



**Mahatma Education Society's**

**Pillai HOC College of Engineering and Technology**

**Dist. Raigad Via Panvel, Rasayani, Tal. Khalapur  
410207, MH, India**



**Institution's Innovation Council**

**Report for Academic Year 2021-22**



**INSTITUTION'S  
INNOVATION  
COUNCIL**

**(Ministry of Education Initiative)**

**A.**

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

To be a fountainhead of innovative ideas to meet the mission of entrepreneurship and startups and accelerate the efforts of skilling and up skilling for employment generation

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

To develop research support and cultivate an active Start-up ecosystem in PHCET is resulting in innovation and entrepreneurship driven employment and economic growth.

- **Journey of IIC established at the Institute:** PHCET has established Institution's Innovation Council (IIC) as per the guidelines of „MoE“s Innovation Cell (MIC)“ in the academic year 2020-21. The initiative was to create a vibrant local innovation ecosystem, start-up supporting mechanism, establish function ecosystem for scouting ideas and pre-incubation of ideas and to develop better cognitive ability for technology students. PHCET, IIC is actively involved in organizing and conducting various seminars, workshops, Idea competitions, Hackathon for school childrens etc. for its students and faculties.

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

PHCET has established IIC comprising members from Industry and Interdisciplinary departments. Each member contributes to fulfil Vision and Mission of IIC established at the institute conducting expert webinars, Workshops, Field visits, Add-on programs for students and faculty of PHCET.

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

- President :**Dr. R. C. Prasad**
- Vice President: **Dr. Mansi Subhedar**
- Convener: **Dr. G. V. Patil**
- Coordinators etc. : Refer Below Table

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

Sr. No.	Name of Member	Member Type (Teaching/ Non-teaching / External Expert)	Key Role/ Position assigned in IIC
01	Dr J. W. Bakal	Teaching	Head of the institution
02	Dr R. C. Prasad	Teaching	President
03	Dr G. V. Patil	Teaching	Convener
04	Dr Mansi Subhedar	Teaching	Vice President
05	Ms. Munawira Kotyad	Teaching	Entrepreneur
06	Dr. B. K. Sarkar	Teaching	IPR Activity Coordinator
07	Mr. Raju Narwade	Teaching	Internship Activity Coordinator
08	Dr M.D. Nadar	Teaching	Innovation Activity Coordinator
09	Dr. G.R. Patil	Teaching	ARIIA Coordinator
10	Dr. Shilpa Kewate	Teaching	NISP coordinator
11	Dr. Manvendra Vashishtha	Teaching	Member
12	Dr. Divya Chirayel	Teaching	NIRF Coordinator
13	Mr. Karthik Nagarajan	Teaching	Social Media Coordinator
14	Dr. Nareshkumar Harale	External	Industry Expert
15	Mr. Vikaykumar Shivpuje	External	Industry Expert
16	Mr. M. V. Rajashekar	External	Industry Expert
17	Harsh Shah	Student	Start-up Coordinator
18	Simran Surve	Student	Member
19	Harsh patil	Student	IPR Coordinator
20	Vedant Sawant	Student	Internship Coordinator
21	Anjali Sharma	Student	Internship Coordinator
22	Joseph K. Thomas	Student	Innovation Activity Coordinator
23	R S Shinjo	Student	Social Media Coordinator

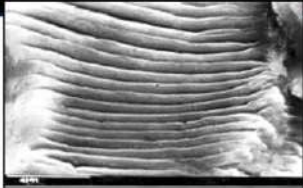
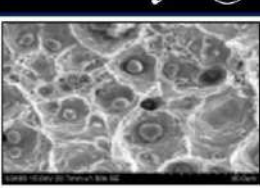
- Total No. of IIC Members: 23
- Total No. of IAs: 3

- Total No. of faculty Mentors From Portal: 13
- Pre-Incubation Units, If any: **Yes**
- Incubation Units, If any: **Yes**
- 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.**

PHCET has dedicated Pre-Incubation & Incubation cell with following facilities:


### *Centre of Excellence in Industrial Research & Consultancy @ PHCET Rasayani*



Forensic & Root Cause Failure Analysis	<p><b>What We Propose to Do:</b></p> <ul style="list-style-type: none"> <li>➤ Any Failure has a root cause that can be mitigated</li> <li>➤ Forensic Failure Analysis of Components &amp; Structures</li> <li>➤ Root Cause Failure Analysis through Advanced Analytical Equipments &amp; Techniques</li> <li>➤ Recommendations made for prevention of future failures</li> <li>➤ Quality reports with detailed description and easy interpretation</li> <li>➤ Ph.D. Level Problem Solver</li> <li>➤ If required can submit preliminary result within 72 hours</li> <li>➤ Consulting &amp; Training through Seminars / Workshops / Lectures / Clinics</li> <li>➤ Some of the course modules for onsite are listed below</li> </ul>
Environmental Assisted Fracture (SCC, HE & CF)	
Corrosion Testing NACE	
Mechanical & Fracture Toughness Testing of Metallic & Composite Materials	
Chemical Composition & Metallography	
NDT: LPT, NPT, UT, CT	
Investigate Modes & Mechanisms of Failures	
Macro Fractography	
Risks Based Analysis & Remaining Life Assessment	
Training Modules	

**Practical Metallurgy in Industries**  
For Continuous Professional Development



- **Software Lab**  
Software lab consists of 18 no of PC's, where students can research and develop projects, several no of software are used. Solid Works, Java net beans, Android SDK, Matlab, Kill, Arduino, etc. Also many software's are provided as per the project need.
- **3D Printing Facility in Software Lab (Felix 3.0 3d printer)**

- Facility used for rapid prototyping and fast processing  
Ultimaker+ Extended Pro  
3D Printing, also known as additive manufacturing, refers to various processes that synthesize a 3 dimensional object. In 3D printing, successive layers of material are formed under computer control to create an object. A 3D printer is a type of industrial robot.
- Component Library  
This is the place where number of resources is incubated to process on. This facility is made with the intention of making maximum resources available to work on. Students can borrow these resources to learn and work on. Library contains resources like Microcontrollers, sensors, actuators, power supply, tools and equipment and many more.
- Workshop Facility  
Research lab has dedicated workshop facility or prototyping and fabrication. Major useful tools and equipment are available with the proper guidance to use.
- Laser Cutting and Assembly Project  
Laser cutting is a technology that uses a laser to cut materials, and is typically used for industrial manufacturing applications. This facility is provided for rapid prototype Designing, Assembly and manufacturing, Testing of pilot design and project based learning.

