



**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 2020-21**



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 upskilling for employment generation

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

To develop research support and cultivate an active Start-up ecosystem in PHCET 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**
- Convenor: **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
1	Dr T.J. Mathew	Teaching	Head of the institution
2	Dr R.C. Prasad	Teaching	President
3	Dr G.V. Patil	Teaching	Convener
4	Dr Ashok Kanthe	Teaching	Vice President and start up Activity Coordinator
5	Ms. Munawira Kotyad	Teaching	Entrepreneur
6	Dr Mansi Subhedar	Teaching	IPR Activity Coordinator
7	Mr. Raju Narwade	Teaching	Internship Activity Coordinator
8	Dr M.D. Nadar	Teaching	Innovation Activity Coordinator
9	Dr J.E.Nalawade	Teaching	Member, NISP Convener
10	Mr. Karthik Nagarajan	Teaching	Social Media Coordinator
11	Dr Nareshkumar Harale	External	Industry Expert
12	Mr. Viswas Kshirsagar,	External	Industry Expert
13	Mr. Vikaykumar Shivpuje	External	Industry Expert
14	Mr. M. V. Rajashekar	External	Industry Expert
15	Mr. Nandakishore Nemade	External	Industry Expert
16	Mr. Rupesh Kale	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 Kassamkulam Thomas	Student	Innovation Activity Coordinator
23	R S Shinjo	Student	Social Media Coordinator

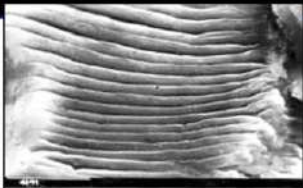
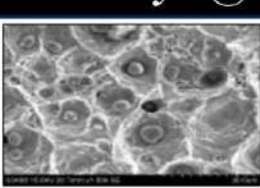
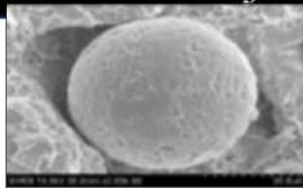
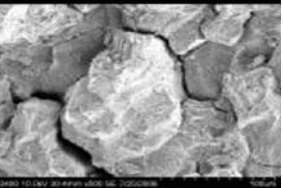
- Total No. of IIC Members: **23**
- Total No. of IAs: **6**

- Total No. of faculty Mentors From Portal: 10
- 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	Intellectual property protection and management in Academia	26 <sup>th</sup> April	<a href="#">Link</a>
2	Career Opportunities in NDT and General Guidance	17 <sup>th</sup> February	<a href="#">Link</a>

### Quarter II

SN.	Activity	Date	Social Media
1	Emerging Technologies in Civil and Infrastructure Engineering for Sustainable Development	12th to 17th July	<a href="#">Link</a>
2	Create Jobs, Generate Value, Create Wealth	1 <sup>st</sup> August	<a href="#">Link</a>
3	Diverse Applications of AI in Core Engineering	5 <sup>th</sup> September	<a href="#">Link</a>
3	Pathway to higher education abroad	01 <sup>st</sup> July	<a href="#">Link</a>

### Quarter III

SN.	Activity	Date	Social Media
1	Workshop on Intellectual Property Rights (IPRs) and IP management for start up	26 <sup>th</sup> July 2021	-
2	One Week AICTE approved STTP 1 on Composites : Fracture Toughness, NDE & Failure Analysis	17 <sup>th</sup> to 22 <sup>nd</sup> November	<a href="#">Link</a>
3	One Week AICTE approved STTP 2 on Composites : Fracture Toughness, NDE & Failure Analysis	18 <sup>th</sup> to 23 <sup>rd</sup> January	<a href="#">Link</a>
4	One Week AICTE approved STTP 3 on Composites : Fracture Toughness, NDE & Failure Analysis	15 <sup>th</sup> to 20 <sup>th</sup> March	<a href="#">Link</a>

### Quarter IV

SN.	Activity	Date	Social Media
1	World Environment Day	05 <sup>th</sup> June	<a href="#">Link</a>
2	Recycling Metals, Plastics & Scrap Tyres : Circular Economy Road map to Build Green India"	21 <sup>st</sup> May	-
3	ONLINE ONE DAY NATIONAL WORKSHOP On "Recycling Metals, Plastics & Scrap Tyres : Circular Economy Road map to Build a Green India"	21 <sup>st</sup> June	<a href="#">Link</a>
4	Poster Presentation Competition for Students of Polytechnic " From waste to Wealth : Circular Economy Roadmap "	21 <sup>st</sup> June	-
5	ONLINE STATE LEVEL H A C K A T H O N 2 0 2 1 ON Solution for Recycling Metals, Plastics & Tyres for Circular Economy	21 <sup>st</sup> June	<a href="#">Link</a>
6	Importance of Internship and Career Guidance for Engineers	18 <sup>th</sup> June	-

- No. of student's & faculty ideas generated: 7
- No. of student's & faculty Innovation/prototypes developed: **In Process**
- No. of IPs generated, published and granted: **In Process**
- 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 : **1.73 Lakhs**
- No. of Technology Transfer and Commercialisation happened: 00

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

- 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. J. E. Nalavade:** He has attended the NISP training program in January 2021. Currently NISP coordinator at PHCET Rasayani and formulated NISP policy in June 2021. He has successfully completed Innovation Ambassador training (Foundation level) conducted by MoE's Innovation Cell and AICTE during the period from 30th June-30th July 2021. Two NISP awareness programs were organized by me for Faculty and students.
- c. **Dr. M.D.Nadar:** Graduated, post graduated and doctorate in the field of Mechanical Engineering and specialised 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 centre by IIT-Mumbai, AICTE Atal Academy FDP Program.



- 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 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 IPR coordinator 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.



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**Pillai HOC College of Engineering & Technology, Rasayani**  
ACCREDITED WITH 'A' GRADE BY NAAC IN FIRST CYCLE 2019  
AND RE-ACCREDITED BY NBA FOR MECHANICAL AND COMPUTER ENGINEERING 2020

and  
**Pillai College of Engineering, New Panvel**  
ACCREDITED WITH 'A+' GRADE BY NAAC  
AND RE-ACCREDITED BY NBA FOR MECHANICAL, ELECTRONICS AND COMPUTER ENGINEERING 2020

Click the icon for Zoom Link

IIC Cell Pillai HOC College of Engineering & Technology, Rasayani presents a webinar on  
**INTELLECTUAL PROPERTY PROTECTION AND MANAGEMENT  
IN ACADEMIA**  
On the occasion of International Patent Day

On: Monday, 26th April, 2021  
05:00 PM

**Program Schedule**

- Rashtra geet
- Welcome Speech by Dr. Mathew, Principal, PHCET, Rasayani
- Dr. R.C. Prasad, President IIC, PHCET, Rasayani
- Speaker Introduction by Dr. Mansi Subhedar
- Talk on "Intellectual Property Protection and Management in Academia" by Dr. Padma Satish
- Vote of thanks by Dr. G.V. Patil

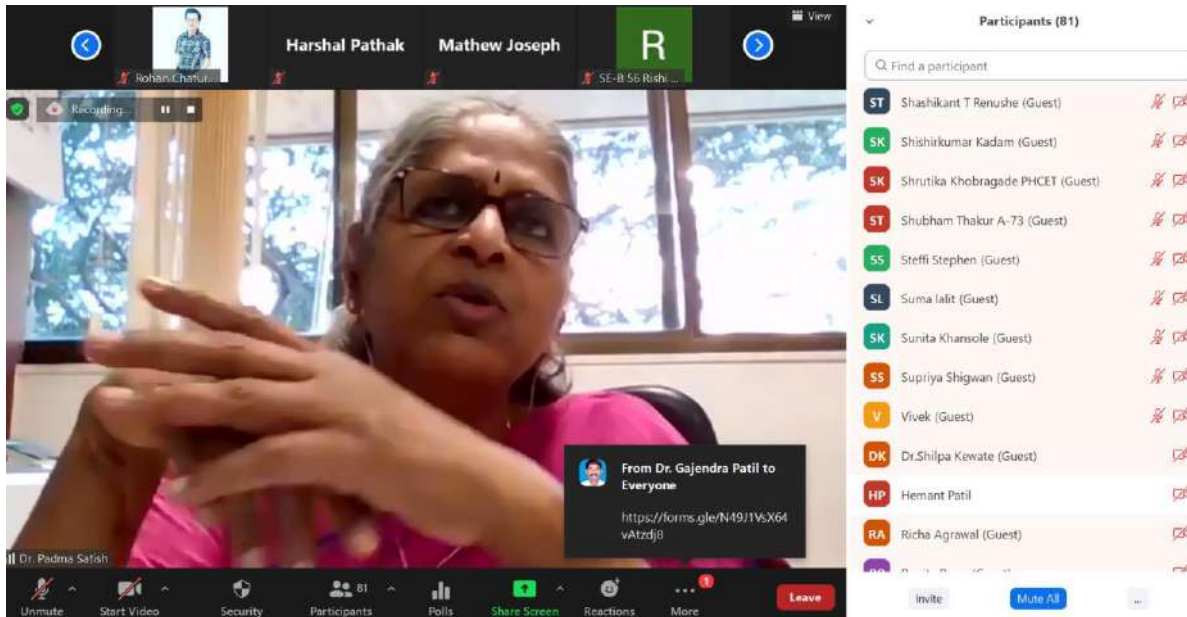
**Speaker**  
Dr. Padma Satish  
Chief Technical Officer (CTO),  
Industrial Research and  
Consultancy (IRCC), IIT Bombay

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

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

**Dr. T.J. Mathew**  
Principal  
PHCET, Rasayani

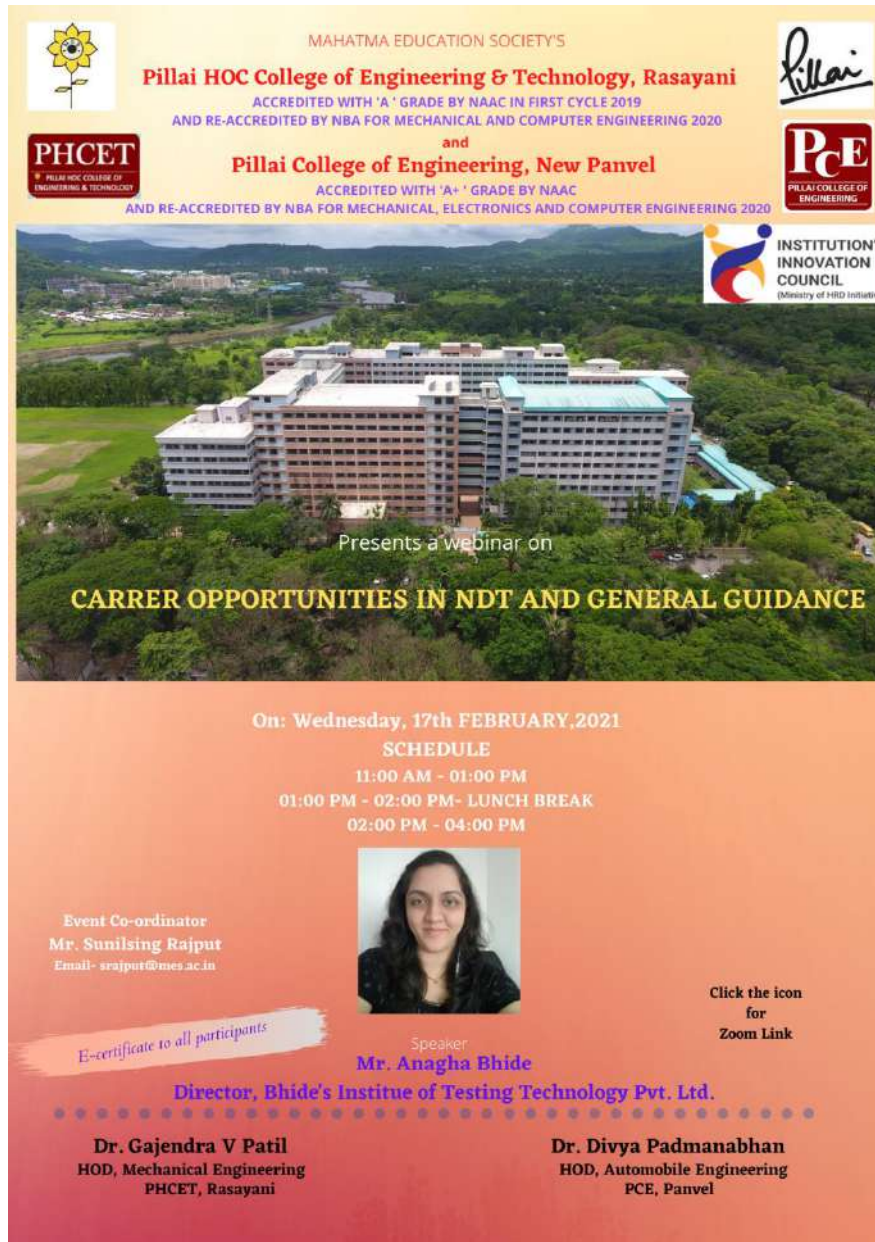
## Event Flyer



### Session Screenshot

IIC PHCET organized a webinar on “I Career Opportunities in NDT and General Guidance” on 17<sup>th</sup> February 2021. The invited speaker was Ms. Anagha Bhide who is Director at Bhide Institute of Testing Technology Pvt. Ltd., which is located at Navi Mumbai. She has delivered several talks on Non-destructive testing & its importance in the manufacturing & testing areas. She also conducts various courses on NDT Level I & Level II.

