovators providing complete support and guidance. Institute also financially support to process for intellectual property Rights of learners. Learners may approach investors for funding to their start up through IIC council member. The students are also appointed as student coordinators for IIC council and related activities being organized within institute.



**Diversified representation in the IIC established at the institute from industry, Interdisciplinary & Departments/ Units etc.**

- The Vice-President **Mr. Abhimanyu Raja, Vice President, JnyuTech Engineering** representing IIC. Mr. Abhimanyu Raja is a Engineering Graduate and expertise in the field of Robotics, Space vehicles, aerial vehicles. Their industry had an MoU with VCET, Vasai for knowledge sharing, live project work, support for internship and related activities. Mr. Raja is a asset for IIC council in terms of guidance support for learners aiming to establish their own startups.
- **Mr. Shirish Nadkarni, General Manager, D'core Home Fabrics Pvt. Ltd.** Who is expertise in textile engineering and having an experience of over 35 years. Mr. Nadkarni actively involved in institute placement, internship, field visit, expert talk to students. Mr. Nadkarni support for IIC council to develop more and more entrepreneurs.

#### **B. Brief mention of key functionaries at the IIC Institute**

- **President**

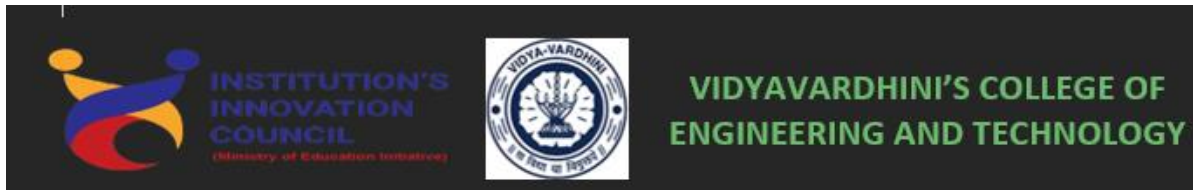
Dr. Ashish Chaudhari, President , IIC VCET. He is Dean Research of the institute as well an Associate Professor from Department of Mechanical Engineering. He served to the institute since last 17 years as Assistant Professor. He graduated from IIT Guwahati in year 2017. His one project in year 2016-17 got patented titled Pressure Cooker Whistle counter. He had published many research papers in referred journals and renowned conferences. His major area of research is renewable energy and solar energy.

- **Vice President**

Mr. Abhimanyu Raja, Vice President, JnyuTech Pvt. Ltd. Mr. Raja is a founder member of the industry which is working in domain of space satellite navigation, unmanned aerial vehicles, robotic application especially in hazardous applications where human life is prime concerned. Mr. Raja had a rich experience of 17 years and associated with ISRO projects since inception of the industry.

- **Convenor**

Dr. Madhavi Waghmare is an Assistant Professor in department of Information Technology, VCET and serving the institute since 19 years. Dr. Waghmare graduated



from Mumbai University with expertise in optic fibre communication. Dr. Waghamre presented paper in many referred journals and renowned conferences.

- **Coordinators**
- **Faculty Representation**

Sr No	Post	Faculty Name
1.	<b>Innovation Activity Coordinator</b>	Dr. Viren Chandanshive
2.	<b>Start-up activity Coordinator</b>	Mr. Swapnil Mane
3.	<b>Internship Coordinator</b>	Mr. Sanket Patil
4.	<b>IPR activity Coordinator</b>	Mr. Vinay D. Patel
5.	<b>Social Media Coordinator</b>	Ms. Shaista Khan
6.	<b>ARIIA Coordinator (Optional)</b>	--
7.	<b>NIRF Coordinator (Optional)</b>	---
8.	<b>Members (Faculty)</b>	Mr. Yogesh Pingle, Asst. Professor, IT
		Mrs. Poonam Surange, counselling psychologist

- **Expert Representation**

Sr No	Post	Expert Name and details
1	<b>IP Expert/Patent Expert</b>	Mr. Parvez Kudroli IPR attorney Khurana and Khurana IPR Advocates Mumbai
2	<b>Start-up / Alumni entrepreneur</b>	Mr. Hemant Isai M/s. Genesis Engineering Solutions Pvt. Ltd. Vasai
3	<b>Expert from nearby Industry/ Industry association/ Ecosystem Enablers</b>	Mr. Shirish Nadkarni General Manager D'décor Home Fabrics Pvt. Ltd. Tarapur,Boisar



**INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)



**VIDYAVARDHINI'S COLLEGE OF  
ENGINEERING AND TECHNOLOGY**

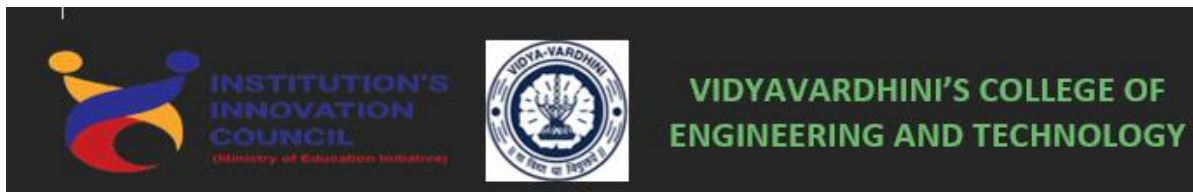
		Ph. No-9823721632
4	<b>FI/Bank/Investor/Angel Investor/VC</b>	Mr. Gaurav Mishra Navyuvak Entrepreneurs Goregaon Mumbai Ph no-9920342394
5	<b>Nearby Incubation Centre</b>	Mr. Aadesh Suryarao CEO MUIDEAS (University of Mumbai's Incubation Centre) University of Mumbai Mumbai

• **Student Representation**

Sr No	Post	Department	Student Name
1	<b>Innovation coordinator</b>	Civil Engineering	Deeksha Shetty
2	<b>Start-up coordinator</b>	Mechanical Engineering	Gaurang Thakur
3	<b>Internship coordinator</b>	Information Tech.	Kimaya Salunkhe
4	<b>IPR coordinator</b>	Mechanical Engineering	Perna Kasar
5	<b>Social Media coordinator</b>	Electronics and Telecommunication	Aditya Kute

• **Support Staff members (Non-Teaching)**

Sr No	Name	Department
1	Mr. Nilesh Patil	IT
2	Mr. Kalpak Chaudhari	COMP
3	Mr. Sashikant Patil	MECH



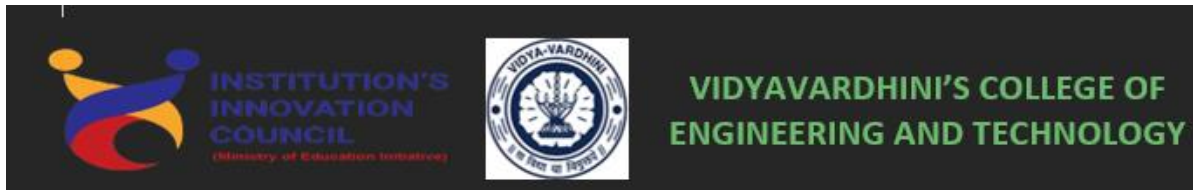
**C. Portfolio/graphical/Tabular representation of Resource strength (human capital and Physical capital) of the IIC institution**

<b>Sr No</b>	<b>Name</b>	<b>Numbers</b>
<b>1</b>	Total Number of IIC Members	49
<b>2</b>	Total number of IAs	09
<b>3</b>	Total Number of faculty mentors	NIL
<b>4</b>	Pre-incubation Units, if any	In process
<b>5</b>	Incubation Units , if any	No
<b>6</b>	IP Facilitation Unit,if any	Yes

**The objectives of the IPR-VCET Cell are**

- Assisting in getting IPRs' protection information, orientation and facilities to faculty, staff and students with the help of authorised patent attorneys, Maharashtra.
- To engage in conduct IP workshops/ seminars.
- To identifying patentable inventions through the student projects across departments in the institute.
- Assist for writing the draft, prepare the manuscript.
- To forward eligible cases of IPR to IPR Office Mumbai.

The document could be framed considering the guidelines issued by IPR cell. This document then submits to the IPR-VCET Cell committee for further action. The project concrete idea could be submitted as provisional patent application drafted in same format mentioned above without claims for the project. There after within 12 month the complete patent application need to be submitted drafted as per above format. The application fees and consultant fees, if needed could be borne by investigator(s) only. The following committee will be involved for processing of application only. Any queries, any further investigation need raised by patent office could be intimated to investigator and for further action.



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

Institute promote the innovation and research activities in the institute for students as well as faculty. The activities such as Vidyavardhini's National Project Showcase is a yearly activity for the innovators and inventors to showcase their project work in all domain of engineering. The evaluation could be carried out by eminent personalities from industry, research institutes etc. The best innovations are awarded. They will further forwarded for IPR process through IPR Cell. Similarly to build entrepreneurial capability and start up capability, the E-cell of institute is organizing festivals such as e-summit, internship fair, Bizmaster, expert talks on product research, development for students especially.