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

- Number and Different types of I&E and IPR activities Conducted :

**Quarter I**

SN.	Activity	Date	Social Media
1	Materials camp of ASM	16/12/2021 to 18/12/2021	<a href="#">Link</a>
2	Prayog- Design Thinking	1/12/2022	<a href="#">Link</a>
3	Guest Lecture series on Research & Development in Engineering Materials	12/16/2021	<a href="#">Link</a>
4	Workshop of Drone Technology	12/19/2021	<a href="#">Link</a>

## Quarter II

SN.	Activity	Date	Social Media
1	Startup and Innovation Ecosystem Initiatives by MIC	Start up	<a href="#">Link</a>
2	Intellectual Property Rights (IPR) Awareness Program	IPR	<a href="#">Link</a>
3	Solution Challenge 2022	Design Thinking & Critical Thinking	<a href="#">Link</a>
3	International Students Olympiad in Hot Bulk Forging and Extrusion Technologies 2022	Design Thinking & Critical Thinking	<a href="#">Link</a>

## Quarter III

SN.	Activity	Date	Social Media
1	Two Days Educational Training Conference & Exhibition On "Challenges And Opportunities In Digital Direct Manufacturing : Additive Manufacturing / 3d Printing & Welding 4.0 "	29/4/2022-30/4/2022	<a href="#">Link</a>
2	One Week Short Term Training Program on "Insights of Data Science and Machine Learning with its Applications "	4/7/2022-9/7/2022	<a href="#">Link</a>
3	"Hands-on Training on Internet of Things (IOT) using Arduino: Tools and Techniques"	29/03/2022.	<a href="#">Link</a>
4	Webinar on "Wide Area Measurement System (WAMS) in Power Systems using PMUs "	16/10/2021	<a href="#">Link</a>



### Quarter IV

SN.	Activity	Date	Social Media
1	Awareness Program on BIS standard	04/08/2022	<a href="#">Link</a>
2	Workshop on Industrial PCB Prototyping	17/03/2022	<a href="#">Link</a>
3	Webinar on "Health assessment of existing nuclear fuel cycle facilities"	20-8-2022	<a href="#">Link</a>
4	Webinar on "Climate Change - A concern for Mumbai"	20-8-2022	<a href="#">Link</a>

- No. of student"s & faculty ideas generated: **15**
- No. of student"s & faculty Innovation/prototypes developed: **04**
- No. of IPs generated, published and granted: **15 (FER Generated)**
- No. of Student & Faculty Start-ups/Ventures established : **In Process**
- Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus: **1 Lakh**
- Amount grant or fund supported to student & Faculty lead Innovations, start-ups and IPR : **4 Lakhs**
- No. of Technology Transfer and Commercialization happened: **00**

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

- a. **Dr. R. C. Prasad:** Dr. R.C. Prasad currently a Professor of Department of Mechanical Engineering and Chairman IIC at PHCET Rasayani is a

former HAG Professor from IIT Bombay. He is a distinguished alumnus of BIT Sindri and completed MTech from IIT Madras and PhD from IISc Bangalore. He has more than 45 years" experience in Teaching, Research & Consultancy and had been an Independent Director at M/s Sanghvi Forging at Vadodara for more than 5 years. Currently he is a Margdarshak of AICTE. He has conducted more than 25 Conferences / Workshops and delivered more than 30 Keynote lectures besides editing a book on "Composites: Science & Technology. He has guided more than 50 MTech & PhD Dissertations and published papers with 727 citations & h-index 14 as given below:



- b. **Dr. M. D. Nadar:** Graduated, post graduated and doctorate in the field of Mechanical Engineering and specialized in the area of industrial Engineering. I had 4 years Industry experience and I have worked in the area of teaching since 1991 and research work since 2010. I have guided more than 50+ under graduate students and guided more than 25+ Post graduate students final year projects and I have been selected for best research work by Mumbai University, I have coordinated many faculty development program institute level, national level sponsored by remote center by IIT-Mumbai, AICTE Atal Academy FDP Program.



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



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

**Gourav Sarkar**

Co-Founder and CEO | (M) +91 9987549293

**Friction Innovative Education LLP**

217, Skylark, Sakal Bhavan Road, Sector 11, Opp. BP Marine Academy,  
CBD Belapur, Navi Mumbai 400614

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

Our invention *Automatic Air Fill in Bike, Scooty and Car Tyres* is a Point of this programmable research show that a drop in Tyre pressure by only a couple of PSI can bring about the decrease mileage. Our invention and effectively carries out the utilization of a versatile blower that will supply air to every one of the four Tyres through hoses and a revolving joint fixed between the wheel axle and wheel center point at each wheel. The revolving joints viably permit air to be directed to the Tyres without the tangling of hoses (max 60 RPM). A programmed vacuum apparatus for vehicle wheel Tyres, particularly those without tubes, uses an air cylinder with a chamber fixed on an edge which empowers its cylinder plate to contact and be moved by the inside Tyre surface progressively by the wheel pivot compacting air into the Tyre chamber until the pressing factor develops adequate and the cylinder pole no longer contacts the inside Tyre surface. Then, at that point a cylinder plate of a pressing factor check cylinder is lifted up making an electric association with cut the power from the blower and the cylinder pole recuperates its unique position.

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

- ARIIA – Participation
- NISP Adoption status - Trained Faculty, Policy Formulation, Policy Implementation
- Smart India Hackathon etc.

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

Website: <https://www.facebook.com/pillaihoccollege>

Website: <https://www.instagram.com/pillaihoccollege>



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

1. **Dr. Mansi Subhedar:** I am serving as vice president for IIC, PHCET. PHCET has constituted IIC to offer support to the students and faculty to nurture innovation and startup ecosystem. IIC team at PHCET has also formulated PHCET NISP in accordance with framework provided by MoE innovation cell. PHCET IIC is promoting student driven innovations by providing a platform to nurture students ideas and mentor them to take those ideas transformed into product design. Being a IPR coordinator, I would like to mention that involved many students are actively involved in prototype design at various stages. It is essential to make them aware about copyrights, trademarks and patents filing procedures and technology commercialisation guidelines. IIC has conducted several webinars on IPR, Entrepreneurship and innovation theme and have planned symposiums and design contest to promote, mentor and nurture a research, innovation and entrepreneurial potential amongst students and faculty. Implementation of NISP at various at stages will certainly help internal and external stakeholders to drive and ensure development at all fronts.
2. **Mr. Nandakishore Nemade:** I am CEO, Nikhil comforts, Mulund Mumbai and Industry expert IIC, PHCET. PHCET has vibrant innovation and startup ecosystem. PHCET IIC is promoting student driven innovations by providing a platform to nurture students ideas and mentor them to take those ideas transformed into product design.

