AIPMA'S *AMTEC* ARVIND MEHTA TECHNOLOGY AND ENTREPRENEURSHIP CENTRE MUMBAI MUMBAI

AIPMA'S AMTEC

ARVIND MEHTA TECHNOLOGY AND ENTREPRENEURSHIP CENTRE (MUMBAI)



Module - 2 : PLASTICS IN PACKAGING : ENVIRONMENTAL ASPECTS & CIRCULAR ECONOMY

 2^{ND} - 26^{TH} SEP. 2021 (4 weeks : 6 Hours per week)

18th NOV. - 11TH DEC 2021 (4 weeks : 6 Hours per week)

Module - 1: PLASTICS IN PACKAGING: MATERIALS ENHANCING MARKETABILITY





Knowledge Partner



Highlights:

- First of its kind of "Skill Development" program in India.
- Internationally acclaimed faculty members from Industry and academia.
- "Course Reference book" on the topics of the module will be provided.
- "Merit Certificate" and "Participation Certificate" will be awarded.
- Career oriented services including placement Assistance.

BENEFIT TO THE INDUSTRY:

Up-gradation of knowledge in Packaging Science,
Application of Plastic in packaging, New generation
materials & its Characteristics, "State of the art" techniques,
Conversion process & its optimization, Quality evaluation,
Regulatory Compliance, Recyclability, Life Cycle analysis of
polymeric materials, Sustainability & Circular economy.



| AIPMA'S AMTEC

ARVIND MEHTA TECHNOLOGY AND ENTREPRENEURSHIP CENTRE, MUMBAI

AIPMA with a goal to bring best practices and new improved technology to Indian Plastics Industry has launched AIPMA's AMTEC - Arvind Mehta Technology & Entrepreneurship Centre (AMTEC). The set-up of the 'Centre of Excellence for Plastics Product Innovation and Application' with a vision to promote high quality knowledge and industrial services for rapid growth of the plastics and its application industry. The Centre of Excellence would help the MSME's in reducing overall time to design, develop and rapid roll out of products thereby increasing speed to global market. The Centre would help the industry to graduate from Micro to Small, Small to Medium and Medium to Large Enterprises in increasing its global market share in the next 3 years.



To disseminate emerging innovations, technologies and knowledge to make India global sourcing hub.



To become 'Institute of Eminence' empowering rapid growth of Indian Plastic Industry.

FOUNDATION FOR INNOVATIVE PACKAGING AND SUSTAINABILITY:

FIPS is registered as a Non-Govt, Non-Profit organization under Section 8(1) of the Companies Act,2013 in 2020 which was envisioned by. Prof. (Dr) N.C. Saha, Former Director, Indian Institute of Packaging (IIP), Govt. of India, an internationally acclaimed professional with 34 years of rich experience in Packaging Science and Technology. Along with him, two of his professional colleagues enthusiastically shared his vision. Prof. (Dr) Anup K. Ghosh, a distinguished and renowned Professor for three decades in the Polymer Science & Engineering at Indian Institute of Technology, Delhi, India and a Fellow of National Academy of Sciences, India and Mr Mrinal K Banerjee, an innovator with 55 patents to his credit (out of 156 patents applied globally) and a leader in the field of laminated and extruded tube packaging, printing and decoration over three decades.



Progress systematically to achieve the vision of our Foundation tangibly by creating

- Partnerships with R&D institutions, colleges, universities, NGOs, gram panchayats, co-operative societies, municipalities, state and central government agencies and MSME segments through research and development.
- $\bullet \ \ \textit{Skill development and knowledge revitalisation programmes for its customers.}$
- To promote translational R&D in collaboration with the relevant industries, developed by any educational institutes / R&D organisations for upgradation of social needs, benefits and living





To provide Sustainable Solutions to the targeted group of Society and industries through scientific and innovative packaging technology and to create awareness of circular economy to save the planet.

EMINENT FACULTY



Former Director, Indian Institute of Packaging (IIP), Govt. of India, Past Vice President, World Packaging Organisation (WPO) & Past Secretary General, Asian Packaging Federation (APF), Chairman, Sectional Committees, Bureau of Indian Standards (BIS), Govt. of India. Authored two books on 'Food Packaging' for IGNOU and a book on 'Packaging of Fragrances' for FFDC, Govt. of India; published 15 research papers, over 450 articles on packaging and acquired one patent to his credit.

Prof. N.C. Saha

Founder Chairman & Director

Foundation for Innovative Packaging and Sustainability (FIPS)



Fellow of National Academy of Sciences, India, Director (Research & Development, Training and Promotion), Foundation for Innovative Packaging and sustainability. 30 years of research and teaching experience, 12 patents, Supervised 30 Ph.D. thesis and 100+M. Tech Thesis. Known for his accomplishments in the field of polymer processing and rheology, reactive processing of polymer blends and alloys, 3D printing of polymers.