The student clubs are functional in the institute as Ethan-Car Racing which was established since 2016 and engaged in the development of Formula Bharat Car. The car is built by students themselves . It involves design, drawings, computational analysis on ANSYS and then manufacturing of all components and assembly of them. The students are exposed to the different skillset and application of theoretical knowledge gained . Also the students are fluent in oral communication. Being the close association with industries for manufacturing of the parts, they learn the scope for start up of their own enterprise. Similar to this, there is Solection Electric Car Club which is involved in design and development of electric car to be developed in house by students. Few other clubs are Centurian Quad Bike, E-mechto Team and Airnova Club are active in the institute where in all department students are combinely work on a same target.

Different Professional Societies like IEEE, ISHRAE,SAE, CSI, IEI-India are active with the sessions , exhibitions for students for innovation, research and ideation.

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

<b>Sr No</b>	<b>Name</b>	<b>Number</b>
<b>1</b>	Number and Different types of I&E and IPR activities Conducted	28
<b>2</b>	No. of student's & faculty ideas generated	20
<b>3</b>	No. of student's & faculty Innovation/prototypes developed	10
<b>4</b>	No. of IPs generated, published and granted	03
<b>5</b>	No. of Student & Faculty Start-ups/Ventures established	00
<b>6</b>	Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus	350000
<b>7</b>	Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR ,Rs.	450000
<b>8</b>	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**

**[Profile of few faculties with 2-3 line of their achievements]**

**Dr.Ashish Chaudhari** delivered an expert session on Research in Dye Sensitized Solar Cell for the STTP on Recet Technologies in Solar Energy.

Ashish Chaudhari, Pranav Patel, Prathamesh Kinjale, Nayan Haralkar, Deepak Maurya, Vinay D. Patel, present paper “Novel Variable Compression Ratio Mechanism Assisted Diesel Engine Performance with Renewable Fuels”, at International Conference on Recent Advances in Fluid Mechanics and Nanoelectronics (ICRAFMN-2023) organized by Manipal Institute of Technology Bangaluru in association with National Institute of Technology, Uttarakhand during, July 12-14, 2023.

Vinay D. Patel, Omkar Chudnaik, R.Sabesh, Omkar Palshetkar, Anant Papewar, Ashish Chaudhari present paper “Numerical and Experimental Performance Analysis of Vertical Axis Harmony Wind Turbine”, at International Conference on Recent



**INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education, Government of India)



**VIDYAVARDHINI'S COLLEGE OF  
ENGINEERING AND TECHNOLOGY**

Advances in Fluid Mechanics and Nanoelectronics (ICRAFNMN-2023) organized by Manipal Institute of Technology Bengaluru in association with National Institute of Technology, Uttarakhand during, July 12-14, 2023.

**Mr. Yogesh Pingle** published paper titled "A Review on the use of Machine Learning Techniques in Music Recommendation System for Healthcare Management"

Publisher: IEEE Xplore, Scopus indexed (IndiaCom 2023)

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

NIL

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

NIL

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

NIL

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

- **ARIIA – participation and Rank** -Promising Institute as per 2021 Report
- **NISP Adoption status - Trained Faculty, Policy Formulation, Policy Implementation** -NIL
- **AVISHKAR -Maharashtra Level Competition-** Innovative Project titled Optimized WiFi based Control System for Pond Aerators in Shrimp Farming was secured 2nd rank final round(University Level) and participated at State Level Competition.

**K. Smart India Hackathon etc.** -One team Team XCoders\_ETX students participated at national level and selected as Grand Finalists team at Smart India Hackathon 2022,Puducherry.

**L. Detail of Social Media & Connections of IIC institute**

Instagram (<https://www.instagram.com/official.vcet/>)