M. Few Images of Various Programs conducted by PHCET, IIC:

IIC, PHCET organize following various programs to nurture student's ideas and mentor them to take those ideas transformed into product design.

IIC PHCET organized a webinar on "Intellectual property protection and management in Academia" on 26<sup>th</sup> April 2020. The invited speaker was Dr. Padmasatish who works as the Chief Technical Officer (CTO) at the Industrial Research and Consultancy Centre (IRCC), Indian Institute of Technology Bombay. Her work comprises multifarious functions relating to management and techno-administration of all R&D related activities undertaken in the Institute, with a main focus on Intellectual Property (IP) management / technology transfer. These include management of technical matters in R&D administration, IPR management, IP policy activities and new initiatives, startup related, contracts management, liaison with industry, researchers, funding agencies and governmental bodies, and mentorship, amongst other facilitation processes towards promotion of R&D at IIT Bombay.

She has organized and given a number of invited talks in various IPR / technology transfer related seminars, national workshops, student orientations and to industry personnel, and has been a resource person for government related work.

The session ended with Question Answer session and vote of thanks. Feedback link was sent to the participants. Positive feedback was received from participants and students suggested to organise more sessions like the same in the future.

## **ASM Materials Camp – 2022**

The four days offline ASM Materials Camp organized by the institute innovation council at the PHCET Rasayani is a joint program in association with ASM International Materials Foundation USA & ASM International India Chapter This is an outreach program designed to expose concepts of advanced materials and their applications in industries. Hands on experiments are planned on Design, Fabrication of PCBs, Sensors, 3D printing, Making Shaping & Treating of steels and their Structure property correlation (Mechanical, NDT , Microstructural) under the guidance of Professors, Industry Experts and students from IIT Bombay & PHCET Rasayani. Short lectures and interactive Lab Sessions will culminate in Drone Workshop on the last day.

Session started with welcoming of chief guest, all eminent speakers, faculties and school students. During this camp, students went through the various innovative / prototype ideas developed. Students also got hands on experience on Welding, 3D printing of sample objects, metallography, CNC machining and Internet of things. ASM Materials camp ended with vote of thanks by program co-coordinator followed by certificate distribution to all participants. Event was sponsored by ASM India chapter for the purpose of developing skills like critical thinking and problem solving apart from behavioral changes and structural shift in growing skill.





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AND RE-ACCREDITED BY NBA FOR MECHANICAL AND COMPUTER ENGINEERING 2020



**IIC in association with IQAC, PHCET**



Presents a webinar on

**Polymer as a Revolutionary Material for the  
Mankind**

**On: Monday,  
16th DECEMBER, 2021  
11:00 AM to 12:00 NOON**



Speaker

**Dr. Virendrakumar Gupta**  
**Head R&D, & Senior VP, Reliance Research**

**Dr. Gajendra V Patil**  
Convener, IIC &  
Mechanical Engineering,  
PHCET, Rasayani

**Dr. R.C. Prasad**  
President, IIC & Professor,  
Mechanical Engineering,  
PHCET, Rasayani

**Dr. J.W. Bakal**  
Principal  
PHCET, Rasayani





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**IIC in association with IQAC, PHCET**



Presents a webinar on

**International Students Olympiad in Hot Bulk  
Forging and Extrusion Technologies 2022**

**On: Saturday,  
26th FEBRUARY, 2022  
11:00 AM to 12:00 NOON**



Speaker

**Dr. R.C. Prasad**

**Ex.Professor IIT Bombay, Professor, Department of Mechanical Engineering  
PHCET, Rasayani**

**Dr. Gajendra V Patil**  
Convener, IIC &  
Mechanical Engineering,  
PHCET, Rasayani

**Dr. R.C. Prasad**  
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**IIC in association with IQAC, PHCET**



**On: Monday,  
26th JULY, 2021  
SCHEDULE  
11:00 AM to 12:30 PM**



Click the icon  
for  
Zoom Link

*E-certificate to all participants*

Speaker

**Mr. Suneet Sabale**

**Director at Brainiac Global Consulting Pvt Ltd**

**Dr. Mansi Subhedar**  
IPR Coordinator, IIC &  
HOD, ExTC Engineering  
PHCET, Rasayani

**Dr. Gajendra V Patil**  
Convener, IIC &  
HOD, Mechanical Engineering  
PHCET, Rasayani

**Dr. R.C. Prasad**  
President, IIC & Professor,  
Mechanical Engineering, PHCET, Rasayani

**Dr. Lata Menon**  
Dy. CEO, Pillai HOCL  
Educational Campus





MAHATMA EDUCATION SOCIETY'S  
**Pillai HOC College of Engineering &  
Technology, Rasayani**



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

**in association with Institute Innovation Council**

**Startup and Innovation Ecosystem initiatives by MIC**  
Date: Thursday, 30th December, 2021 Time: 11:30 am



**Dr. Gajendra Patil**  
PhD (VJTI Mumbai)  
Mechanical  
Engineering



**Karthik Nagarajan**  
PhD (Pursuing)  
Mumbai University  
Civil Engineering

***Innovation Ambassador***



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Technology, Rasayani**



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

**in association with Institute Innovation Council**

**Startup and Innovation Ecosystem initiatives by MIC**  
Date: Thursday, 10th January, 2022 Time: 11:30 am



**Dr. Richa Agarwal**  
PhD (VNIT Nagpur)  
Mechanical  
Engineering



**Dr. Avinash R Vaidya**  
PhD (IIT Bombay)  
Electronics & Telecomm  
Engineering

***Innovation Ambassador***



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**IIC in association with IQAC, PHCET**



