PLASTICS MATERIALS:

Title: Plastics Materials for End Use Applications Duration: 16 hours Proposed date: 28th & 29th January 25

Fee: Rs.10,000/- per person Plus GST 18 %

Co-ordinator: Mrs.T.Bharani 96293 60251

Curriculum: Studies on General Properties and applications of Different class of Advanced Plastics and Polymeric Materials.

Thermoplastic Elastomers – Polyurethane Elastomers,Polyolefin Elastomers, Styrene Elastomers, PEEK

Polymer Blends & Alloys-Properties and Applications of Parameters for Compatibility PVC - Nitrile rubber,

PP. EPDM and ABS-PVC

AMC:

Title:Additive Manufacturing Techniques Duration: 16hours Proposed date: 11 th &12 th December 24 Fee: Rs.10,000/- per person Plus GST 18% Co-ordinator: Mrs.S.Soundarya 75988 66883 Curriculum:IntroductiontoAdditive Manufacturing- Classification of

Additive Manufacturing processes - A d v a n t a g e s a n d l i m i t a t i o n s o f Additive Manufacturing-Liquid Based Additive Manufacturing-SolidManufacturing- Powder Based Additive M a n u f a c t u r i n g - Based Additive Conversion of **CAD** to STL-Part Orientation-Post Processing & A p p l i c a t i o n s o f A d d i t i v e Manufacturing.

TAILOR- MADE COURSES:

CIPET :SARP - ARSTPS is organizing Tailor Made courses as per the topics /Technology based on the requirements from the industries/ MNC's.

Special Features of Training programme: Delend of Theory& Practical sessions Live Projects Customised curriculumfor industries as per their requirements State- of- art facilities

For Further Details Please Contact: The Principal Director & Head CIPET:School for Advanced Research in Petrochemicals (SARP) - ARSTPS SIDCO Industrial Estate, Guindy,Chennai-600032. Tel:044-22254794 Mobile:9597511411 Email:arstps@cipet.gov.in arstpscipet@gmail.com Website: www.cipet.gov.in

www.arstps.gov.in





SHORTTERMCOURSE Annual Calendar 2024-2025



CIPET: SARP - ARSTPS Advanced Research School for Technology and Product Simulation

Department of Chemicals and Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India SIDCO Industrial Estate, Guindy, Chennai -



CIPET:SARP-ARSTPSPROFILE Central Institute of Petrochemicals Engineering & Technology (CIPET) is a n I S O 9 0 0 1 - 2 0 0 5 Q M S .ISO/ IEC 17020: 2012 (NABCB) ISO/IEC17025:2017(NABL)

Accredited Premier National Institution devoted to Skill Training, Technology Support, Academic & Research (STAR) activities for the last five decades.**CIPET** operates on hub and spokes model with its HeadOffice at Chennai and 45 locations spread across the length & breath of the Country.

CIPET:SARP-ARSTPS offers highend solutions for complex & criticale n g i n e e r i n g p r o b l e m s a n dare working with a range of companies / R & D labs in the field /area ofdefence components, automotive, consumer p r o d u c t s , h e a l t h c a r e , h e a v y engineering & telecom to solve the most challenging Research / Technical issues. The exclusive focus of this R & D l a b o r a t o r y i s - D e v e l op m e nt of light weighttechnology products by Additive Manufacturing Technology.

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ReverseEngineering,Design, Simulation & Tooling And Testing of products.

ADVANCED TOOLING IN MOULD DEVELOPMENT

Title : Rapid Tooling Duration:16hrs.(2days) Proposed dates:13th&14th February 25

Fee : **Rs.10,000/**-per person plus GST18% Coordinator: **Mr.S.Santhanakumar** (+91 94449 45810)

Curriculum:Introduction to rapid tooling – Difference between rapid tooling and conventional tooling – Online course : Development of mouldinserts with Rapid Prototyping - Classification: Soft tooling, Hard tooling- Fabrication processesConformal cooling of mould elements -Silicon moulds for Vacuum Casting- Applications.