Total 228 students and faculty members participated the session. The Session started with the welcome of speaker by Mr. Sunil Singh Rajput, & then commenced the session by speaker by explaining the Non-destructive testing, & different types of non-destructive testing used by industries for the betterment of productivity. She explained all the fundamentals about NDT. Session was planned around 4 hours where she explained all the perspectives of NDT.



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PHCET  
PILLAI HOC COLLEGE OF  
ENGINEERING & TECHNOLOGY

PCE  
PILLAI COLLEGE OF  
ENGINEERING

INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of HRD Initiative)

Presents a Webinar on  
**CARRER OPPORTUNITIES IN NDT AND GENERAL GUIDANCE**

On: Wednesday, 17th FEBRUARY, 2021  
SCHEDULE  
11:00 AM - 01:00 PM  
01:00 PM - 02:00 PM- LUNCH BREAK  
02:00 PM - 04:00 PM

Event Co-ordinator  
**Mr. Sunil Singh Rajput**  
Email- srajput@mes.ac.in

Speaker  
**Mr. Anagha Bhide**  
Director, Bhide's Institute of Testing Technology Pvt. Ltd.

E-certificate to all participants

Click the icon  
for  
Zoom Link


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

**Dr. Divya Padmanabhan**  
HOD, Automobile Engineering  
PCE, Panvel

**Event Flyer**

PowerPoint Slide Show - Intro to NDT.ppt - Compatibility Mode - PowerPoint



## Visual Inspection



Most basic and common inspection method.

Tools include fiberscopes, borescopes, magnifying glasses and mirrors.

Portable video inspection unit with zoom allows inspection of large tanks and vessels, railroad tank cars, sewer lines.



Anagha Bhide

Session Screenshot

### Registration Details

- Get yourself registered using the link given below.
- Registration link:  
<https://forms.gle/9mdoatBTOVbCei5e8>
- No registration fees.

### Guidelines

- All registered participants will receive session details by mail.
- Login 10 minutes before session start.
- Last date for registration is 11th July 2021.
- The STTP will be conducted in online mode with 2 sessions per day.  
Session 1 : 11am to 1.30pm  
Session 2 : 2 pm to 4.30pm
- After registration please join the Whatsapp Group:  
<https://chat.whatsapp.com/17f1HP9b177hsHEVNF71omz6>

### Certificates

- E certificate will be provided to those who satisfy attendance criteria ( Minimum 75 percent).
- Attendance will be monitored.
- Participants should fill and submit the daily feedback form.



### Patrons

Dr. K.M. Vasudevan Pillai, Hon'ble Chairman, MES.  
Dr. Daphne Pillai, Hon'ble Secretary, MES.  
Dr. Priam Pillai, Hon'ble COO, MES.  
Dr. Franay Pillai, Hon'ble Dy. CEO, MES.  
Dr. Lata Menon, Deputy CEO, Pillai HOC Educational Campus, Rasayani.  
Prof. Munawtra Pillai, Head, Innovation Research Centre, PHCET.

### Convenor

Mr. Raju Narwade  
Head of Civil Engineering Department  
Contact no : 8108202122  
[rnarwade@mes.ac.in](mailto:rnarwade@mes.ac.in)

### Co-ordinators

Ms. Apurva Deshpande  
Assistant Professor  
Contact No: 9422181868  
[apurva@mes.ac.in](mailto:apurva@mes.ac.in)

Ms. Ashwini P  
Assistant Professor  
Contact No : 8779338833  
[ashwinip@mes.ac.in](mailto:ashwinip@mes.ac.in)

### Organizing Committee

Dr. Anil Dasgupta	Dr. Vinay Nikam
Dr. Shilpa Kewate	Mr. Karthik Nagarajan
Ms. Manisha Jarnagade	Mr. Anwar Sayed
Ms. Madhulika Sinha	Ms. Sonali Baviskar
Mr. Harshul Pathak	Mr. Manish Mane
Ms. Steffi Stephen	Ms. Smitha JS
Ms. Gayatri Deshpande	

## DEPARTMENT OF CIVIL ENGINEERING ORGANISES

### ONE WEEK (6 DAYS) SHORT TERM TRAINING PROGRAMME ON EMERGING TECHNOLOGIES IN CIVIL AND INFRASTRUCTURE ENGINEERING FOR SUSTAINABLE DEVELOPMENT.

IN ASSOCIATION WITH








**12TH JULY, 2021 - 17 TH JULY, 2021**



**MAHATMA EDUCATION SOCIETY'S  
PILLAI HOC COLLEGE OF ENGINEERING &  
TECHNOLOGY.**

RASAYANI, TAL: KHALAPUR DIST. RAIGAD  
PHONE NO. (02192)252005 / 250066 [www.phcet.ac.in](http://www.phcet.ac.in)

### About Mahatma Education Society

Mahatma Education Society was established in the year 1970 by a group of teachers with the aim of spreading education for all. The society today has 48 institutions from pre-primary to post graduation & research with over 35,000 students and over 2,500 teachers. The society manages several schools imparting instruction in S.S.C., C.B.S.E., I.G.C.S.E. and I.B. programmes, Junior Colleges, Degree Colleges, Engineering Colleges, Management Institutions, Polytechnics and Teacher education programmes at different locations in Mumbai, Navi Mumbai and Rasayani (Raigad District). Most of the colleges are re - accredited 'A' Grade by NAAC and also accredited by NBA & other Government bodies.

### About PHCET

Mahatma Education Society's Pillai HOC College of Engineering & Technology, Rasayani was established in 2009 and is affiliated to University of Mumbai and recognized by AICTE, & DTE. In a short span, PHCET is recognized as one of the premier institutions delivering professional courses in Engineering & Technology at Under Graduate as well as at Post Graduate level. Currently PHCET offers following courses-  
Automobile Engineering (UG).  
Civil Engineering (UG & PG).  
Computer Engineering (UG & PG).  
Electronics & Telecommunication (UG & PG).  
Electrical Engineering (UG).  
Information Technology (UG & PG).  
Mechanical Engineering (UG & PG).  
Ph.D. in Civil Engineering &  
Ph.D in Computer Engineering.  
The Institute is Accredited with an A grade by NAAC in the first cycle, 2019 and Reaccredited by NBA for computer and Mechanical Engineering in 2020. PHCET is Winner of the first position for workplace safety awards 2019 and also winner of Indian Merchant Chamber's Ramakrishna Bajaj National Quality Performance Excellence Trophy - 2019.

### About Civil Engineering Department

The Department of Civil Engineering was established in 2010 and within a short period of time department grew from UG to PhD. The Department of Civil Engineering offers an excellent ambience for students to learn and acquire the necessary skills that are much sought after by the industry. Department has well equipped labs and signed MoUs with major construction companies. These companies offer industry project and internship to our students. They also conduct placement drive for students. College has an ISRO Outreach Centre which is under civil engineering department. Under this ISRO Outreach Centre department runs the various certification courses for students and faculty members. More than 9000 students and faculty members have successfully completed various courses.

### Vision of the Department

To impart quality education to civil engineering graduates by keeping pace with rapidly changing technologies and to create professionals through teaching-learning and research with capabilities of accepting global challenges who shall maintain integrity to serve society with respect for the environment.

### Mission of the Department

To produce competent and quality conscious civil engineers with civic sense to strive for sustainable solutions and endeavor future engineers for excellence in all aspects to meet global standards and educating them for innovative thinking with relevance to professional career and entrepreneurship with industrial and social interface.

### About STTP

The world today is witnessing sea change in infrastructural development. Innovative technologies are bringing in sustainable development around the globe. As a developing country, India is going through enormous infrastructural advancement in housing, roads, railways, airports and city planning. To match the pace of development, various innovative methods are being used in construction industry as well as in allied disciplines. This Short Term Training Programme aims to enlighten about the recent trends and the challenges faced in the diversified fields of Civil Engineering. We aim to deliberate on and discuss the various recent applications and innovative methods applied in the field of Civil Engineering. Technical lectures will be provided by Eminent Resource Persons from Academic Institutions and Industries.

### Program Objectives

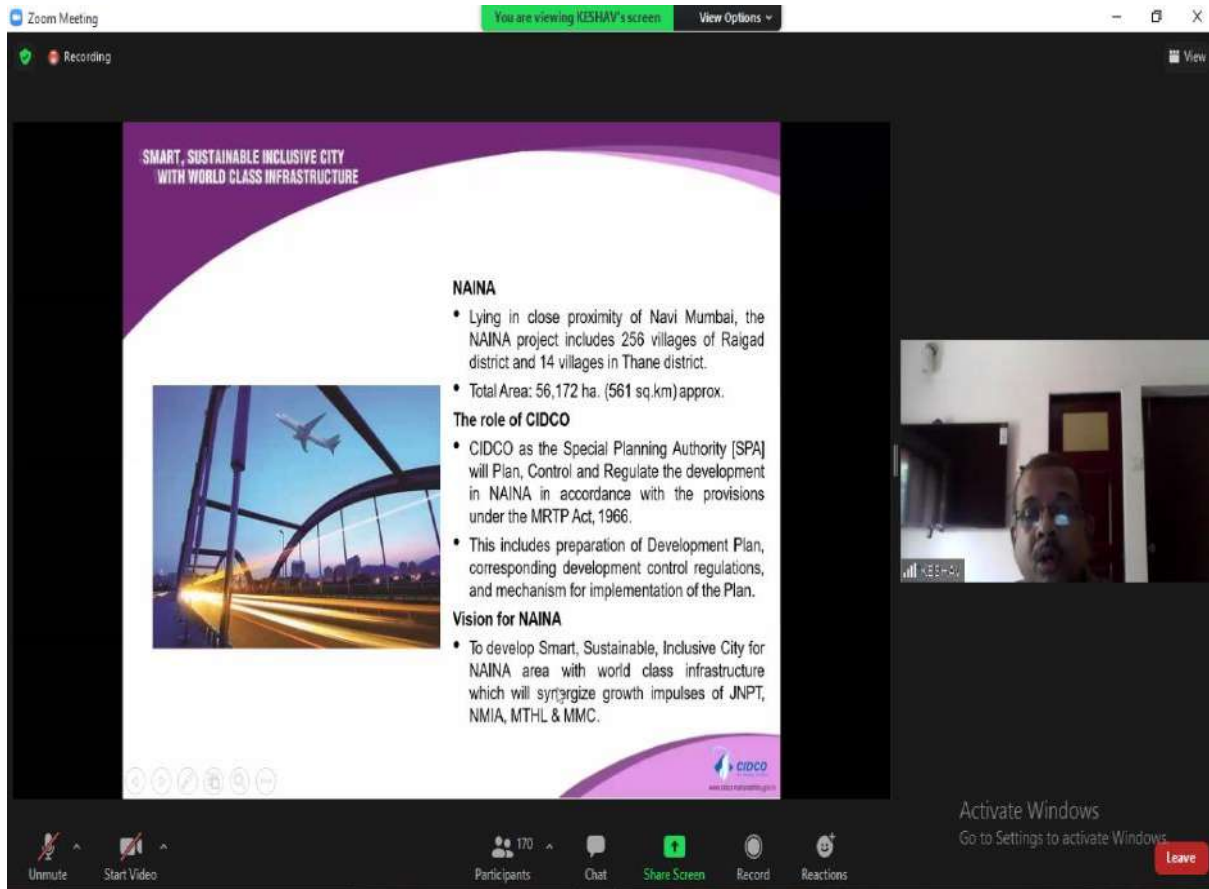
- To get acquainted with the knowledge of sustainable infrastructural development.
- To learn about the latest material, software's, tools, and techniques available for sustainable development.
- To enrich the theory and technical skills to keep pace with changing scenarios.