**TOY HACKATHON COMPETITION 2021-22 on the  
occasion of National Start-up day**

**On: Saturday,  
16th JANUARY, 2022  
10:00 AM ONWARDS**

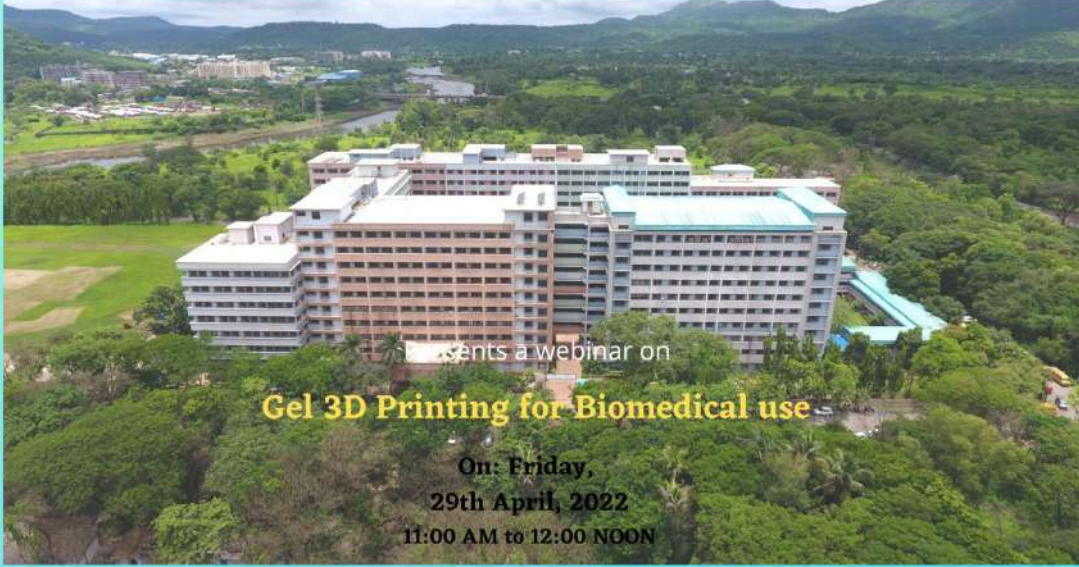
**For all branches  
For further details contact us:**

**Dr. Gajendra V Patil**  
Convener, IIC &  
Mechanical Engineering,  
PHCET, Rasayani


**Dr. R.C. Prasad**  
President, IIC & Professor,  
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PHCET, Rasayani

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PHCET  
PILLAI HOC COLLEGE OF  
ENGINEERING & TECHNOLOGY

INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of HED Initiative)

PHCET presents a webinar on  
**Gel 3D Printing for Biomedical use**  
On: Friday,  
29th April, 2022  
11:00 AM to 12:00 NOON



Speaker  
**Dr. Jayesh Bellare,**  
Professor, Department of Chemical Engineering, IIT Bombay

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**Dr. Gajendra V Patil**  
Convener, IIC &  
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**IIC in association with IQAC, PHCET**



Presents a webinar on

**Overview of Rubber Industry: Challenges and  
Opportunities for Students**

**On: Saturday,  
10th JANUARY, 2022  
11:00 AM to 12:00 NOON**



Speaker


**Dr. Rajkumar Kasilingam**  
Director, IRMRA Thane

**Dr. Gajendra V Patil**  
Convener, IIC &  
Mechanical Engineering,  
PHCET, Rasayani


**Dr. R.C. Prasad**  
President, IIC & Professor,  
Mechanical Engineering,  
PHCET, Rasayani


**Dr. J.W. Bakal**  
Principal  
PHCET, Rasayani






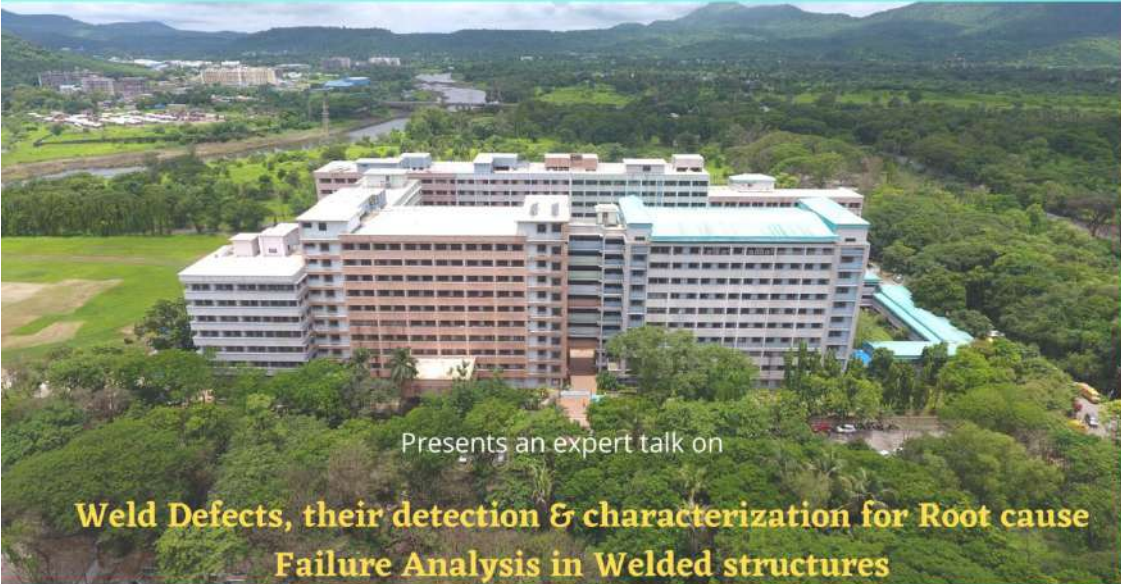
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**IIC in association with IQAC, PHCET**