Prof. A.K. Ghosh
Professor Emeritus,
Materials Science & Engineering,
Indian Institute of Technology, Delhi



33 years of rich experience at Essel Propack Limited. Applied for 156 patents globally and out of that 55 patents got a global grant. Innovator and thought leader in the field of laminated and extruded tube packaging and allied polymer conversion field, including printing and decoration

Mr M.K. Banerjee
Director (Innovation, Sustainability & Finance),
Foundation for Innovative Packaging and Sustainability (FIPS)



Former Director of the Ministry of Environment & Forests, Govt. of India, Visiting faculty in TERI School of Advanced Sciences in teaching solid waste management, waste utilisation and industrial ecology. Advisor and consultant in areas of environment & waste management in the Swachh Bharat Mission.

<u>Dr Lakshi Raghupati</u> Advisor, Foundation For Innovative Packaging and Sustainability (FIPS)



An internationally acclaimed polymer Scientist and holding the position as Chief Researcher and Manager at Centre for Nanostructures and Advanced Materials, DST-CSIR Nanotechnology Innovation Centre, Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa. He is also the Distinguished Visiting Professor, Department of Chemical Sciences, University of Johannesburg, South Africa. He has authored 4 books, ,30 book chapters on various aspects of polymer-based Nano-structured materials & their applications, published 450 Research papers in international journals.

Dr Suprakash Sinha Roy

Advisor, Foundation For Innovative Packaging and Sustainability (FIPS)



Mechanical engineer from Bombay University, specializing in solid waste management; more specifically, recycling and reclaiming technologies; be it, plastics, textiles, MSW, e-waste, metals etc., having tie-up with 11 world-class European companies.

Mr Deepak Mehta

Thought Leader, Foundation For Innovative Packaging and Sustainability (FIPS)



Formerly Head of Packaging at reputed consumer brand companies - Oriflame-Silver Oak; Dabur and Ranbaxy. Initially he worked with Metal Box India, later with integrated brand development consultancy, Autumn Design and Firstouch Solutions. He was consultant for Jindal Polymers and Michelman. He was closely associated with Indian Institute of Packaging (IIP), Packaging South Asia magazine and industry conferences.

Mr Deepak Manchada

Chief Counsultant - Packaging Design, Foundation For Innovative Packaging and Sustainability (FIPS)



He was the former Managing Director of NERAMAC Ltd., Ministry of DoNER, Govt. of India having 38 years of rich experience in marketing of processed food. His degrees include B.Sc. in Agriculture (Hons.); Masters in Food Technology from CFTRI, Mysore; specialised programme at IIM, Kolkata; IIT Delhi and Kansas State University, USA. Presently, he is a Consultant with CSIR-CFTRI, Mysore; on the Board of Directors of North East Mega Food Park; Member, Technical Board of AIFPA; Advisor of Laghu Udyog Bharati; North East Chairman, Food Processing Committee of FICCI, North East.

Mr Subhas Bahttacharjee

Chief Counsultant - Training, Foundation For Innovative Packaging and Sustainability (FIPS)



Qualified Packaging Technologist with 32+ experience of significant contribution in the R&D of pharmaceutical packaging at Sun Pharma / Ranbaxy. Expert in packaging consultancy for technical services, for end-to-end pack design, cost / productivity improvement and setting up a unit for biodegradable chemical coating materials.

Mr Rahul Bhargava

Chief Consultant- Innovation, Foundation For Innovative Packaging and Sustainability (FIPS)



A strategist of sustainability to reduce the impact of climate change on business models. Over 3 decades of rich techno-commercial global experience in chemicals, plastics and packaging. He has held Board positions in various prestigious institutions and industry associations. Founder & CEO of Sustain Mantra for Sustainable Development & Circularity.

Mr Shailendra Singh

Chief Consultant- Sustainability, Foundation For Innovative Packaging and Sustainability (FIPS)