### Who should attend?

- U.G, P.G. Students & Ph.D. research scholars from Civil and Infrastructure Engineering.
- Faculty-Engineering, Polytechnic, Architecture Institutions
- Delegates from Industries and R & D Organizations.



## Event Flyer



## Session Screenshot

IIC PHCET organized a webinar on “Create Jobs, Generate Value, Create Wealth” on 01<sup>st</sup> August 2020. The webinar started with welcome of all speakers and Principal, Dr. Madhumita Chatterjee. Then initially talk was delivered by Mr. Sadanand Shetty who is Director of Crystal Industrial Syndicate Pvt. Ltd. He gave insights all about entrepreneurship. He shared his all experience with students. Then in second part Mr. Ronald D’Souza gave talk about entrepreneurship. He joined the session from abroad(Dubai). Then at the end, talk was delivered by Ms. Anagha Bhide who is director of Bhide Institute of Testing Technology. Then session ended with vote of thanks by Head of Department Dr. G.V. Patil. More than 200 students participated in the event.





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As Part of Golden Jubilee lecture series of Mahatma Education Society  
Department of Mechanical Engineering

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

**50**  
INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of Education Initiative)

**Presents a webinar on  
CREATE JOBS, GENERATE VALUE,  
CREATE WEALTH**

**ON: SATURDAY, 1ST AUGUST, 2020  
FROM 11:00 AM - 1:00 PM**

**Event Coordinator:**  
• **Mr. Sunil Singh Rajput**  
Email: srajput@mes.ac.in

**SPEAKERS:**

**Click the icon for  
Google meet**

**Mr. Sadanand Shetty**  
Director: Crystal Industrial  
Syndicate Pvt.Ltd

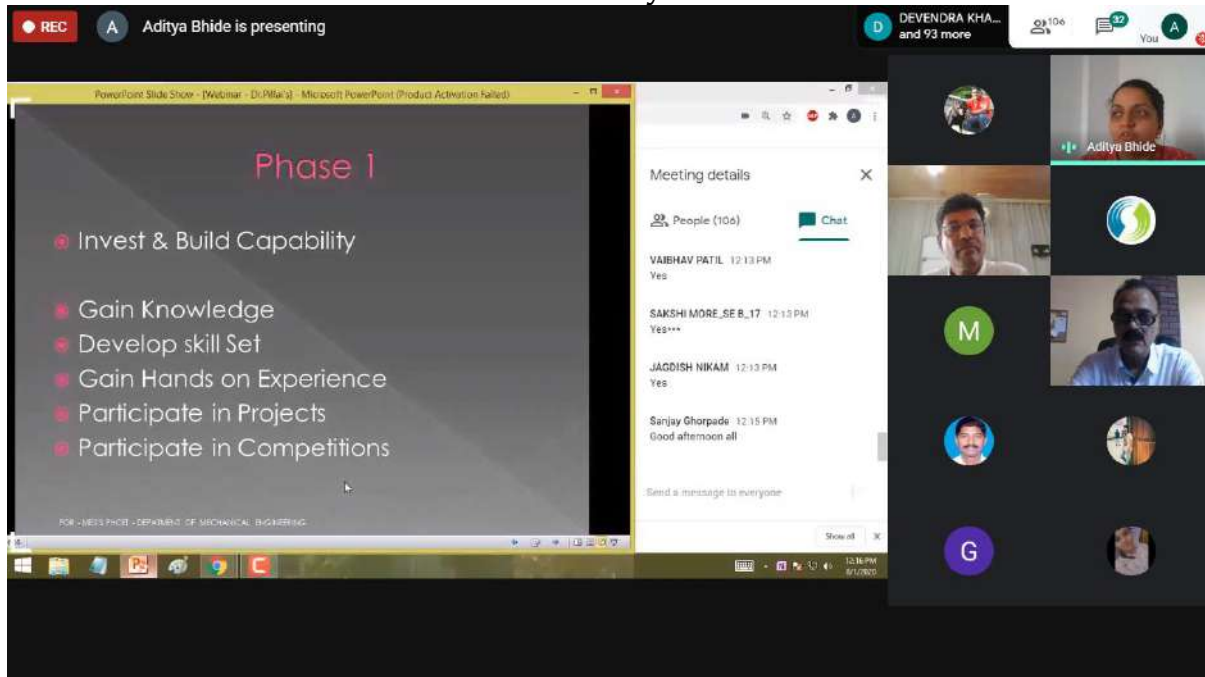
**Mr. Ronald D'Souza**  
Managing Partner: Bluechem  
LLC, Dubai

**Mrs. Anagha Bhide**  
Director: Bhide's Institute of  
Testing Technology Pvt. Ltd.

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

**Dr. Madhumita Chatterjee**  
Principal,  
PHCET Rasayani

### Event Flyer



REC A Aditya Bhide is presenting

DEVENDRA KHA... and 93 more

PowerPoint Slide Show - [W:\lumar - Du\lma\...] - Microsoft PowerPoint (Product Activation Failed)

**Phase 1**

- Invest & Build Capability
- Gain Knowledge
- Develop skill Set
- Gain Hands on Experience
- Participate in Projects
- Participate in Competitions

FOR - ME'S PHOB - DEPARTMENT OF MECHANICAL ENGINEERING

Meeting details

People (106) Chat

VAIBHAV PATIL 12:13 PM  
Yes

SAKSHI MORE\_SEB\_17 12:13 PM  
Yes\*\*\*

JAGDISH NIKAM 12:13 PM  
Yes

Sanjay Chorpade 12:15 PM  
Good afternoon all

Send a message to everyone

Show all

Aditya Bhide

M

G

12:18 PM 8/1/2020

### Session Screenshot

IIC PHCET organized a webinar on “Diverse Applications of AI in Core engineering” on 5<sup>th</sup> August 2020. The invited speaker was Mr. Makarand Apte, who is working as a Solidworks AI Development Director was invited as a resource person for the webinar. He is currently working in Dassault Systemes- la fondation. Mr. Makarand is has done B.Tech from IIT Bombay in Metallurgical Engineering & Material Science. He worked on various areas on Computational Geometry, Geometric Modelling, Advanced Surfacing, CAD data inter-operability, Mesh Compression-Decompression, Wall Thickness Analysis, Swept Volume Generation and Shrink Wrapping, AI based 3D design assistant tool for productivity boosting. He has also filed 3 patents in area of Artificial Intelligence (AI). He has also organised events like idea Crowdsourcing, Hackathons, Tech Talks.



**Popular Science Lecture Series**  
Organized by  
**INDIAN WOMEN SCIENTISTS' ASSOCIATION**  
Vashi, Navi Mumbai  
Supported by  
**Board of Research in Nuclear Sciences-DAE**  
Hosted by  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
MAHATMA EDUCATION SOCIETY'S  
**Pillai HOC College of Engineering & Technology, Rasayani**  
ACCREDITED WITH 'A' GRADE BY NAAC IN FIRST CYCLE 2019  
AND RE-ACCREDITED BY NBA FOR MECHANICAL AND COMPUTER ENGINEERING 2020

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

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

Presents a webinar on  
**DIVERSE APPLICATIONS OF AI IN CORE ENGINEERING**

**On: Saturday, 5th SEPTEMBER, 2020**  
FROM 05:00 PM - 07:00 PM

Event Co-ordinator  
**Mr. Sunilsing Rajput**  
Email- srajput@mes.ac.in

E-certificate to all participants

Speaker  
**Mr. Makarand Apte**  
Solidworks AI Development Director

Click the icon  
for  
Google meet

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

**Dr. Madhumita Chatterjee**  
Principal  
PHCET, Rasayani

### Session Flyer



Session Screenshot



Mahatma Education Society's  
Pillai HOC College of Engineering and Technology, Rasayani  
NAAC Accredited A  
and  
Pillai College of Engineering, New Panvel  
NAAC Accredited A+  
along with  
PCE Alumni Association  
Presents  
**WEBINAR on**  
**PATHWAY TO HIGHER STUDIES ABROAD**

By PCE Alumni  
for  
**Students of Automobile & Mechanical  
Engineering of PCE & PHCET**

July 1, 2020 at 10 AM

Register on or before: 29<sup>th</sup> June, 2020, 10.00 PM  
Register by MES-ID only  
**Participation E-Certificates to all the participants**

**Aniket Jadhav**  
• PHD candidate in Mechanical Sciences & Engineering, University of Michigan – Dearborn.  
• MSE in Automotive Systems Engineering, University of Michigan - Dearborn.

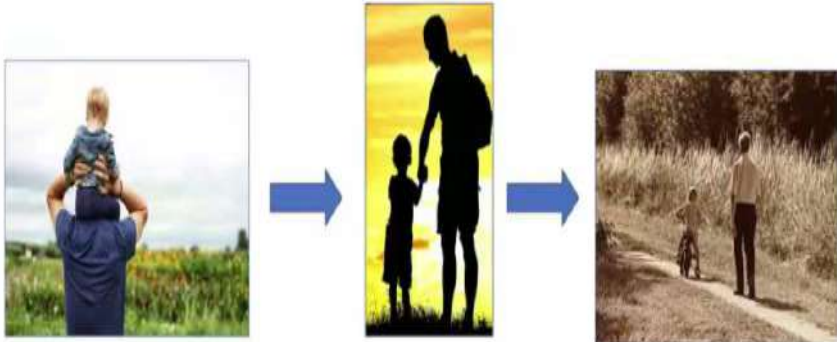
**Deepak Padmanabhan**  
• PHD candidate in Mechanical Engineering, Drexel University, Philadelphia.  
• Engineering lead at Kinoss Medical Inc.  
• MS in Mechanical Engineering from Drexel university, Philadelphia.

**Suraj Panicker**  
• Doctoral researcher at Tampere University, Finland.  
• MS in Industrial Engineering from Oregon State university.

**Coordinators:**  
KS Anish 8898177950  
Krishnamohan S Menon 7718057306

Event Flyer

*My Interpretation of higher studies...*



Undergraduate      Graduate (Master's)      Graduate (PhD.)

Suraj Panicker

4

**Session Screenshot**



MAHATMA EDUCATION SOCIETY'S  
**Pillai HOC College of Engineering & Technology, Rasayani**  
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**PHCET**  
PILLAI HOC COLLEGE OF  
ENGINEERING & TECHNOLOGY

**IIC in association with IQAC, PHCET**

INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of Education Initiative)

Presents a webinar on  
**Intellectual Property Rights (IPRs) and  
IP management for the start-up**

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

E-certificate to all participants

Click the icon  
for  
Zoom Link

Speaker:  
**Mr. Suneet Sabale**  
Director at Brainiac Global Consulting Pvt Ltd

**Dr. Mansi Subhedar**  
IPR Coordinator, IIC &  
HOD, Ex'TC Engineering  
PHCET, Rasayani

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

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

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

### Event Flyer



REC

**Patents**

- Patent is a statutory right granted by the government in exchange of complete disclosure of the invention for a limited period of 20 years.

Dr. Gajendra Patil's screen

### Event Screenshot

**Sponsorship**  
The Pillai HOC College of Engineering & Technology invites faculty of AICTE approved institutes and participants from industries & R&D organizations for three separate AICTE sponsored one week certificate Short Term Training Programs on "Composites : Fracture Toughness, NDE and Failure Analysis" as per details given below.  
STTP 1 : "Composites : Fracture Toughness, NDE and Failure Analysis" during 17 - 22 November 2020.  
STTP 2 : "Composites : Fracture Toughness, NDE and Failure Analysis" during 18 - 23 January 2021.  
STTP 3 : "Composites : Fracture Toughness, NDE and Failure Analysis" during 1 - 6 March 2021.  
On successful completion, participants will be awarded AICTE & PHCET approved certificates.

**Souvenir**  
Three separate souvenirs will be brought out on this occasion. It will contain the abstracts of the respected STTPs. The tariff for advertisements in the souvenir is as below:  
Back Cover : Rs. 10,000/- & Inside Cover Pages Rs. 7,500/-,  
Full Page Rs. 5,000/- & Half Page Rs. 3,000/-.