Presents an expert talk on

**Weld Defects, their detection & characterization for Root cause  
Failure Analysis in Welded structures**

**On: Saturday,  
29th APRIL, 2022  
02:00 PM to 03:00 NOON  
Venue- Conclave I**




Speaker

**Mr. Paresh Haribhakti,**  
Managing Director, TCR Advanced Engineering Pvt. Ltd. Vadodara

**Dr. Gajendra V Patil**  
Convener, IIC &  
Mechanical Engineering,  
PHCET, Rasayani


**Dr. R.C. Prasad**  
President, IIC & Professor,  
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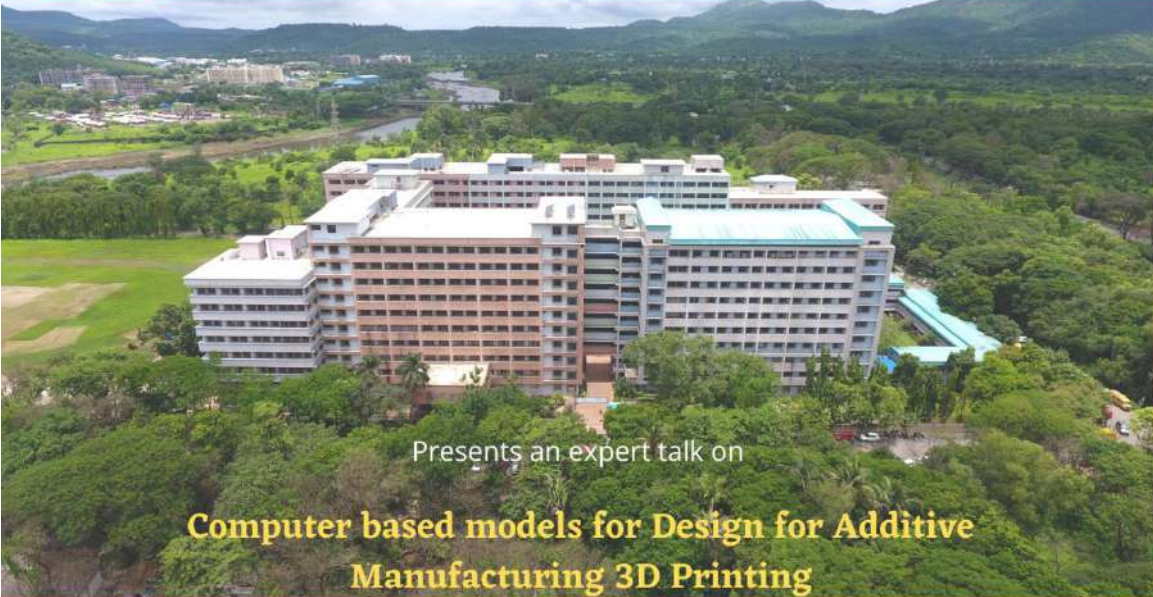


**PHCET**  
PILLAI HOC COLLEGE OF  
ENGINEERING & TECHNOLOGY

**IIC in association with IQAC, PHCET**




**PHCET**  
PILLAI HOC COLLEGE OF  
ENGINEERING & TECHNOLOGY



Presents an expert talk on

**Computer based models for Design for Additive  
Manufacturing 3D Printing**

**On: Saturday,  
30th APRIL, 2022  
11:00 AM to 12:00 NOON  
Venue- Conclave I**



Speaker

**Dr. Amitava De,**  
Professor, Department of Mechanical Engineering, IIT Bombay

.....

<b>Dr. Gajendra V Patil</b> Convener, IIC & Mechanical Engineering, PHCET, Rasayani	<b>Dr. R.C. Prasad</b> President, IIC & Professor, Mechanical Engineering, PHCET, Rasayani	<b>Dr. J.W. Bakal</b> Principal PHCET, Rasayani
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Patentability/novelty search  
Drafting Patent Application  
Patent Filing in India  
Publication of Patent Application  
Examination of Patent Application  
Grant of Patent

Mahatma Education Society's  
**Pillai HOC College Of  
Engineering And Technology**  
RASAYANI  
  
**SEMINAR ON  
" IPR & PATENT FILING "**



**DATE :  
4TH AUGUST 2022**

**TIME :  
11 AM ONWARDS**

**VENUE :  
CONCLAVE 1**

  
**SPEAKER : DR. B.K. SARKAR**

Organized By :  
**COMPUTER ENGINEERING DEPARTMENT**

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



**PILLAI CENTRE OF  
INNOVATION AND  
ENTREPRENEURSHIP**  
presents

# **BUSINESS PLAN COMPETITION 2021-22**

**CONTACT DETAILS**  
Prof. Lalit Mehta  
PCE (8080524053)  
Prof. Sadhana Thevar  
PCACS (86556 97313)  
Prof. Shaheda Sheikh  
PIMSR (9769056180)  
Prof. Kavita Pradhan  
PICA (9972007940)  
Prof. Celina Joy  
PCIE (9833709566)

- Students studying in **Institutions under Mahatma Education Society** are allowed to participate in this competition.
- Register your team (2 to 5 members per team).
- The team may include an alumni of the college (provided the alumni has completed studies not earlier than 31<sup>st</sup> March 2019).
- A student can be member of maximum two teams.



**₹  
1 LAKH  
PRIZE**

**Last date for registration - 25<sup>th</sup> September 2021**



The Institute Innovation Council at the Mahatma Education Society's PHCET organized two days Education Training Conference and exhibition that is being organized in association with SFA Mumbai Chapter, IIW Mumbai Chapter & ASM International India Chapter on **"Challenges And Opportunities in Digital Direct Manufacturing : Additive Manufacturing / 3D Printing & Welding 4.0"**

Industries today are shifting towards smart digital direct manufacturing to cut cost and time of production. They are using automation to be competitive in the local & global market. Additive manufacturing / 3D Printing and Welding

4.0 have created a new business ecosystem where the entire production process is digitized and documented.

Welding procedures like joint geometry, consumables, shielding gas, weld speed are digitized for the computer to take decision and control software tracks welding parameters like current, voltage, heat input and robot operates as per virtual welding software.

Both the additive manufacturing and Welding 4.0 processes build parts by joining layer upon layer from a CAD file. Each layer melts and welds to the previous layer to create a 3D structure. Additive manufacturing cuts 3D CAD model into 2D slices and converts it into a 3D physical model using printers. For metals additive manufacturing uses electron beam or arc welding processes to develop layer upon layer deposition of metal powder or wire based filler metals. In addition to digitization skill the knowledge of metallurgy, metallography, fractography, NDT, mechanical testing and different parameters that affect structure-properties and the quality and integrity of layered components needs to be updated. Industries are looking for trained and skilled manpower. Professional training in this area is needed for gainful employment as the degree alone cannot be enough to get a job. This two days workshop will provide an interdisciplinary platform to discuss research, innovations, trends, concerns and practical challenges to meet the requirements of Industry 4.0 through Education 4.0.

#### Sponsorship

The event can be sponsored by donating Rs.25,000/-. The sponsorship entitles mention in the souvenir and hall, exhibition stall and free registration for three delegates with registration kit, breakfast, lunch & evening tea.

#### Souvenir

A souvenir will be brought out on this occasion. It will contain the abstracts of the papers and advertisements. The tariff for advertisements in the souvenir is as below:

Back Cover	Rs.8,000/-
Inside Cover Pages	Rs.6,000/-
Full Page	Rs.5,000/-
Half Page	Rs.3,000/-

#### Exhibition & Presentation by Exhibitors

Concurrent with the workshop an exhibition is planned for the display of products & processes. The exhibitors shall be provided a stall of 6' by 4' with electrical connections and tables for the display of the product and processes of the company that will provide a platform for the growth of 3D printing & welding industries.

