

Annual Report 2020-21
[Vidyavardhini's College of Engineering and Technology, Vasai],



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

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.

There are Entrepreneurship Cell , Internship Cell , IPR cell were functioning in the institute for creating awareness among students towards innovation, entrepreneurship, business ideas, intellectual property rights. The flagship events organized under those cells are Internship fair, E-summit, BIZ- master, expert talk on IPR of innovations, inventions etc. every year. With the introduction of IIC, those activities are accelerated further with coordination of helping hands. The students understand the era of own start up,

entrepreneurship through the sessions organized wherein experts from society are invited.

- **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. Waghmare presented paper in many referred journals and renowned conferences.

- **Coordinators**

- **Faculty Representation**

Sr No	Post	Faculty Name
1.	Innovation Activity Coordinator	Mr. Viren Chandanshive
2.	Start-up activity Coordinator	Mr. Swapnil Mane
3.	Internship Coordinator	Mr. Sanket Patil

4.	IPR activity Coordinator	Mr. Vinay D. Patel
5.	Social Media Coordinator	Ms. Shaista Khan
6.	ARIIA Coordinator (Optional)	Mr. Chandan Kolvankar
7.	NIRF Coordinator (Optional)	Dr. Sharif Mohd. Pathan
8.	Members (Faculty)	Mr. Yogesh Pingle, Asst. Professor, IT
		Mrs. Poonam Surange, counselling psychologist

- **Expert Representation**

Sr No	Post	Expert Name and details
1	IP Expert/Patent Expert	Mr. Parvez Kudroli IPR attorney Khurana and Khurana IPR Advocates Mumbai
2	Start-up / Alumni entrepreneur	Mr. Hemant Isai M/s. Genesis Engineering Solutions Pvt. Ltd. Vasai
3	Expert from nearby Industry/ Industry association/ Ecosystem Enablers	Mr. Shirish Nadkarni General Manager D'décor Home Fabrics Pvt. Ltd. Tarapur,Boisar Ph. No-9823721632
4	FI/Bank/Investor/Angel Investor/VC	Mr. Gaurav Mishra Navyuvak Entrepreneurs Goregaon Mumbai Ph no-9920342394
5	Nearby Incubation Centre	Mr. Aadesh Suryarao CEO MUIDEAS (University of Mumbai's Incubation Centre) University of Mumbai Mumbai

- **Student Representation**

Sr No	Post	Department	Student Name
1	Innovation coordinator	Civil Engineering	Mr. Viraj Gawali
2	Start-up coordinator	Mechanical Engineering	Ms. Vedika Patil
3	Internship coordinator	Information Tech.	Mr. Harshal Kore

4	IPR coordinator	Mechanical Engineering	Mr. Saleel Churi
5	Social Media coordinator	Electronics and Telecommunication	Mr. Rahul Bhivaji Kamble
	General Members		
6	Innovation Cell	Civil Engineering	Mr. Rushikesh Kamadi
7	Start up Cell	Mechanical Engineering	Mr. Chintan Vinay Patel
8	Internship Cell	Information Tech.	Mr. Neel Mehta
9	IPR cell	Mechanical Engineering	Mr. Yash Shikhare
10	Social Media Cell	Electronics and Telecommunication	Ms. Sneha Rajesh Jaiswal
11	Member	Mechanical Engineering	Mr. Mahesh Vijay Pachpande

• **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

Sr No	Name	Numbers
1	Total Number of IIC Members	31
2	Total number of IAs	09
3	Total Number of faculty mentors	NIL
4	Pre-incubation Units, if any	In process
5	Incubation Units , if any	No
6	IP Faciliation 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.

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 Intellectual Property Rights Cell was functioning in the institute since 2018, which is actively inculcating the importance of intellectual property rights, how to identify key innovations and protect it by organizing the expert talks from renowned attorney worldwide.

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

Sr No	Name	Number
1	Number and Different types of I&E and IPR activities Conducted	04
2	No. of student's & faculty ideas generated	01
3	No. of student's & faculty Innovation/prototypes developed	04
4	No. of IPs generated, published and granted	01
5	No. of Student & Faculty Start-ups/Ventures established	01
6	Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus	NIL
7	Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR ,Rs.	4360
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 [Profile of few faculties with 2-3 line of their achievements]

Prof. Yogesh Pingle is an Assistant Professor in department of Information Technology, VCET is having expertise in IoT in music therapy recently granted patent from Patent Office, India.