CERTIFICATE COURSES :

Title 1:Additive Manufacturing (SAM 200) Duration : 4 months(July 1st week) Fee :Rs.48,000 per person plus 18 % GST Title 2 :New Product Development (SNP200) Duration :4 months (December 1stweek) Fee :Rs.48,000 per person plus 18 % GST **Co-ordinator: Mrs.S.Soundarya** (75988 66883)

PRODUCT VALIDATION & TESTING

Title: Mechanical Testing of Plastics Duration:16hours(2 days) Proposed dates : 12 th & 13 th August.24 Fee: Rs.10,000/-per person Plus GST 18 % Co-ordinator: Mr. M.F.Antony 9944424697

Curriculum:

- 1. Introduction to Plastic Materials Property and Structure.
- Introduction to Tensile, flexural, Hardness and Impact Propertiesof plastic Materials.
- 3. Fatigue and Tribological Properties of Plastic Materials.
- 4. NVH Testing of Plastic Products.

Laboratory Session:

- 1. Sample Preparation & Mechanical Testing of Plastics
- 2. Practical Session on Fatigue Testing Machine
- 3. Practical Session on Wear Testing Machine
- 4. Practical Session on NVH Testing Machine

PRODUCT DESIGN & DEVELOPMENT:

Title: Plastic Product development with CAD/CAE Duration :16hrs.(2days) Proposed dates: 22th&23thOctober 24 Fee:Rs.10,000/-per person plus GST 18% Coordinator : Dr.S.Rajkumar (+91-9841262565)

Curriculum:Product Development Process- Plastic materials- Moulding process Product Design features-Wall thickness Rib, Bosses, Gusset Undercuts Draft - Holes-Tolerance Molded in threads

-Structural Considerations-Long & Short term loading - Design for Assembly - Press fits - Snap fit -Welding - Insert Moulding Post Moulding Process.

Tooling Aspects of Product Design Case studies.

ONLINE COURSES :

" 2 Weeks (10 days), @ 2 hrs. / day)

1.Fundamentals of Injection Mould

Design & Analysis – 24.07.24 to 05.08.24

2.Additive Manufacturing-

Fundamentals & Applications -

18.09.24 to 28.09.24

3.Mechanical Testing of Plastics – 18.11.24 to 28.11.24

4.Industrial Training Programme on

Product Development: Polymeric

Materials in Engineering and various

Applications- 18.02.25 to

28.03.25

CIPET: SARP – ARSTPS, CHENNAI

FY: 2024-25

SHORT-TERM COURSES

S.No	Name of the Programme	Duration	Proposed Dates	Name of the Co-ordinator / Mobile Number
1	Mechanical Testing of Plastics	16 hrs. (2 days)	12 & 13.08.2024	Mr. Marcian Frank Antony 9944424697
2	Plastic Product development with CAD/CAE	16 hrs. (2days)	22 & 23 10.2024	Dr.S.Rajkumar 9841262565
3	Additive Manufacturing Techniques	16 hours	11 & 12.12.2024	Mrs.S.Soundarya 75988 66883
4	Plastics Materials for End Use Applications	16 hours	28 & 29.01.2025	Mrs.T.Bharani 96293 60251
5	Rapid Tooling	16 hours	13 & 14.02.2025	Mr.C.Santhanakumar 94449 45810
ON-LINE COURSES				
1	Fundamentals of Injection Mould Design & Analysis	2 Weeks (10 days) @ 2 hrs./Day	24.07.24 to 05.08.24	Mr.C.Santhanakumar 94449 45810
2	Additive Manufacturing- Fundamentals & Applications	2 Weeks (10 days) @ 2 hrs./Day	18.09.24 to 28.09.24	Mrs.S.Soundarya 75988 66883
3	Mechanical Testing of Plastics	2 Weeks (10 days) @ 2 hrs./Day	18.11.24 to 28.11.24	Mr. Marcian Frank Antony 9944424697
4	Industrial Training Programme on Product Development: Polymeric Materials in Engineering and various & Applications	2 Weeks (10 days) @ 2 hrs./Day	18.02.25 to 28.03.25	Dr.S.Rajkumar 9841262565
CERTIFICATE COURSES				
1	Additive Manufacturing (SAM 200)	4 months	1st week of July	Mrs.S.Soundarya 75988 66883
2	New Product Development (SNP 200)	4 months	1st week of December	Mrs.S.Soundarya 75988 66883