**Exhibition & Presentation by Exhibitors**  
Concurrent with the workshop an online Exhibition is planned for the display of products & processes of the company that will provide best platform for growth of business in large size Indian market related to:  
- Composite raw materials (resins, reinforcements, etc.)  
- Equipment related to manufacturing process  
- Inspection and NDT equipment  
- Display of high-performance products in MMCs, CMCs & PMCs for Aerospace, Automotive, Marine, Construction, Transportation, Defense, Sports / Leisure, Agriculture, etc.

**Exhibition Tariff**  
The exhibition tariff is Rs. 3,500/- with free registration & certificate for one delegate, one-page advertisement in the Souvenir of respected STTP and five minutes slot for product presentation.

**REGISTRATION FEE**  
(a) Participants from AICTE recognized colleges: No registration fee will be charged from faculty members. (Restricted to 40 participants only in each of the three separate STTPs)  
(b) Participants from other organizations (Limited to 4 participants only) : Participants from Industries and R&D Organizations have to pay Rs. 2,000/- per candidate per STTP as registration fee. This amount is to be sent along with the application form. Registration fee includes an electronic copy of the souvenir.  
Link for Registration : <https://forms.gle/mzphthFDt6b6yJAA>  
MODE OF PAYMENT: All payments should be made through RTGS / crossed Demand Draft in favour of "PHCET R&D Account"  
A/C No. : 6214220011189  
Bank: Syndicate Bank, Khairi Patilganja  
IFSC Code: SYNB0005214  
Institution PAN : AAATM5536H

**Patrons**  
Dr. K. M. Vasudevan Pillai, Chairman & CEO, MES  
Mr. T. S. Kathayat, Sr. President, Welspun Corp. Ltd.  
Dr. N. Eswara Prasad, Director, DMSRDE, Kanpur  
Dr. R. Rajkumar, Director, IRMRA, Mumbai

**Advisory Committee**  
Dr. Priam Pillai, COO, MES  
Mr. Pravey Pillai, DCEO, MES  
Dr. S. Joshi, Principal, PCE Panvel  
Dr. Mathew T. Joseph, Principal PHCET  
Dr. Manoranjan Patil, Director, NMRL, Mumbai  
Mr. Kashinath Deodhar, Group Director, ARDE, DRDO  
Dr. Makarand Joshi, R&DE, DRDO, Pune  
Dr. Sashi Kanta Panigrahi, DIAT, Pune  
Prof. Raghu Prakash, IIT Madras  
Mr. Suresh Chandra, GE India Pvt. Ltd. Pune  
Dr. Mangesh V. Joshi, MD & CEO, Sanrachana Pvt. Ltd. Mumbai  
Mr. Atul Bakare, Addl. Director, CEMILAC, Nashik  
Dr. Ishfaq Khan, Tata Technologies Pune  
Mr. Shantanu C. Prabhure, L&T Powal Mumbai  
Mr. Sudhakar Bonde, Chairman, ASM International India Chapter  
Mr. Sandeep Rege, Secretary ASM & DGM Mahindra & Mahindra  
Dr. G. S. Prabhu, MD, Fine Finish Organics Pvt. Ltd., Talaja, Mumbai  
Mr. Rinzath B., DIAB Group, Sweden  
Mr. Sudhir B. Vaidya, Manager, SAE WESTERN INDIA GROUP

**Local Organizing Committee**  
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Dr. T. Tambuskar, PCE Panvel  
Dr. Viewraj Patil, PCE Panvel  
Dr. M. D. Nader, PHCET Rasayani  
Mr. Suhas Uthale, PHCET Rasayani  
Mr. Amar Arun Jadhav, PHCET Rasayani  
Mr. Saurabh Sriskar, PHCET Rasayani  
Mr. Shashi Bhushan, PHCET Rasayani  
Mr. K. S. Anish, PHCET Rasayani  
Mr. Karthik Nagarajan, PHCET Rasayani  
Mr. Tatyasaheb Garande, PHCET Rasayani  
Dr. Ajit Bhandekar, Secretary, SFA Mumbai Chapter  
Dr. Mathew T. Joseph, Principal : Chairman  
Dr. R. C. Prasad, Coordinator & Member Secretary  
Dr. G. V. Patil, Head Mech. Engg. Dept. : Member  
Dr. S. Pawar, Head Automobile Engg. Dept. : Member  
Dr. Priam Pillai, COO of MES : Member as a Subject Expert

**Address for Correspondence:**  
Prof. R.C. Prasad  
Coordinator & Vice Chairman SFA Mumbai Chapter  
Department of Mechanical Engineering, PHCET, Rasayani  
Mobile : -0989235812 Fax : -2748 3208  
Email : [rcsp@pce.com](mailto:rcsp@pce.com) / [rcprasad@mes.ac.in](mailto:rcprasad@mes.ac.in)  
Web : - [www.sfa.mes.ac.in](http://www.sfa.mes.ac.in)

**PILLAI HOC COLLEGE OF  
ENGINEERING AND TECHNOLOGY**

PRESENTS ONLINE  
**THREE - ONE WEEK AICTE APPROVED  
CERTIFICATE  
SHORT TERM TRAINING PROGRAMS**  
On  
**COMPOSITES: FRACTURE TOUGHNESS,  
NDE & FAILURE ANALYSIS**

FIRST STTP : DURING 17 - 22 NOVEMBER 2020  
SECOND STTP : DURING 18 - 23 JANUARY 2021  
THIRD STTP : DURING 15 - 20 MARCH 2021

Organised by



Supported by Knowledge Partners



**ABOUT THE STTP**  
Light weight, corrosion and damage resistant, tough composites are considered a major break-through that has revolutionized their use for many high-performance parts in automotive, Aerospace, Defense and Marine industries. India has rapidly advanced to face the challenges and opportunities that lie in the area of composites applications. This has dramatically impacted the GNP & employment opportunities in our country. New courses related to composites and non-destructive testing of composites have been introduced in Indian Technological Institutes. Fracture toughness, NDE and Damage mechanisms have become an active area of research. Extensive research carried out in academic and research institutes has brought India at the threshold of a new era. Professional manufacturers are increasingly looking for defect free, durable & defect tolerant composites components using Fracture Mechanics. ASTM has formulated standards for determination of Translaminar & Interlaminar fracture toughness of PMCs for durability and damage tolerance assessment under, tensile fatigue and impact damage conditions. Composites have poor flow resolution compared to microscopically homogeneous conventional metals due to noise attenuation. The use of NDT for composites is thus highly challenging due to its anisotropy and complex failure modes. Fracture mechanics approach integrated with NDE and Failure analysis have become game changers in industries. With these challenges in mind and keeping in view the worldwide interest, these three separate one week Certificate AICTE approved STTPs have been designed at PHCET, Rasayani. This course plans to take stock of the current state of the art in Polymer & Rubber composite technology. The objective is to provide basic understanding of synthesis, fracture toughness evaluation using fracture mechanics, defect detection using NDT & understand modes and mechanisms of fracture for analysing failure of composite structures. Training in this emerging area will facilitate research, bridge the gap between academia & industries and enhance placement opportunities for students.

**LIST OF RESOURCE PERSONS FOR STTP - 1  
DURING 17 - 22 NOV 2020**

**WITH TITLE OF THEIR PRESENTATION**

1. Dr. R. C. Prasad, Professor, PHCET RASAYANI : An overview of the STTP on Composites : Fracture toughness, NDE & Failure Analysis
2. Dr. Rajkumar Kasilingam, Director, IRMRA Mumbai : Advances in Polymer Technology, Nanotechnology
3. Dr. C. M. Manjunatha, Chief Scientist, NAL Bangalore : Fatigue and Fracture of Composites
4. Dr. Raghu Prakash, IIT Madras : Thermography and Computed Tomography Applications in Composites
5. Shri. Kashinath Deodhar, Group Director, ARDE, DRDO, Pune : R&D Innovation on Hybrid Carbon-Glass-Epoxy Gun Barrel for shoulder fired barrel
6. Dr. Rahul Harsh, R&DE, DRDO, Pune : Processing of composites
7. Mr. Shyam Sunder, Chairman ISNT, former Principal Scientist GE Global Research Centre, Bangalore : NDE and Inspection of Composites - Trends and Advances
8. Mr. Suresh Chandra, Field Application Leader - Inspection, GE India Pvt. Ltd., Pune : Advancement in Industrial Computed Tomography (CT)
9. Dr. Debdatta Kalita, Scientist, NMRL Ambernath : Polymer matrix composites for Naval Applications
10. Mr. Ajit Bhandekar, Chief of Lab, HAL, AURDC, Nashik: Application of Composites in Fighter and Civilian Aircrafts
11. Prof. Nagmani Jaya Balis, Dept. of MEMS, IIT Bombay : Fracture Toughness Testing & Integrity Assessment of Composites across multiple length scales
12. Dr. Viewraj Patil, PCE, Panvel : Understanding of structure property relations in advanced polymer nano-composites
13. Dr. Prakash D. Trivedi, Ghanda Chemicals Mumbai : Preparation, Processing, Properties and Performance of High Performance Plastics
14. Mr. Shantanu C. Prabhure, L&T Mumbai : Processing Composites in Defence - An Industry Perspective
15. Prof. Chandra Sekher Yerramallu, IIT Bombay : Challenges in Design & Manufacturing of Composites
16. Dr. S. K. Panigrahi, Professor, DIAT, Pune : Fracture Mechanics & Computational Methods for Damage Assessment in Composite for Defense Applications
17. Mr. Rinzath B. DIAB, Sweden : Fabrication of Sandwich Composites and its Applications
18. Mr. Mangesh V. Joshi, CEO, Sanrachana Structural Strengthening Pvt. Ltd., Thane : Rebuilding Corrosion Damaged Structures Using Composites: Some Case Studies
19. Dr. Virendra Kumar Gupta, Head R&D & Senior VP, Reliance Research, Mumbai : Advance Polymers & Composites for high performance Applications
20. Dr. G. S. Prabhu, Managing Director, Fine Finish, Talaja : Mechanical Testing of Plastics & Composites and their relevance to performance requirements
21. Dr. Sunanda Bandyopadhyay, SABIC, Bangalore : Applications of composites in Oil and Gas
22. Dr. Dattaji K. Shinde, Professor, VJTI, Matunga, Mumbai : Effect of Electrospun Nanofibers and Carbon Nanotubes on the Properties of Polymeric Composite as Functional Materials
23. Dr. Atul Bakare, Addl. Director, CEMILAC, Nashik : Corrosion behavior of crack in thin aluminum structure repaired with asymmetric composite patch
24. Dr. Anasuya Roy, Founder, CEO, Nanosafe Solutions Private Limited : Design, Fabrication & Characterisation of medical textiles & their composites for Protection against COVID
25. Dr. Ravi Babu, CECRI, Tamilnadu : 3D printing of Polymers & Polymer Composites
26. Dr. P. J. Gouprasad, Professor, ITB : Analysis of Interlaminar cracking of composite laminates
27. Dr. Poole Manoj, Kalkar, D.K.T.E.S Textile & Engineering Institute, Rajwade, Chikaranji : Textile materials in manufacturing composites
28. Mr. Praveer Verma, DMSRDE, Kanpur : Failure Analysis of polymer matrix composites

**REGISTRATION FORM**

**THREE SEPARATE ONE WEEK AICTE APPROVED  
CERTIFICATE  
SHORT TERM TRAINING PROGRAMS**  
On  
**COMPOSITES: FRACTURE TOUGHNESS, NDE &  
FAILURE ANALYSIS**

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SECOND STTP : DURING 18 - 23 JANUARY 2021  
THIRD STTP : DURING 15 - 02MARCH 2021

NAME (PRINT) : \_\_\_\_\_

GENDER : M / F : \_\_\_\_\_

DESIGNATION : \_\_\_\_\_

ORGANISATION : \_\_\_\_\_

MAILING ADDRESS : \_\_\_\_\_

TEL: (O) (R) : \_\_\_\_\_

FAX: MOBILE : \_\_\_\_\_

EMAIL : \_\_\_\_\_

QUALIFICATION : \_\_\_\_\_

EXPERIENCE in Yrs : \_\_\_\_\_

MODE OF PAYMENT: All payments should be made through RTGS / crossed Demand Draft in favor of "PHCET R&D Account"  
A/C No. : 6214220011189  
Bank: Syndicate Bank, Khairi Patilganja  
IFSC Code: SYNB0005214  
Institution PAN : AAATM5536H

**Event Flyer**

IIC PHCET & Department of Mechanical Engineering, PHCET conducted Short Term Training Program ( STTP ) under AQIS 2019-20 during the financial year 2020-21 vide Ref.No.:34-66/442/FDC/STTP/Policy-1/2019-20 dated 10 August 2020 on “ Composites: Fracture Toughness, NDE & Failure Analysis “

The first STTP was conducted during November 17-22, 2020. The highlight of the STTP has been the participation of leading professional societies in the country like Society for Automotive Engineering, Western Region, Institution of Engineers, Maharashtra Region, ASM International India Chapter, Society for Failure Analysis, Mumbai Chapter, Indian Society for Remote Sensing, Mumbai Chapter, Materials Recycling Association of India and the Indian Rubber Manufacturers Research Association, Mumbai. Their involvement immensely benefited participants and allowed them to interact with industries related to the subject matter of the STTPs. STTP covered processing of Polymers, Polymer Blends & Composites, and their mechanical and Non-destructive characterization to ensure quality assured industrial products. This was followed by case studies of failures in different industrial sectors and ways and means to prevent such failures. The STTP also covered advanced manufacturing processes like additive manufacturing and 3D printing. The lectures were delivered by the industry experts, faculty from NITs and IITs as well as leading foreign universities. The applications of Polymers, composites and NDE for medical applications were also covered by eminent speakers.