#### Exhibition tariff:

Rs. 15000 with free registration for 3 delegates, one page advertisement in the souvenir and 10 minutes slot for the presentation with certificate of participation.

#### Registration charges for Participants

Category	Fees (Rs.)
SFA / IIW / ASM Members & Faculty	1500
Participants from Industries & Non-Members	3500
Student Participants	500

This includes registration kits, breakfast, lunch and evening tea and a copy of the souvenir with abstracts.

Payment may be made through DD / Cheque drawn in favor of 'R&D PHCET'.

#### RTGS / NEFT / IFSC Code Details:

Name of the Account Holder: **PHCET Research and Development Account**

Name of the bank: **CANARA BANK**

Branch: **Khairi, Patalganga**

Account No. **52142200111189**

RTGS / NEFT / IFSC Code: **CNRB0015214**

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Mr.Chander Girotra, CMD Weldwell Speciality Pvt. Ltd.  
Mr. Anand V. Rao, ED, ICON Labs Sompada, Mumbai

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Dr. Ganav Rao, Se F, NMRL, Ambarnath  
Mr. Anur Munge, PHCET Polytechnic Section  
Dr. Clara Fernandes, BCP, Kalma Santharuz

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Dr. Manasi Subhedar, HOD, Electronics & Telecom, PHCET Rasayani.  
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Mr. Aniket Dumbre, PHCET Rasayani

#### Address for Correspondence :

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President IIC @ PHCET & Professor  
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[rccprasad@mes.ac.in](mailto:rccprasad@mes.ac.in) Web :-  
[www.sfa.mes.ac.in](http://www.sfa.mes.ac.in)

### TWO DAYS EDUCATIONAL TRAINING CONFERENCE & EXHIBITION On

**"CHALLENGES AND OPPORTUNITIES IN  
DIGITAL DIRECT MANUFACTURING :  
ADDITIVE MANUFACTURING / 3D PRINTING  
& WELDING 4.0"**

Date: **April 29-30, 2022**

Venue: **Conclave, PHCET Rasayani**

#### Organized by



#### Supported by





Mahatma Education Society's  
Pillai HOC College of Engineering and Technology  
Department of Mechanical Engineering

**INNOVATION**

Seminar on  
**Idea Building for  
Startups, Innovation and Entrepreneurship  
using Design Thinking Approach**

Date : 27th July 2022 , Wednesday  
Time : 10:15 - 01:00 pm  
Venue : 1st Floor Conclave

**Speaker**  
Dr.Karthik Nagarajan

Agenda : 1) Design Thinking 2) ISRO Projects / Internships 3) Startups / Innovations 4) PHCET Students Council 5) ISRO Outreach

## **“Hands-on Training on Internet of Things (IOT) using Arduino: Tools and Techniques”**

**Date:** 29<sup>th</sup> March 2022.

**Venue:** Research LAB

**Time:** 11:00 A.M to 4:00 P.M

### **Speaker Profile**

Ms. Ruchira Patole, currently working as an Assistant Professor in Electronics Engineering Department of Pillai College of Engineering, New Panvel. She is also pursuing her P.HD in the same area of expertise (IOT and Arduino) from NIT, Surathkal. She has completed her Master's and Bachelor's degree in Electronics Engineering from Pillai College of Engineering, Panvel (Mumbai University) with distinction. She has more than 10 years of experience in teaching. She has published a book chapter in Springer Nature Singapore Pte Ltd. 2020, indexed by SCOPUS. She has also published papers in National and International journals. She has also conducted many workshops for faculties and students. She is also a coordinator for conducting workshops in collage held by IIT Bombay.

Prof. Lakshmi C. R has given introduction of the speaker and started the session.

### **Workshop:**

The session started with the felicitation of speaker by our Head of the Department Prof. Pranita Chavan mam. Ruchira mam started with the introduction of IOT. She explained the role that Arduino plays in this particular technology. She gave information about the types of Arduinos available in the market and how students can utilise them into their projects. She has also shown them the working model and parts of drone using Arduino. She also highlighted the costing analysis for final year projects using Arduino kit. She gave a brief overview of useful softwares used for the resultant product. Students were motivated to utilize their time in studying and



hands on training for Arduino Workshop. Speaker highlighted the key points to be considered while making patent filing project. Aditya Fundekar and Ritika Rai, students from TE Electrical, asked queries about costing and software and the speaker gave satisfactory answers to all the queries. Students thoroughly enjoyed the session and speaker made sure that all their concepts must be cleared.

This hand-on session left a great impact on students as well as faculties. Total 40 students and 6 faculties have attended the session and all gave positive feedback through the form circulated after the session. They have also requested to conduct such hearings and hands on sessions in future.

Below is the glimpse of our workshop.



H.O.D of Electrical Engineering Department Prof. Pranita Chavan welcoming and felicitating the guest Prof. Ruchira Paotle



Speaker giving introductory speech



**Started with hand on workshop**



**Vote of thanks and token of acknowledgment**





**In a frame with students**



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**"Insights of Data Science  
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Technology, Rasayani**

Accredited with an 'A' grade by NAAC in the First Cycle 2019  
Reaccredited by NBA for Computer and Mechanical Engineering 2020  
Winner of the First Position for Workplace Safety Awards 2019  
Winner of Indian Merchant Chamber's Ramakrishna Bajaj National Quality Performance Excellence Trophy - 2019

**Session Date**  
Mon 4th July, 2022 - Sat 9th  
July 2022

**Session Timing**  
10:30 A.M. TO 4:30 P.M.

**Certificate**  
Registered participant will  
receive certificates during the  
valedictory function on the last  
day subject to attendance.

**For Registration & Enquiry:**  
Prof. Shamna Sadanand  
9167741331  
Prof. Akanksha Patil-  
7387963369

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Prof. Akanksha Patil

**REGISTRATION DETAILS**

- Registration will be done on first come first serve basis, 40 seats are available.  
Registration form link: <https://forms.gle/iCiH2q5yZyEEt5vC7>
- Last date of registration is **Thursday, 30th June, 2022.**
- Registration Charges are as follows:  
ISTE Member: **RS. 1200/-**  
Others: **Rs. 1500/-**  
UPI ID: **snehalshinde9821@oksbi**  
Mobile no. **8087626518**
- Mode of participation for PHCET faculty: **Offline | Others: Online**



## “Wide Area Measurement System (WAMS) in Power Systems using

**Speaker Profile: B.E.Electrical , MTech Electrical , Ph.D. Pursuing (IIT Bombay)**



Mrs. Pragati Gupta has more than 25 years of experience .She has completed her B.E with silver jubilee merit award for securing highest marks in BE examination of Dibrugarh University. She got VJTI Gold Medal for securing highest marks in M.Tech, 2010. She has industrial as well as teaching experience. Currently she is working as Assistant Professor at VJTI, Matunga and pursuing Ph.D in Electrical Engg. from IIT ,Bombay. Her area of research is Wide Area Measurement system using Phasor Measurement Units.