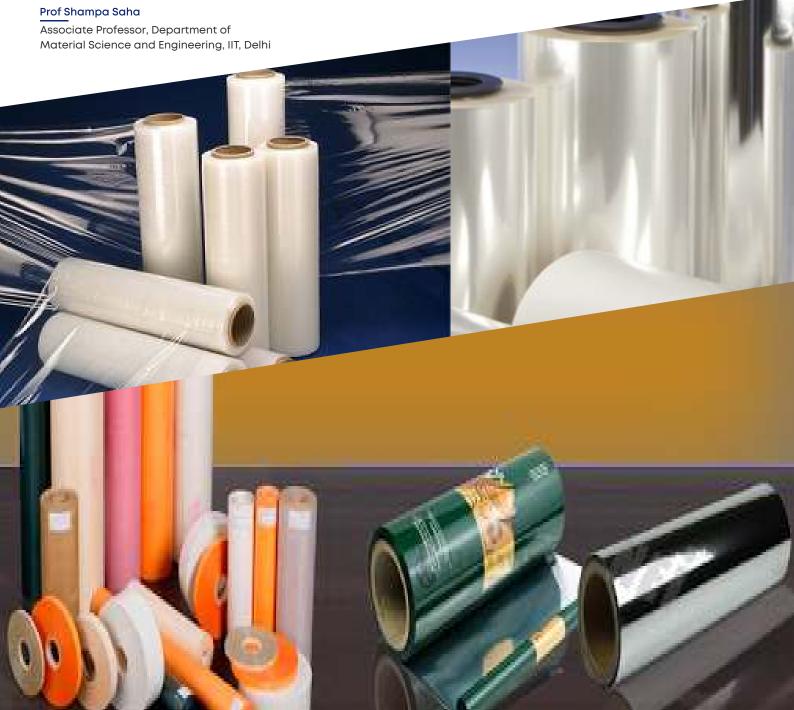


Prof Vimal Katiyar
Professor Department of
Chemical Engineering, IIT,
Guwahati

He is an eminent Professor of the Department of Chemical Engineering, particularly acclaimed for the "Establishing noble Biodegradable Polymers and its Technologies through Centre of Excellence for Sustainable Polymers" at Indian Institute of Technology Guwahati (IITG), India. Honorary Senior Fellow to Kyoto Institute of Technology, Kyoto, Japan, Visiting Professor at GIFU University, Japan and also honoured as Chair Professor Numaligarh Refinery Limited & Hindustan Gums Co. Limited. 20+ years of teaching and research experience, has 28 granted/filed patents, published more than 125 peer reviewed research articles in highly reputed journals and more than 250 conference papers, 6 books and 69 book chapters.



Supervised 5 Ph.D. and 20 Master thesis. Published around 43 peer-reviewed journal articles, 4 book chapters and 6 patents to her credit. Her research area spans from biodegradable polymeric particles (multi-layered and multi-compartmental) to polymer brushes for applications such as biomedical, agricultural and water remediation.



- · Concepts, Functions and Components and Classification of Packaging
- Introduction to Plastics materials for packaging and its identification method.
- Innovative & Futuristic Plastics materials in packaging application.
- Concepts of Package Design & its application.
- Structures & Properties of Polymeric materials used in Packaging.
- Rheology and Processibility of Plastic Materials.
- Selection of Specific Polymer for a given Process (such as Injection Molding, Blow Molding, Blow film, Cast film, Extrusion Process etc).
- Concepts of Barrier Properties of Plastics materials & its importance in Packaging.
- Critical role of Master batch & Additives in Polymer and packaging structures (Color -Slip -ant blocker-PPA, UV stabilizer, Flame retardant etc.).
- Cost Optimization-process, manpower, energy, poor quality and machine break down.
- Plastics Packaging for domestic and export market.
- Qualitative products lead to better price realization.
- Concept of Bio-degradable/ Oxy biodegradable, Compostable & Biopolymers –process and application.
- Testing and quality evaluation of Plastics materials for Packaging Materials.
- In addition, 4 sessions on Demonstration through Video Classes and Examination

MODULE - 2

PLASTICS IN PACKAGING: ENVIRONMENTAL ASPECTS & CIRCULAR ECONOMY

18th NOV. - 11TH DEC 2021 4 weeks (6 Hours per week)

- Concepts of Circular Economy with emphasis on Plastics Packaging
- Concept of Sustainability & its importance in Packaging.
- Plastics Packaging & its impact on environment.
- Importance of Packaging design for Sustainable approach.
- Polymer from Sustainable Sources: Bio-degradable/Composta ble Polymer/Oxy-degradable polymer.
- Merit and Demerits of Bio-polymer, Price point and Quality consistency.
- Manufacturing Process of sustainable plastics materials.
- Plastics Packaging waste-Indian Vs Global Scenario.
- Recyclability & Life Cycle Analysis approach.
- Collection and sorting system of Plastics packaging waste in India.
- Recycling of post-consumer flexible & rigid packaging waste or Challenges & Dynamic Developments in Recycling PCR waste.
- The New Plastic economy in waste management.
- Post Consumer Recyclates (PCR) and Regulatory Compliance.
- In addition, 4 sessions on Demonstration through Video Classes and Examination.



- ELIGIBILITY: 12 pass + 3 Years Industry experience or academic or Research / Graduate or Diploma + fresher or minimum 1 Years' Experience or academic or Research
- WHO SHOULD ATTEND : Production / Purchase / Quality Control / R&D Regulatory , Sales & Marketing / Export marketing / Startups
- For Admission Enquiries, please call Ms. Shiraz Sequeira +91 99207 15579

Name of Bank Account: AIPMA-AMTEC-MUMBAI

Bank Account Number: 50100354424826

Bank Name: HDFC BANK

Bank Address: Ahura Centre, Ground Floor, Mahakali

Caves Road Andheri East, Mumbai - 400 093 Branch Name : Andheri East - Ahura Centre

RTGS / NEFT IFSC: HDFC0000543

MICR: 400240002 Branch Code: 543



ORGANIZEF

AIPMA'S AMTEC

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KNOWLEDGE PARTNER

FOUNDATION FOR INNOVATIVE PACKAGING AND SUSTAINABILITY

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