## Advances in Polymer & Nano -Techno



Prepared for:

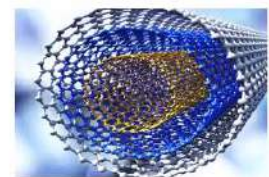
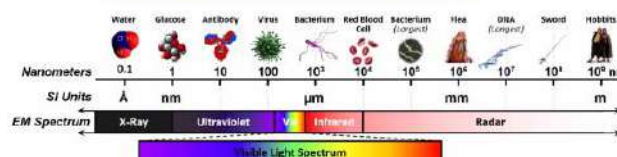
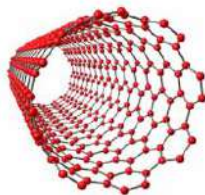
AQIP -STTP – AICTE  
Sponsored program

Presented by

**Dr. K. Rajkumar**  
Director,  
Indian Rubber Mfrs Research  
Assn. (IRMRA)  
DPIIT, Min of Com & Ind.,  
Govt. of India



[director@irmra.org](mailto:director@irmra.org)



Session Screenshot



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

**Mahatma Education Society's  
Pillai HOC College of Engineering and Technology  
Dist. Raigad Via Panvel, Rasayani, Tal. Khalapur  
410207, MH, India  
Tel:02192-669000/01/02/03**



**Sponsorship**

The Pillai HOC College of Engineering & Technology invites faculty of AICTE approved institutes and participants from industries & R&D organizations for three separate AICTE sponsored one week certificate Short Term Training Programs on "Composites : Fracture Toughness, NDE and Failure Analysis" as per details given below.

STTP 2 : "Composites : Fracture Toughness, NDE and Failure Analysis" during January 18 - 23, 2021.

STTP 3 : "Composites : Fracture Toughness, NDE and Failure Analysis" during March 15 - 20, 2021.

On successful completion, participants will be awarded AICTE & PHCET approved certificates.

**Souvenir**

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Back Cover : Rs. 10,000/- & Inside Cover Pages Rs. 7,500/-, Full Page Rs. 5,000/- & Half Page Rs. 3,000/-

**Exhibition & Presentation by Exhibitors**

Concurrent with the workshop an online Exhibition is planned for the display of products & processes of the company that will provide best platform for growth of business in large size Indian market related to:

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(a) Participants from AICTE recognized colleges: No registration fee will be charged from faculty members. (Restricted to 40 participants only in each of the three separate STTP's)

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Link for Registration : <https://forms.gle/T5FHNpmC4G9G89nR8>

Last Date of registration for STTP-2 is 03 January 2021

**MODE OF PAYMENT:** All payments should be made through RTGS / crossed Demand Draft in favour of "PHCET R&D Account"

A/C No. : 52142200111189

Bank: Syndicate Bank, Khairate Patalganga

IFSC Code:SYNB0005214

Institution PAN :AAATM536H

**Patrons**

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Mr. T. S. Kathayat, Sr. President, Welspun Corp. Ltd.  
Dr. N. Eswara Prasad, Director, DMSRDE, Kanpur  
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Prof. Raghuraj Prakash, IIT Madras  
Mr. Samresh Chandgar, GE India Pvt. Ltd. Pune  
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Dr. Viswajit Panda, PCE Panvel  
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Mr. Suhas Uthale, PHCET Rasayani  
Mr. Amar Arun Jadhav, PHCET Rasayani  
Mr. Saurabh Sirsikar, PHCET Rasayani  
Mr. Shashi Bhushan, PHCET Rasayani  
Mr. Karthik Nagarajan, PHCET Rasayani  
Dr. Ajit Bhandarkar, Secretary, SFA Mumbai Chapter

**Steering/Program monitoring committee AICTE STTP:**

Dr. Mathew T. Joseph, Principal : Chairman  
Dr. R. C. Prasad, Coordinator & Member Secretary  
Dr. G. V. Patil, Head Mech. Engg. Dept. : Member  
Dr. S. Pawar, Head Automobile Engg. Dept. : Member  
Dr. Priam Pillai, COO of MES : Member as a Subject Expert

**Address for Correspondence:**

Prof. R. C. Prasad  
Coordinator & Vice Chairman SFA Mumbai Chapter  
Department of Mechanical Engineering, PHCET, Rasayani  
Mobile :- 09869236812 Fax :- 2746 3208  
Email :- [rcprasad@gmail.com](mailto:rcprasad@gmail.com) / [rcprasad@mes.ac.in](mailto:rcprasad@mes.ac.in)  
Web :- [www.sfa.mes.ac.in](http://www.sfa.mes.ac.in)

**PILLAI HOC COLLEGE OF  
ENGINEERING AND TECHNOLOGY**

PRESENTS ONLINE  
**THREE - ONE WEEK AICTE APPROVED  
CERTIFICATE  
SHORT TERM TRAINING PROGRAMS**  
On  
**COMPOSITES: FRACTURE TOUGHNESS,  
NDE & FAILURE ANALYSIS**  
SECOND STTP : DURING JANUARY 18 - 23, 2021  
THIRD STTP : DURING MARCH 15 - 20, 2021

Organised by

Supported by Knowledge Partners

**ABOUT THE STTP**

Light weight, corrosion and damage resistant, tough composites are considered a major breakthrough that has revolutionized their use for many high-performance parts in automotive, Aerospace, Defense and Marine industries. India has rapidly advanced to face the challenges and opportunities that lie in the area of composites applications. This has dramatically impacted the GNP & employment opportunities in our country. New courses related to composites and non-destructive testing of composites have been introduced in Indian Technological Institutes. Fracture toughness, NDE and Damage mechanisms have become an active area of research. Extensive research carried out in academic and research institutes has brought India at the threshold of a new era. Professional manufacturers are increasingly looking for defect free, durable & defect tolerant composites components using Fracture Mechanics. ASTM has formulated standards for determination of Translaminar & Interlaminar fracture toughness of PMCs for durability and damage tolerance assessment under, tensile fatigue and impact damage conditions. Composites have poor flaw resolution compared to microscopically homogeneous conventional metals due to noise attenuation. The use of NDT for composites is thus highly challenging due to its anisotropy and complex failure modes. Fracture mechanics approach integrated with NDE and Failure analysis have become game changers in industries. With these challenges in mind and keeping in view the worldwide interest, these three separate one week Certificate AICTE approved STTP's have been designed at PHCET, Rasayani. This course plans to take stock of the current state of the art in Polymer & Rubber composite technology. The objective is to provide basic understanding of synthesis, fracture toughness evaluation using fracture mechanics, defect detection using NDT & understand modes and mechanisms of fracture for analysing failure of composite structures. Training in this emerging area will facilitate research, bridge the gap between academia & industries and enhance placement opportunities for students.

**LIST OF RESOURCE PERSONS (Tentative) FOR STTP - 2  
DURING JANUARY 18 - 23, 2021**

1. Dr. R. C. Prasad, Professor, PHCET RASAYANI
2. Dr. Rajkumar Kasilingam Director, IRMRA Mumbai
3. Mr. Shantanu C. Prabhune, L&T Mumbai
4. Prof. Shridhar Yariagadda, University of Delaware, USA
5. Dr. Prakash D. Trivedi, Gharda Chemicals Mumbai
6. Dr. Biswajit Panda, PCE, Panvel
7. Dr. Vinendra Kumar Gupta, Head R&D & Senior VP, Reliance Research, Mumbai
8. Shri. Kashinath Deodhar, Group Director, ARDE, DRDO, Pune
9. Prof. Ramesh Tejraja, Teneco Prof., TEXAS A&M UNIVERSITY, USA
10. Dr. Debdatta Ratna, Scientist, NMRL Ambernath
11. Dr. Dinahsingh Thakur, Professor, DIAT, Pune
12. Mr. Ajit Bhandarkar, DGM HAL, Nashik
13. Mr. Rinzath B., DIAB, Sweden
14. Prof. Shankar Sastry, Washington University in St. Louis, USA
15. Dr. C. M. Manjunatha, Chief Scientist, NAL Bangalore
16. Mr. Shyamunder, Chairman ISNT
17. Dr. Raghuraj Prakash, IIT Madras
18. Dr. Ravi Babu, CECRI Tamilnadu
19. Dr. Dattaji K. Shinde, Professor, VJTI, Matunga, Mumbai
20. Dr. S. K. Panigrahi, Professor, DIAT, Pune
21. Prof. Chandra Sekher Yerramalli, IIT Bombay
22. Mr. Praveer Verma, DMSRDE, Kanpur
23. Dr. P. J. Guruprasad, Professor, IIT Bombay
24. Dr. Guruprasad Rao, Director, Imaginarium India Pvt. Ltd.
25. Dr. Atul Bakare, Addl. Director, CEMILAC, Nashik
26. Mr. Samresh Chandgar, GE India Pvt. Ltd., Pune
27. Prof. Nagmani Jays Balia, Dept. of MEMS, IIT Bombay
28. Mr. Mangesh V. Joshi, CEO, Sanrachana Pvt. Ltd., Thane
29. Dr. G. S. Prabhhu, Managing Director, Fine Finish, Talaja
30. Dr. Sumanda Bandyopadhyay, SABIC, Bangalore
31. Dr. Pooja Katkar, D.K.T.E.S, Ichalkaranji
32. Dr. Divya Padmanabhan, PCE, Panvel
33. Dr. G. V. Patil, PHCET, Rasayani

**REGISTRATION FORM**

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SECOND STTP : DURING JANUARY 18 - 23 2021  
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NAME (PRINT) : \_\_\_\_\_

GENDER : M / F : \_\_\_\_\_

DESIGNATION : \_\_\_\_\_

ORGANISATION : \_\_\_\_\_

MAILING ADDRESS : \_\_\_\_\_

TEL: (O) (R) : \_\_\_\_\_

FAX: MOBILE : \_\_\_\_\_

EMAIL : \_\_\_\_\_

QUALIFICATION : \_\_\_\_\_

EXPERIENCE IN Yrs : \_\_\_\_\_

MODE OF PAYMENT: All payments should be made through RTGS / crossed Demand Draft in favor of "PHCET R&D Account"