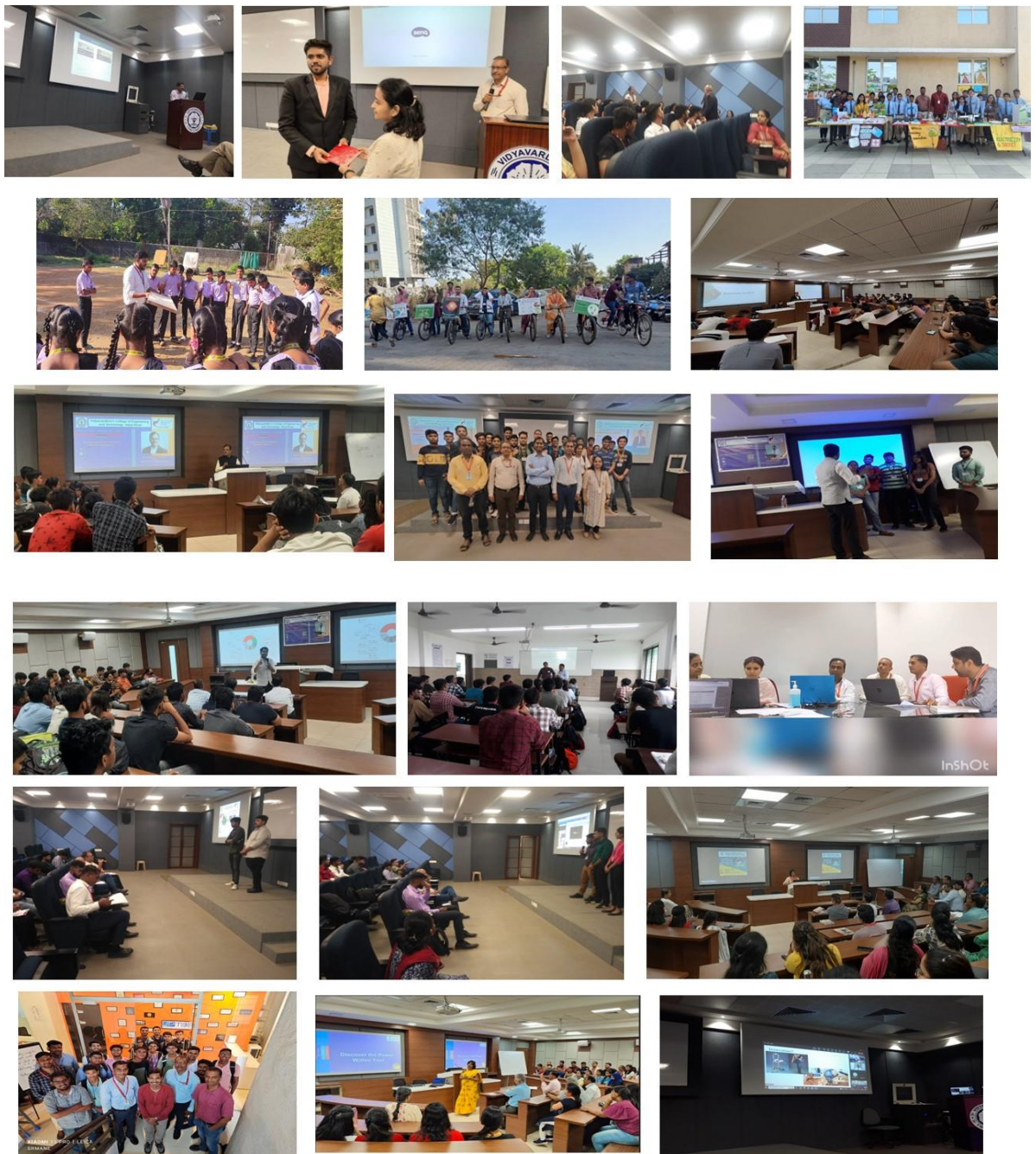
Facebook (<https://www.facebook.com/vcet.vasai.50>)



Twitter (<https://twitter.com/home?lang=en>)

**M. Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation Cell**  
NIL

**N. Images**

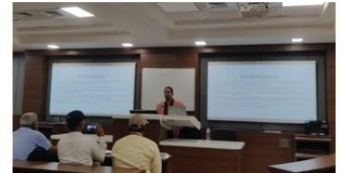




**INSTITUTION'S  
INNOVATION  
COUNCIL**  
*(Ministry of Education, Government of India)*



**VIDYAVARDHINI'S COLLEGE OF  
ENGINEERING AND TECHNOLOGY**





INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of Education, Government of India)



VIDYAVARDHINI'S COLLEGE OF  
ENGINEERING AND TECHNOLOGY

## O. Contact

The Principal

Vidyavardhini's College of Engineering and Technology

K.T.Marg

Vasai Road West

Dist-Palghar

Maharashtra.INDIA-401202

Ph No-0250-2338234

Mobile- 9860176909

Email-principal@vcet.edu.in

  
Dr. Ashish Chaudhari

**Dr. Ashish J. Chaudhari**

**President-IIC, VCET, Vasai**