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

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/07/2021

(21) Application No.202111032293 A
(43) Publication Date : 06/08/2021

(54) Title of the invention : INTELLIGENT WEARABLE SWEAT SENSOR BASED DEVICE FOR MONITORING AND RECOMMENDING PERSONAL PHYSICAL FITNESS

(51) International classification	:A61B0005000000, A61B0005145000, H01M0008160000, A61B0005020500, A61B0005010000	(71)Name of Applicant : 1)Dr. Nisheeth Joshi Address of Applicant :Associate Professor, Department of Computer Science, Banasthali Vidyapith, Banasthali 304022, Rajasthan, India Rajasthan India 2)Dr. Pushyamitra Mishra 3)Dr. Vikas Kulshreshtha 4)Mr. Yogesh Prabhakar Pingle 5)Mr. Bhaskar Roy 6)Mr. Bikas Mondal 7)Dr. Chiranjib Goswami 8)Prof. Chilukuri Bala Venkata Subbarayudu 9)Dr. Sushma Jaiswal 10)Tarun Jaiswal 11)Dr. Ravi Kumar 12)Dr.S.Balamurugan 13)Dr. Pavithra G 14)Dr.T.C.Manjunath 15)Dr. M. Thangamani
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Dr. Nisheeth Joshi 2)Dr. Pushyamitra Mishra 3)Dr. Vikas Kulshreshtha 4)Mr. Yogesh Prabhakar Pingle 5)Mr. Bhaskar Roy 6)Mr. Bikas Mondal 7)Dr. Chiranjib Goswami 8)Prof. Chilukuri Bala Venkata Subbarayudu 9)Dr. Sushma Jaiswal 10)Tarun Jaiswal 11)Dr. Ravi Kumar 12)Dr.S.Balamurugan 13)Dr. Pavithra G 14)Dr.T.C.Manjunath 15)Dr. M. Thangamani
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The Intelligent Wearable Sweat Sensor-based Device for Monitoring and Recommending Personal Physical Fitness (IWSSD) helps any user to make use of the IWSSD by wearing the wearable fuel cell grid band to generate electricity from sweat and measure the human body health conditions automatically as well as recommend to drink water appropriately. The sweat fuel cell generates electricity from sweat. For this anode, cathode and electrolyte are helps to produce electricity from lactate in sweat on the sweat fuel cell. To do this process the wearable fuel cell grid band needs to be wear by the user. Also, health sensors like temperature sensors, pressure sensors, mineral sensors, etc. in the wearable band are measuring the health values and transfer to the control unit. The control unit process the data and generate results and transmits it to the registered user's mobile phone. The IWSSD control unit helps to monitoring and managing the successful functioning of the whole IWSSD system. By using this IWSSD, any user to make use of the IWSSD by wearing the wearable fuel cell grid band to generate electricity from sweat and measure the human body health conditions automatically as well as recommend drinking water appropriately.

No. of Pages : 16 No. of Claims : 3

Mr. Yogesh Prabhakar Pingle is among other innovators across India who successfully developed the intelligent wearable sweat sensor-based device for monitoring and recommending personal physical fitness.

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


Mr. Archis Mhatre graduated from Mechanical Engineering Department in June 2021 established his own start up in the field of die designing and development.



Government of India
Form GST REG-06
[See Rule 10(1)]

Registration Certificate

Registration Number : 27ABTFA7758H1ZQ



1.	Legal Name	ASMI ENGINEERING WORKS			
2.	Trade Name, if any	ASMI ENGINEERING WORKS			
3.	Constitution of Business	Partnership			
4.	Address of Principal Place of Business	0, 343, SIDDHI-VINAYAK BUNGLOW, MHATRE WADI, AGASHI, VIRAR WEST, Palghar, Maharashtra, 401301			
5.	Date of Liability				
6.	Period of Validity	From	13/02/2021	To	Not Applicable
7.	Type of Registration	Regular			



Annexure B

GSTIN 27ABTFA7758H1ZQ
 Legal Name ASMI ENGINEERING WORKS
 Trade Name, if any ASMI ENGINEERING WORKS

Details of Managing / Authorized Partners

1		Name	ARCHIES HARSHVARDHAN MHATRE
		Designation/Status	PARTNER
		Resident of State	Maharashtra
2		Name	SMIT SWAPNIL RAUT
		Designation/Status	partner
		Resident of State	Maharashtra

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 Stage Govt. Highlighting specially for the schemes or programs

- **ARIIA – participation and Rank-NA**
- **NISP Adoption status - Trained Faculty, Policy Formulation, Policy Implementation-NA**
- **Smart India Hackathon – 48 students participated**

K. 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>)

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

NIL

M. Images

NIL

N. Contact

NIL

Dr. Ashish J. Chaudhari

President-IIC, VCET, Vasai