A/C No. : 52142200111189

Bank: Syndicate Bank, Khairate Patalganga

IFSC Code :SYNB0005214

Institution PAN :AAATM536H

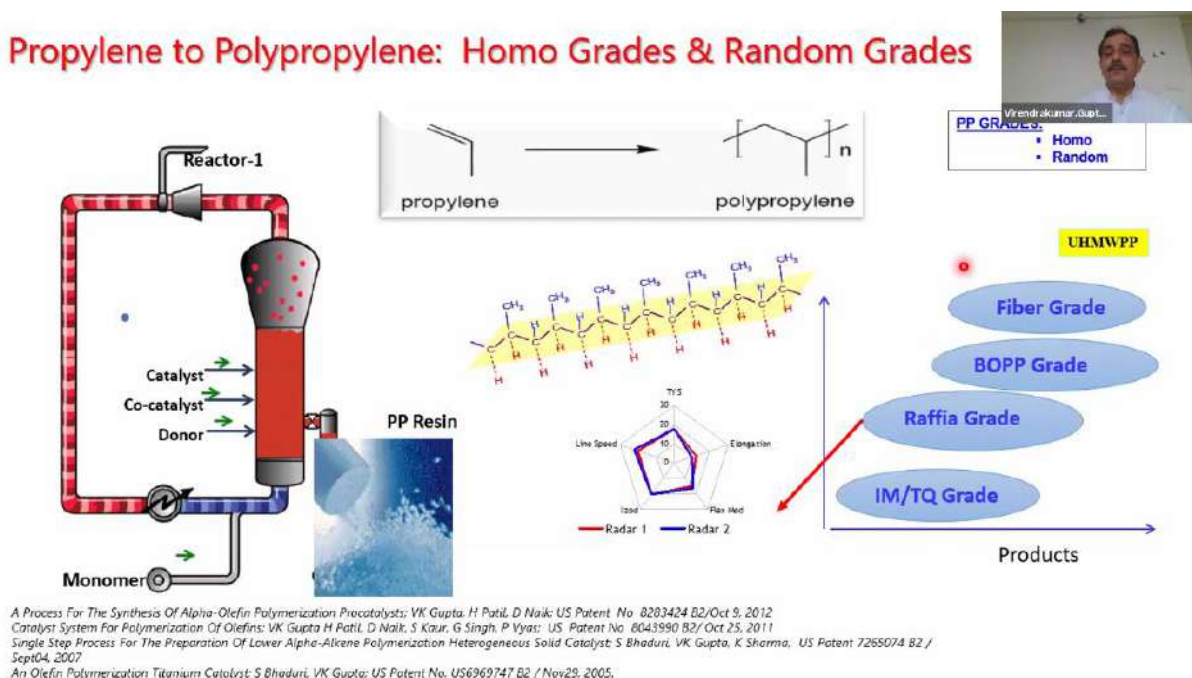
**Event Flyer**



IIC PHCET & Department of Mechanical Engineering, PHCET conducted Short Term Training Program ( STTP ) under AQIS 2019-20 during the financial year 2020-21 vide Ref.No.:34-66/442/FDC/STTP/Policy-1/2019-20 dated 10 August 2020 on “ Composites: Fracture Toughness, NDE & Failure Analysis “

The second STTP was conducted during January 18-23, 2021. The highlight of the STTP has been the participation of leading professional societies in the country like Society for Automotive Engineering, Western Region, Institution of Engineers, Maharashtra Region, ASM International India Chapter, Society for Failure Analysis, Mumbai Chapter, Indian Society for Remote Sensing, Mumbai Chapter, Materials Recycling Association of India and the Indian Rubber Manufacturers Research Association, Mumbai. Their involvement immensely benefited participants and allowed them to interact with industries related to the subject matter of the STTPs. STTP covered processing of Polymers, Polymer Blends & Composites, and their mechanical and Non-destructive characterization to ensure quality assured industrial products. This was followed by case studies of failures in different industrial sectors and ways and means to prevent such failures. The STTP also covered advanced manufacturing processes like additive manufacturing and 3D printing. The lectures were delivered by the industry experts, faculty from NITs and IITs as well as leading foreign universities. The applications of Polymers, composites and NDE for medical applications were also covered by eminent speakers.

## Propylene to Polypropylene: Homo Grades & Random Grades



**PP GRADES:**

- Homo
- Random

**Products:**

- UHMWPP
- Fiber Grade
- BOPP Grade
- Raffia Grade
- IM/TQ Grade

A Process For The Synthesis Of Alpha-Olefin Polymerization Precatalysts: VK Gupta, H Patil, D Naik; US Patent No. 8283424 B2/Oct 9, 2012  
Catalyst System For Polymerization Of Olefins: VK Gupta H Patil, D Naik, S Kaur, G Singh, P Vyas; US Patent No. 8043990 B2/Oct 25, 2011  
Single Step Process For The Preparation Of Lower Alpha-Alkene Polymerization Heterogeneous Solid Catalyst: S Bhaduri, VK Gupta, K Sharma; US Patent 7265074 B2 / Sept04, 2007  
An Olefin Polymerization Titanium Catalyst: S Bhaduri, VK Gupta; US Patent No. US6969747 B2 / Nov29, 2005.

## Session Screenshot

**Sponsorship**

The Pillai HOC College of Engineering & Technology invites faculty of AICTE approved institutes and participants from industries & R&D organizations for three separate AICTE sponsored one week certificate Short Term Training Programs on "Composites : Fracture Toughness, NDE and Failure Analysis" as per details given below.

STTP 3 : "Composites : Fracture Toughness, NDE and Failure Analysis" during March 15 - 20, 2021.  
On successful completion, participants will be awarded AICTE & PHCET approved certificate.

**Souvenir**

Three separate souvenirs will be brought out on this occasion. It will contain the abstracts of the respected STTPs. The tariff for advertisements in the souvenir is as below:  
Back Cover : Rs. 10,000/- & Inside Cover Pages Rs. 7,500/-  
Full Page Rs. 5,000/- & Half Page Rs. 3,000/-

**Exhibition & Presentation by Exhibitors**

Concurrent with the workshop an online Exhibition is planned for the display of products & processes of the company that will provide best platform for growth of business in large size Indian market related to:

- Composite raw materials (resins, reinforcements, etc.)
- Equipment related to manufacturing process
- Inspection and NDT equipment
- Display of high-performance products in MMCs, CMCs & PMCs for Aerospace, Automotive, Marine, Construction, Transportations, Defense, Sports / Leisure, Agriculture, etc.

**Exhibition Tariff**

The exhibition tariff is Rs. 3,500/- with free registration & certificate for one delegate, one-page advertisement in the Souvenir of respected STTP and five minutes slot for product presentation.

**REGISTRATION FEE**

(a) Participants from AICTE recognized colleges: No registration fee will be charged from faculty members. (Restricted to 40 participants only in each of the three separate STTPs)  
(b) Participants from other organizations (Limited to 4 participants only) : Participants from Industries and R&D Organizations have to pay Rs. 2,000/- per candidate per STTP as registration fee. This amount is to be sent along with the application form. Registration fee includes an electronic copy of the souvenir.  
Link for Registration : <https://forms.gle/C2bJNCTRHWHCQJW9>  
Last Date of registration for STTP-3 is 10 March 2021

**MODE OF PAYMENT:** All payments should be made through RTGS /crossed Demand Draft in favour of "PHCET R&D Account"  
A/C No. : 52142200111189  
Bank: Syndicate Bank, Khairat Patalganga  
IFSC Code: SYNB0005214  
Institution PAN : AAATM5536H

**Patrons**

Dr. K. M. Vasudevan Pillai, Chairman & CEO, MES  
Mr. T. S. Kathayat, Sr. President, Welspan Corp. Ltd.  
Dr. N. Eswara Prasad, Director, DMSRDE, Kanpur  
Dr. K. Rajkumar, Director, IRMRA, Mumbai

**Advisory Committee**

Dr. Priam Pillai, COO, MES  
Mr. Pranav Pillai, DCEO, MES  
Dr. S. Joshi, Principal, PCE Panvel  
Dr. Pragnesh Shah, PCE Panvel  
Dr. Mathew T. Joseph, Principal PHCET  
Dr. H. M. Raju, Chairman, Institute of Engineers, Mah. State Centre  
Dr. Manoranjan Patri, Director, NMRL, Mumbai  
Mr. Kashinath Deodhar, Group Director, ARDE, DRDO  
Dr. Makarand Joshi, R&DE, DRDO, Pune  
Dr. Sashi Kanit Panigrahi, DIAT, Pune  
Prof. Raghu Prakash, IIT Madras  
Mr. Samresh Chandgar, GE India Pvt. Ltd. Pune  
Dr. Mangesh V. Joshi, MD & CEO, Samrachs Pvt. Ltd. Mumbai  
Mr. Atul Bakare, Addl. Director, CEMILAC, Nashik  
Dr. Jahiaq Khan, Tata Technologies Pune  
Mr. Shantanu C. Prabhune, L&T Powel Mumbai  
Mr. Sudhakar Bonde, Chairman, ASM International India Chapter  
Mr. Sandeep Rege, Secretary ASM & DGM Mahindra & Mahindra  
Dr. G. S. Prabhu, MD, Fine Finish Organics Pvt. Ltd., Talaja, Mumbai  
Mr. Rimzath B., DIAB Group, Sweden  
Mr. Sudhir B. Vaidya, Manager, SAE WESTERN INDIA GROUP

**Local Organizing Committee**

Dr. Divya Padmanabhan, PCE Panvel  
Dr. T. Tambushkar, PCE Panvel  
Dr. Viswajit Panda, PCE Panvel  
Dr. M. D. Nadar, PHCET Rasayani  
Mr. Suhas Uthale, PHCET Rasayani  
Mr. Amar Arun Jadhav, PHCET Rasayani  
Mr. Saurabh Sirankar, PHCET Rasayani  
Mr. Shashi Bhushan, PHCET Rasayani  
Mr. Karthik Nagarajan, PHCET Rasayani  
Dr. Ajit Bhandakkar, Secretary, SFA Mumbai Chapter

**Steering/Program monitoring committee AICTE STTP:**

Dr. Mathew T. Joseph, Principal : Chairman  
Dr. R. C. Prasad, Coordinator & Member Secretary  
Dr. G. V. Patil, Head Mech. Engg. Dept. : Member  
Dr. S. Pawar, Head Automobile Engg. Dept. : Member  
Dr. Priam Pillai, COO of MES : Member as a Subject Expert

**Address for Correspondence:**  
Prof. R.C. Prasad  
Coordinator & Vice Chairman SFA Mumbai Chapter  
Department of Mechanical Engineering, PHCET, Rasayani  
Mobile :- 09869236812 Fax :- 2748 3208  
Email :- [rcpspp@gmail.com](mailto:rcpspp@gmail.com) / [rcprasad@mes.ac.in](mailto:rcprasad@mes.ac.in)  
Web :- [www.sfa.mes.ac.in](http://www.sfa.mes.ac.in)

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Supported by Knowledge Partners



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With these challenges in mind and keeping in view the worldwide interest, these three separate one week Certificate AICTE approved STTP's have been designed at PHCET, Rasayani. This course plans to take stock of the current state of the art in Polymer & Rubber composite technology. The objective is to provide basic understanding of synthesis, fracture toughness evaluation using fracture mechanics, defect detection using NDT & understand modes and mechanisms of fracture for analysing failure of composite structures.

Training in this emerging area will facilitate research, bridge the gap between academia & industries and enhance placement opportunities for students.

**LIST OF RESOURCE PERSONS (Tentative) FOR STTP -3  
DURING March 15 - 20, 2021**

1. Dr. R. C. Prasad, Professor, PHCET RASAYANI
2. Dr. Rajkumar Kasilingam, Director, IRMRA Mumbai
3. Mr. Shantanu C. Prabhune, L&T Mumbai
4. Prof. Shridhar Yarlagadda, University of Delaware, USA
5. Dr. Prakash D. Trivedi, Gharda Chemicals Mumbai
6. Dr. Biswajit Panda, PCE, Panvel
7. Dr. Virendra Kumar Gupta, Head R&D & Senior VP, Reliance Research, Mumbai
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14. Prof. Shankar Sastry, Washington University in St. Louis, USA
15. Dr. C. M. Manjunatha, Chief Scientist, NAL Bangalore
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21. Prof. Chandra Sekher Yerramilli, IIT Bombay
22. Mr. Praveer Verma, DMSRDE, Kanpur
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26. Mr. Samresh Chandgar, GE India Pvt. Ltd., Pune
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29. Dr. G. S. Prabhu, Managing Director, Fine Finish, Talaja
30. Dr. Sumanda Bandyopadhyay, SABC, Bangalore
31. Dr. Pooja Katkar, D.K.T.E.S, Ichalkaranji
32. Dr. Divya Padmanabhan, PCE, Panvel
33. Dr. G. V. Pabi, PHCET, Rasayani