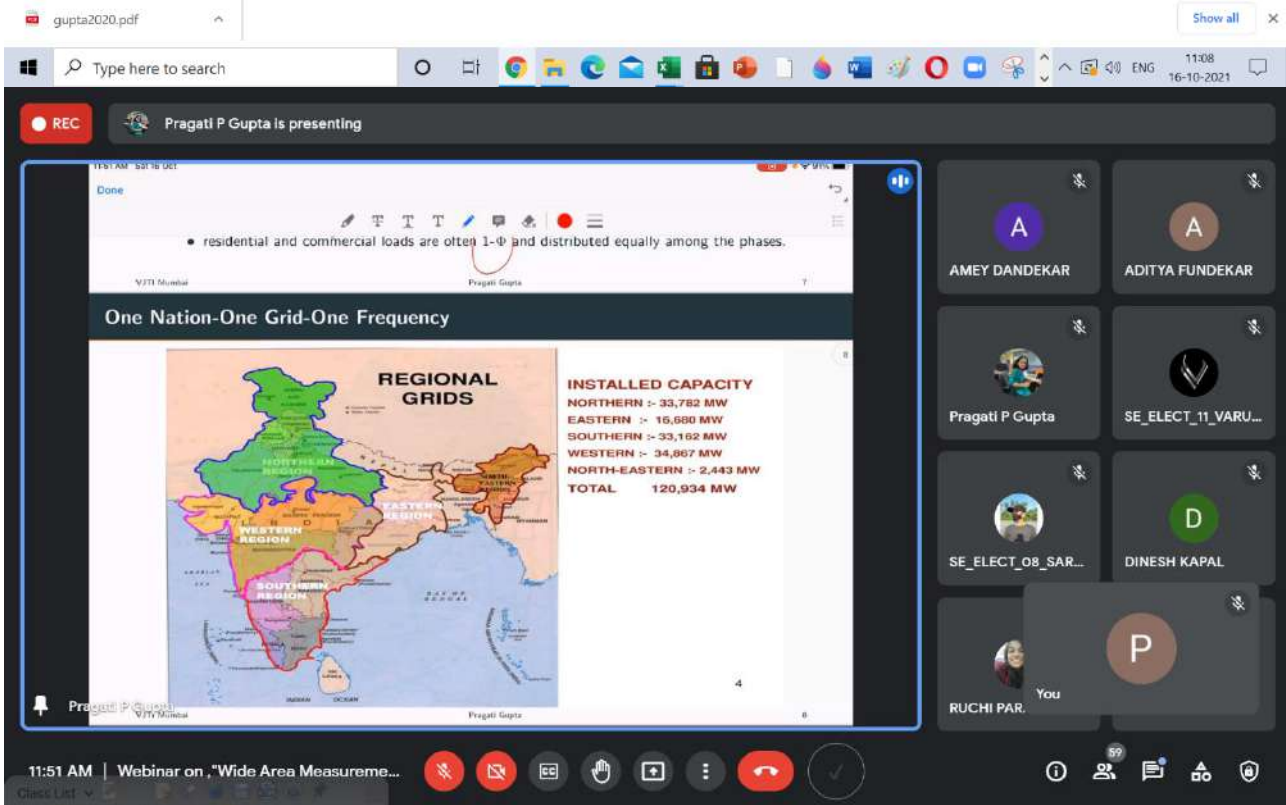
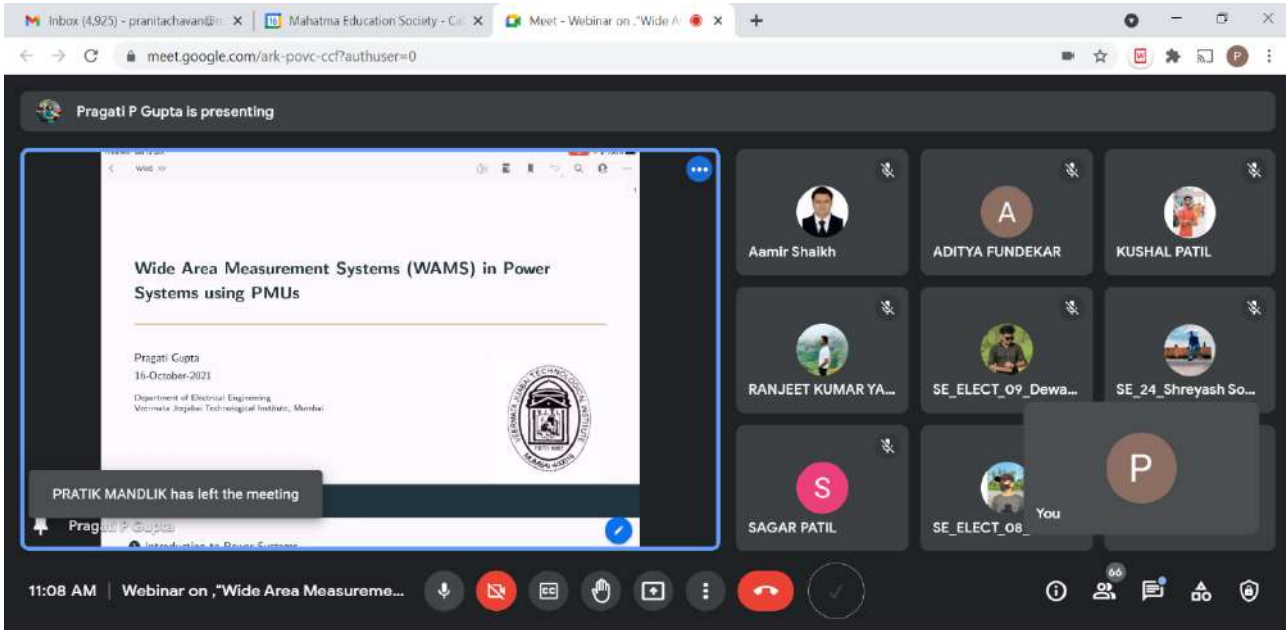
The webinar on the topic, “Wide Area Measurement System (WAMS) in Power Systems using PMUs” was organized under student chapter IEI and special interest Group Power System for all the undergraduate Engineering students. The main objective of the webinar is to get brief idea about new concept of WAMS and its application in power system. Prof. Aamir Shaikh introduced the Speaker and Session started.