**REGISTRATION FORM**

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NAME (PRINT) : \_\_\_\_\_

GENDER : M / F : \_\_\_\_\_

DESIGNATION : \_\_\_\_\_

ORGANISATION : \_\_\_\_\_

MAILING ADDRESS : \_\_\_\_\_

TEL: (O) (R) : \_\_\_\_\_

FAX: MOBILE : \_\_\_\_\_

EMAIL : \_\_\_\_\_

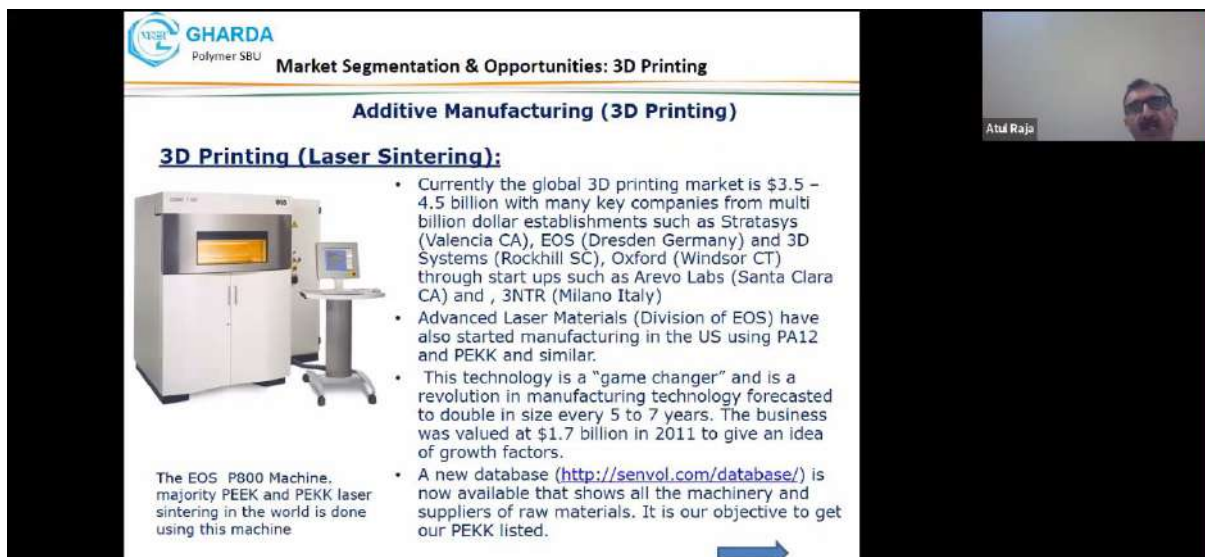
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**GHARDA**  
Polymer SBU  
Market Segmentation & Opportunities: 3D Printing

**Additive Manufacturing (3D Printing)**

**3D Printing (Laser Sintering):**

- Currently the global 3D printing market is \$3.5 – 4.5 billion with many key companies from multi billion dollar establishments such as Stratasys (Valencia CA), EOS (Dresden Germany) and 3D Systems (Rockhill SC), Oxford (Windsor CT) through start ups such as Arevo Labs (Santa Clara CA) and , 3NTR (Milano Italy)
- Advanced Laser Materials (Division of EOS) have also started manufacturing in the US using PA12 and PEKK and similar.
- This technology is a “game changer” and is a revolution in manufacturing technology forecasted to double in size every 5 to 7 years. The business was valued at \$1.7 billion in 2011 to give an idea of growth factors.
- A new database (<http://senvol.com/database/>) is now available that shows all the machinery and suppliers of raw materials. It is our objective to get our PEKK listed.

The EOS P800 Machine. majority PEEK and PEKK laser sintering in the world is done using this machine

Atul Raja

**Session Screenshot**

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

ACCREDITED WITH 'A' GRADE BY NAAC IN FIRST CYCLE 2019  
AND RE-ACCREDITED BY NBA FOR MECHANICAL AND COMPUTER ENGINEERING 2020

**WORLD ENVIRONMENT DAY 2021**  
"ENVIRONMENT DAY CELEBRATION 2021 : AN INTERACTION WITH STUDENTS TO BOOST RECYCLING & WASTE MANAGEMENT"  
SATURDAY, 05TH JUNE 2021

The World Environment Day is celebrated across the globe on June 5, every year, by the United Nations to remind the people that Nature can't be taken for granted and there is an urgent need to maintain biodiversity that affects all living beings. There is a need to balance the ecosystem through recycling and waste management. Under the aegis of the World Environment Day, the Innovation Council @ PHCET organized a virtual event to commemorate the Day under the theme Reimagine-Recreate-Restore on June 5 at 07:00 PM. The students, faculties and entrepreneurs were invited to join on the shared link and narrate actions taken in their daily lives to restore human-nature bond and action plans for the recycling and Waste Management.

**Coordinator**  
**Dr. R.C. Prasad**  
Dept. of Mechanical Engg.  
Email- rcprasad@mes.ac.in  
Mobile: 9869236812

**Session Recording**  
<https://drive.google.com/file/d/1yjFkDjyrCLwyhYZ4YsQYRhuVzRcxB10-/view?usp=sharing>

**Organized by**  
Institute Innovation Council at Pillai HOC College of Engineering & Technology, Rasayani



Event Flyer

Under the aegis of the World Environment Day, the Innovation Council @ PHCET organized a virtual event to commemorate the Day under the theme Reimagine-Recreate-Restore on June 5 at 07:00 PM. The students, faculties and entrepreneurs were invited to join on the shared link and narrate actions taken in their daily lives to restore human-nature bond and action plans for the recycling and Waste Management.

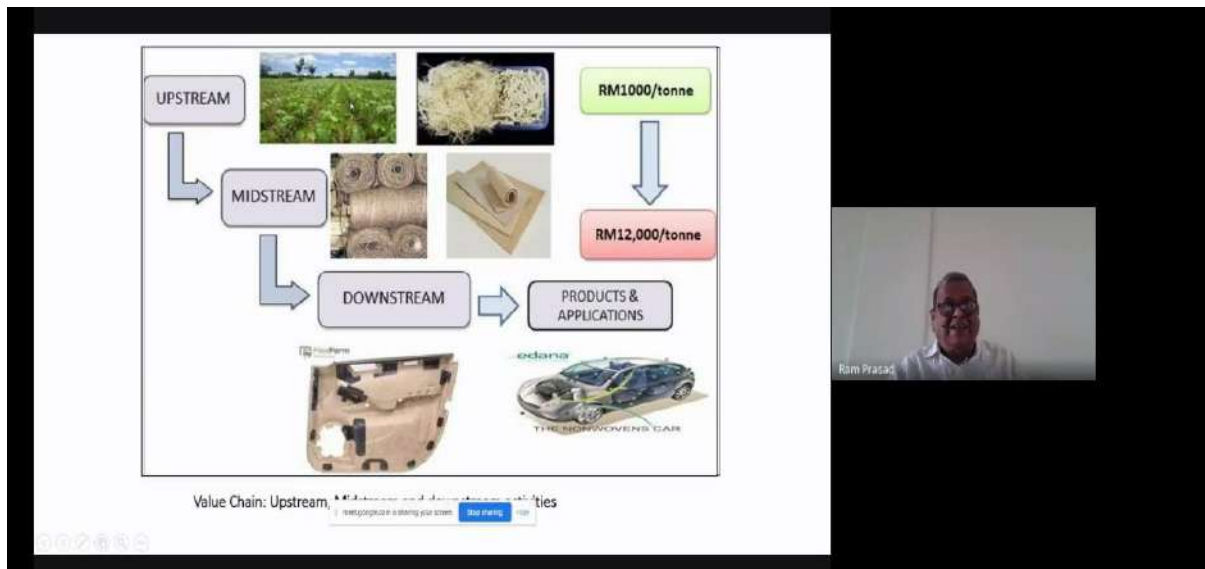
At the outset Prof. R.C. Prasad, President of the Innovation Council @ PHCET welcomed the participants and gave an insight into waste segregation, recycling and waste management for circular economy. He also outlined the upcoming National Workshop on June 21 and State Level Hackathon 2021. School students were briefed on how to prepare their video recorded presentations for the competition. After his talk, Dr. T. J. Mathew, Principal PHCET shared his experience and gave valuable tips on video recording. More than 120 students and faculty participated the interactive session. The session ended with Question Answer session and vote of thanks. Positive feedback was received from participants and faculties.



Session Screenshot

IIC & PHCET organized a webinar on "Recycling Metals, Plastics & Scrap Tyres : Circular Economy Road map to Build Green India". The invited speaker was Dr. R.C. Prasad, who is retired professor of IIT Bombay & now he is working with Pillai HOC College of Engineering & technology, Rasayani as a Professor. He has published several papers on materials, failure analysis of metals and nonmetals He also conducted several workshops on Composites: Fracture Toughness, NDE & Failure Analysis, Corrosion Fatigue, Fracture and Failure Analysis & Structural Integrity and Failure Analysis of Welded Structures Using Fracture Mechanics. He has delivered several lectures on different platforms.

Total 54 faculty members have participated the session. The Session started with welcome of speaker by Dr. G.V Patil, Head of Mechanical Engineering, & then commenced the session by speaker by explaining the concept of recycling & need of recycling. He then explained about recycling of metals, its procedure, recycling of plastics & tyres. He talked about different perspective of throwing plastic in the ocean. He suggested some ideas for recycling of these materials.



Session Screenshot

**Sponsorship**  
The event can be sponsored by donating Rs.10,000/-. The sponsorship entitles mention in the souvenir, free registration for three delegates

**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/-

**Registration Charges**

Category	Fees (Rs.)
SFA Members & Faculty	500
Participants from Industries & Non-Members	1500
Student Participants	Nil

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: Khaire, Patalganga  
Account No. 52142200111189  
RTGS / NEFT / IFSC Code: CNRB0015214

**Participation**  
Persons desirous of participating in the workshop are requested to kindly provide details provided in the accompanying form and send the same to the Convener.

**Patrons**  
Dr. K.M. Vasudevan Pillai, Chairman & CEO, MES  
Dr. Rajkumar Kasilingam, Director IRMRA/Mumbai  
Mr. T.S. Kathayat, President & COO, Welspun Corp. Ltd.  
Dr. N.Eswara Prasad, Director DMSRDE Kaapur  
Dr. Sameer Joshi, Chairman, Plastic Committee, MRAI  
Dr. Virendra Gupta, Head R&D Polymer & Sr.VP RIL Mumbai  
Dr. Prakash Trivedi, Ghada Chemicals, Mumbai  
Mr. Sudhakar Bonde, Chairman, ASM International, India Chapter

**Advisory Committee**  
Dr. Priyam Pillai, COO, MES  
Dr. Pranav Pillai, DCEO, MES  
Dr. Lata Menon, DCEO, Pillai HOC Educational Campus, Rasayani  
Dr. T. Mathew Principal, PHCET Rasayani  
Prof. M. Pillai, Head, Innovation, Research Centre, PHCET Rasayani  
Mr. Samar Gupta, Managing Director, OM Hesi Treat Pvt. Ltd.  
Mr. S.C. Prabhune, AGAL&I Mumbai  
Dr. A.Ega, GM Ghada Chemicals Ltd, Mumbai  
Prof. Amaya Meen, Arvity University, Mumbai  
Mr. Subodh Sharma, COO, Tine Rubber and Infrastructure Ltd.  
Mr. Uthas Partikar, Global Consultant, WM, AFR & Co-processing  
Dr. A.K. Sinha, Vice Chancellor, CSMU Maharashtra  
Dr. Gopprasad Rao, Director Imagination Pvt. Ltd. Mumbai  
Dr. Debdata Ratna, Sc.F, NMRL, Ambernath  
Mr. Amar Nanga, Principal HOC Polytechnic

**Local Organizing Committee**  
Dr. G.V.Patil, HOD, Mech Engg. PHCET Rasayani  
Dr. Ashok Kanthe, HOD, Computer Engg. PHCET Rasayani  
Mr. Raju Narwade, HOD, Civil Engg. PHCET Rasayani  
Dr. J.E. Nalawade, HOD, Information & Technology PHCET Rasayani  
Ms. Pranita Chavan, HOD, Electrical Engg. PHCET Rasayani  
Dr. Manoj Subhedar, HOD, Electronics & Telecom. PHCET Rasayani.  
Dr. M.D. Nadar, Professor, Mech Engg. PHCET Rasayani  
Mr. Amar Jadhav, HOD Automobile Engineering, PHCET Rasayani  
Mr. Saurabh Sirokar, AP Automobile Engg. PHCET Rasayani  
Mr. Suril Singh, AP Mech. Engg. PHCET Rasayani  
Mr. P.J.Nhute, AP Electronics & Telecom. PHCET Rasayani

**Address for Correspondence :**  
Dr. R.C. Prasad  
Convener & Vice Chairman SFA Mumbai Chapter  
Retd. Professor IIT Bombay & Professor  
Department of Mechanical Engineering, PHCET Rasayani  
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Web :- www.sfa.mes.ac.in

**ONLINE ONE DAY NATIONAL WORKSHOP**  
On  
**"Recycling Metals, Plastics & Scrap Tyres : Circular Economy Road map to Build a Green India"**  
**21 June, 2021**

*Organized by*




*Supported by*




**ASM INTERNATIONAL INDIA CHAPTER**

**Invitation**  
The Incubation, Innovation & Entrepreneurship Cell of the Mahatma Education Society's PHCET Rasayani is inviting you to attend the online National Workshop that is being organized in association with SFA Mumbai Chapter, MRAI, IRMRA & ASM International India Chapter on " Recycling Metals, Plastics & Scrap Tyres : Circular Economy Road to Build Green India " on June 21, 2021

**About the Workshop**  
India with 1.3 b population is undergoing rapid urbanization and modernization. This has resulted in release of large amount of metallic, plastic & scrap tyres that are littered all around. Plastics & tyres have long end life and degrade very slowly due to long carbon bond in polymer chain. It takes hundreds of year to decompose. According to WEF-2015, there will be more plastics in ocean than fishes by 2030, if there are no interventions. Micro plastic in fishes can endanger our health. It is estimated that nearly 1 million PET bottles are wasted every minute. The current COVID 19 Pandemic has also resulted in increased consumption of plastics and pollution of environment. According to WLF if only 1% masks are incorrectly disposed then nearly 10 million masks per month are going to environmental pollution. Our current waste management approach does not appear to be holistic, as it does not consider the entire chain starting from design to product development and waste management. Today landfills are considered one the easiest ways for the disposal of metallic, plastics and scrap tyres. However, we need to develop a sustainable holistic waste management and low carbon planning in cities to adopt circular economy and convert waste to wealth. Indian industries are mandated to follow EPR strategies for sustainable waste management and give a new life to wastes through holistic life cycle management.