The guest made the session very interactive. She has started the session with basic concept of power system. She gave detailed history and overview of National Grid with their MW capacity and also, the HVAC, HVDC transmission system detailed overview. Then she shifted the presentation towards introduction of WAMS, its significance and application in power system. The concept of WAMS and PMUs were explained with application in



power system protection .The session was really informative and students gained the knowledge of new area WAMS which will help them for selecting Project topic in future. The session was carried out through the online Google Meet platform around 65 Students and faculty participated enthusiastically.

The session ended with a vote of thank speech given by Prof. Pranita Chavan. The feedback link circulated among the participants and E-certificates were provided.





## **Bureau of Indian Standards Mumbai Branch Office-II**

BIS is organizing an orientation Programme for the Engineering Students on 04<sup>th</sup> August 2022, from 1130 am – 1230 pm, at Pillai HOC College of Engineering & Technology, Rasayani MH-410207



### LEARNING OBJECTIVES

Promote quality consciousness among young engineering students  
Introduction to quality assurance activities carried out by Government of India

### SPEAKER



1. Sh. Ashish Wakle - Scientist C/Deputy Director  
Subjects – About BIS, Activities of BIS, Standard Formulation
2. Pushpendra Mishra – Standard Promotion officer  
Subject – Standards Club & Guidelines on standards club



### WHO SHOULD ATTEND

Engineering Students & Faculty members of Civil, Electrical, Mechanical & Chemical

### FEE & DISCOUNT Nil



For Further Information  
Please Contact :  
Sh Puspendra Mishra (SPO) – 91 8073384268  
Email I'd – mubo2@bis.gov.in







**MAHATMA EDUCATION SOCIETY'S  
PILLAI HOC COLLEGE OF ENGINEERING AND TECHNOLOGY,  
RASAYANI 410207**

**DEPARTMENT OF CIVIL ENGINEERING**

**Webinar On**  
Health Assessment of existing nuclear fuel cycle facilities  
&  
Climate Change - A Concern for Mumbai

**Date :- 20th Aug, 2022**

**TIME : 11 AM ONWARD**

**E-Certificate will be provided to participants**

**PARTICIPANTS CAN REGISTER THROUGH SCANNING THE FOLLOWING QR CODE**



**AFTER REGISTRATION PLEASE JOIN THE WHATSAPP GROUP TO RECEIVE MORE UPDATES**



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SCIENTIFIC OFFICER, BARC

**MR. SUDIPTA CHAKRABORTI**  
INFRASTRUCTURAL CONSULTANT, MUMBAI

**CONVENOR,**  
PROF. R. P. NARWADE  
HEAD, DEPARTMENT OF CIVIL ENGINEERING, PHCET

**FACULTY COORDINATOR**  
MS. APURVA DESHPANDE  
ASSISTANT PROFESSOR  
(9422181868)

**REGARDS,**  
DR. J. W. BAKAL  
PRINCIPAL



**MAHATMA EDUCATION SOCIETY'S  
Pillai HOC College of Engineering &  
Technology, Rasayani.**

*Pillai*



**DEPARTMENT OF ELECTRONICS &  
TELECOMMUNICATION ENGINEERING  
UNDER IETE STUDENT FORUM ORGANISES**

## **WORKSHOP ON "INDUSTRIAL PCB PROTOTYPING"**

### **DETAILS OF THE SPEAKER**



**Mr. Shubham Thakur  
(Research Associate, PCB Lab),  
Certified PCB Analyst &  
Design Engineer, ESSCI.**

**DATE**

**FRIDAY,  
11TH MARCH 2022**

**VENUE**

**2ND FLOOR  
CONCLAVE**

**TIME**

**10:30 AM  
ONWARDS**





**MAHATMA EDUCATION SOCIETY'S  
PILLAI HOC COLLEGE OF ENGINEERING AND  
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**DEPARTMENT OF COMPUTER ENGINEERING  
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# DESIGN THINKING, INNOVATION AND STARTUP

How to Start and Grow a Business:  
A Guide for Young Entrepreneurs



29th July 2022, Friday  
02:30 pm - 4:30 pm



Conclave - II

## AGENDA

Design Thinking | Startups & Patents | ISRO  
Outreach Center | ISRO Projects / Internships



**SPEAKER**

**DR. KARTHIK NAGARANJAN**

INNOVATION AMBASSADOR





**PILLAI CENTRE OF  
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# **BUSINESS PLAN COMPETITION 2022-23**

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- The Pillai Centre of Innovation and Entrepreneurship is back with its flagship **Business Plan Competition** with a prize money of **Rs. One Lakh**.
- Register for the competition on the link given in the poster.
- This competition is only for students studying in Institutions under Mahatma Education Society's Pillai Group of Institutions.

## **CONTACT DETAILS**

Prof. Hemant Patil  
**PHCET (9028626803)**  
Prof. Sejal Malusare  
**PHMSR (8552973731)**  
Prof. Vinit Murali  
**PHCASC (9769504527)**  
Prof. Amit Kadam  
**PHCOA (99875 92960)**  
Prof. Celina Joy  
**PCIE (9833709566)**



## **REGISTRATION**

Register for free here :  
**[bit.ly/PillaiBusinessPlan](https://bit.ly/PillaiBusinessPlan)**

For detailed rules & information visit :

 **[pcie.mes.ac.in](https://pcie.mes.ac.in)**

Last date for registration -

**25<sup>th</sup> August 2022**



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Google Meet

[meet.google.com/czo-ncog-hkw](https://meet.google.com/czo-ncog-hkw)

**Mr. Karthik Nagarajan**  
Associate Professor -  
Civil Engineering Department  
Pillai HOC College of Engineering  
and Technology, Navi Mumbai

JAN  
**13**

**3**<sup>pm</sup>

**Faculty Coordinators:**  
**Dr. Jai Godheja (SLAS) & Dr. Mohit Sahu (SER)**  
**EDC & IIC**  
**ITM University, Raipur**

*An e Certificate will be provided to all the participants*



**Mahatma Education Society's  
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410207, MH, India  
Tel:02192-669000/01/02/03**



**N. Contact:**

**Dr. Gajendra V. Patil**

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