**Workshop Objectives**  
In the light of above and the worldwide interest, the SFA Mumbai Chapter and the Mahatma Education Society's PHCET Rasayani is organizing this one day National workshop on "Recycling Metals, Plastics & Scrap Tyres : Circular Economy Road map to Build Green India " to bring all the stake holders on one platform to sensitize and share knowledge about circular economy, increase public awareness, adopt sustainable behavior, know challenges and opportunities in waste management and use of recycled plastics in advanced manufacturing processes like additive manufacturing.

**Tentative topics to be covered:**

- Overview of recycling of metals, plastics & scrap tyres
- Challenges & opportunities in solid WM
- Current approaches & scope for WM in India
- Role of academia, industries & research establishments to meet the challenges of WM
- Development of sustainable holistic waste management for circular economy in Indian context
- Design thinking for adopting Circular economy initiatives in India
- Urban Environment management: Low carbon planning for smart cities & give second life to waste
- Task force for creating a road map to create clean and green India

**REGISTRATION FORM**  
Online One Day National Workshop on  
**" Recycling Metals, Plastics & Scrap Tyres : Circular Economy Road map to Build Green India "**  
*June 21, 2021*

NAME (PRINT): \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

ORGANISATION: \_\_\_\_\_

MAILING ADDRESS : \_\_\_\_\_

TEL: \_\_\_\_\_ (O) \_\_\_\_\_ (R)  
FAX: \_\_\_\_\_ MOBILE: \_\_\_\_\_  
EMAIL: \_\_\_\_\_

Bank Details for Payment towards sponsorship / participation DD / Cheque No. \_\_\_\_\_ drawn in favor of 'PHCET Research & Development Account' are given below .

**RTGS/NEFT /IFSC Code Details:**  
Name of the Account Holder: PHCET Research and Development Account  
Name of the bank: CANARA BANK  
Branch: Khaire, Patalganga  
Account No. 52142200111189  
RTGS / NEFT / IFSC Code: CNRB0015214

Date: \_\_\_\_\_ Signature \_\_\_\_\_



**PILLAI HOC COLLEGE OF  
ENGINEERING AND TECHNOLOGY**



**ONLINE STATE LEVEL HACKATHON 2021 ON  
Solution for Recycling Metals, Plastics & Tyres for Circular Economy  
Steps towards creating a Circular Economy Road Map to build a Green Nation**

**Workshop on "Circular Economy Roadmap for Metals, Plastics & Tyres" on June 21, 2021**

**Poster Presentation Competition for Students of Polytechnic**

**" From waste to Wealth : Circular Economy Roadmap "**



**COORDINATOR**

**Prof. R. C. Prasad**

Dept of Mechanical Engg, PHCET

Email: [rccprasad@mes.ac.in](mailto:rccprasad@mes.ac.in) Mobile: 9869236812

**About the Hackathon**

This event is an outreach program aimed to excite young minds towards emerging technologies of waste management of metals, plastics & tyres through recycling and create a Circular Economy road map to build a green Nation.

- During this program a workshop titled " Circular Economy roadmap for metals, plastics & tyres" shall be organized on June 21, 2021 where experts from
- industries, professional societies and academia will emphasize the need and ways to recycle plastics & tyres to save environment and create Circular Economy.
- After this an Poster competition will be held amongst the best 3 groups on " From waste to Wealth : Circular Economy Roadmap"
- Each college shall be invited to select three teams consisting a maximum of three students with strong interest in pursuing engineering career. These students should be asked to send a poster on the above topic latest by June 15, 2021.
- Three teams shall be selected to give online Oral presentation for 10 minutes during the final competition on June 21, 2021.
- Best 3 teams with content & presentation skill shall be awarded cash prizes along with a certificate.

Link to Participate in Competition:

<https://forms.gle/JGKYM3xN95NnHjmZ8>

**Know your plastic to reduce trash.**

**ORGANIZED BY**

Incubation, Innovation and Entrepreneurship cell  
&

Dept of Mechanical & Automobile Engineering  
Pillai HOC College of Engineering and Technology,  
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**ONLINE STATE LEVEL HACKATHON 2021 ON  
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**COORDINATOR**  
**Prof. R. C. Prasad**  
Dept of Mechanical Engg, PHCET  
Email: [rprasad@mes.ac.in](mailto:rprasad@mes.ac.in) Mobile: 9869236812

**Poster Guidelines**

- Poster boards will accommodate A0 size portrait posters: height 1189 mm (46.8 inches), width 841 mm (33.1 inches). Please ensure that your display will fit within these parameters.
- You are free to choose landscape or portrait orientation. Title should be in bold. Author's affiliations and e-mail addresses for should be included.
- Text: a poster should be easily readable from a distance of 1 – 2 meters, and 1.5 or 2 lines of spaces should be used between each line. It is advised that authors should also pay attention to the following points:
- Headings should be 25% larger than normal text. Bold or other colors may be used.
- Suggested font sizes are (for the A0 format):  
Main title: 78 pt (bold, upper case)  
Author: 72 pt (bold, title case)  
Affiliation(s): 48 pt (normal, title case)  
Email address: 36 pt (bold)  
Subheading: 36 pt (bold upper case)  
Body of text: 24 pt (normal)  
Smaller fonts may be used in citations and acknowledgement.

**Poster Submission Deadline: June 15, 2021**

**Poster Presentation: June 21, 2021**

**Know your plastic to reduce trash.**

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&  
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Pillai HOC College of Engineering and Technology,  
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**Impact Lecture Series Workshop on**

ONLINE ONE DAY NATIONAL WORKSHOP  
On  
"Recycling Metals, Plastics & Scrap Tyres : Circular Economy  
Road map to Build a Green India"  
21 June, 2021  
&  
ONLINE STATE LEVEL HACKATHON 2021

www.google.com/joining your screen

Ram Prasad

Event Screenshot

**MANUFACTURING PROCESSES**

Tape Winding

Prepreg Layup  
Autoclave Curing

Resin Film Infusion

Filament Winding

Vacuum Assisted Resin  
Infusion Molding (VARIM)

Vacuum Assisted Resin  
Transfer Molding (VARTM)

Artillery | Military Communication | Submarines & Warships | Weapon & Engineering Systems

**L&T Defence**

Event Screenshot



MAHATMA EDUCATION SOCIETY'S  
**Pillai HOC College of Engineering & Technology, Rasayani**  
ACCREDITED WITH 'A' GRADE BY NAAC IN FIRST CYCLE 2019  
AND RE-ACCREDITED BY NBA FOR MECHANICAL AND COMPUTER ENGINEERING 2020

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

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

Presents a webinar on  
**Importance of Internship & Career Guidance for Engineers**

**On: Friday, 18th JUNE, 2021**  
**SCHEDULE**  
**10:30 AM onwards**

Event Co-ordinator  
**Mr. Raju Narwade**  
Internship Coordinator, IIC  
& HOD, Civil Engineering  
Email- rnarwade@mes.ac.in



Speaker  
**Er. Ashok Kumar**  
Founder - CMTI & PES

Click the icon  
for  
Zoom Link

E-certificate to all participants

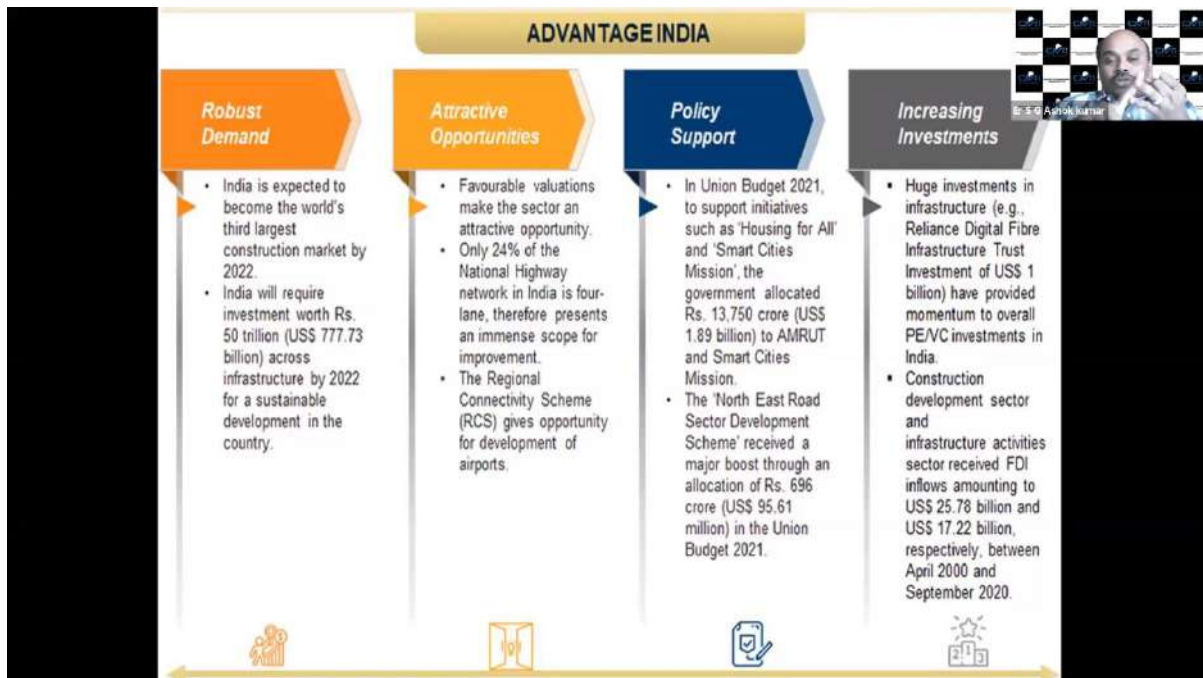
**Dr. Gajendra V Patil**  
Convener, IIC & HOD, Mechanical Engineering  
PHCET, Rasayani

**Dr. T.J. Mathew**  
Principal  
PHCET, Rasayani

Event Flyer

Institute Innovation Council, (IIC) Pillai HOC College of Engineering and Technology, Rasayani has conducted a webinar on Importance of Internship and

Career Guidance for Engineers on June 18, 2021 for the students of all branches. Er. Ashok Kumar Founder, Construction Management Training Institute, Bangalore was invited as a resource person. The main objective of this webinar was to give in detail information about importance of internship in engineering. Around 125 participants from second year, third year, final year, master's students and 12 faculty members of various department attended the webinar, enriched their knowledge and skill in this field. The participants furnish positive feedback about the workshop. The workshop helped the participants to get well acquainted with various opportunities available for internship.



Session Screenshot

**N. Contact:**

**Dr. Gajendra V. Patil**

Convener IIC & Professor and Head, Mechanical Engineering Department

Pillai HOC college of Engineering and Technology

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