

KNOWLEDGE PLATFORM DEA TO SOLUTION

FOUNDATION FOR INNOVATIVE PACKAGING AND SUSTAINABILITY

THE FIPS DOCTRINE

"Gaining knowledge is the first step to wisdom; sharing it, is the first step to humanity." With this philosophy, and having rich knowledge as well as experience in education, research, innovation, industry collaboration, advocacy, standards formulation, export promotion, publications in the field of material science, packaging technology and sustainability at India's premier academic institutions and corporate sector for over last three decades, we are extremely happy to announce the formation of the 'Foundation for Innovative Packaging and Sustainability (FIPS)' to share the acquired knowledge and expertise to provide service to the community and industries through various activities for the overall growth of our society.

We are moving ahead with a specific goal and vision. We have with us eminent members as Advisory Board, Chief Consultants and Thought Leaders under the mentorship of distinguished fellows to meet our Vision. It is our belief and trust that our Mission will be fulfilled through our dedicated efforts and continued support from all of you by engaging us in your endeavour as you find us fit and necessary.

Prof. (Dr.) N. C. Saha Founder Chairman and Director (Packaging Technology, Industry Relationship and Publication)



Mrinal K. Banerjee Director (Innovations, Sustainability and Finance)

VISION

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.

MISSION

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.
- 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.



Prof. (Dr.) N. C. Saha

Founder Chairman and Director (Packaging Technology, Industry Relationship and Publication)

Prof. (Dr.) N. C. Saha is an internationally acclaimed professional with 33 years of rich experience in the field of packaging science & technology. He was the Former Director of Indian Institute of Packaging (IIP), Govt. of India, India's premier institute in packaging. He obtained his Masters in Food Technology from Central Food Technological Research Institute (CFTRI), Mysore, and then his Ph.D in Packaging Management. He is an alumnus of School of Packaging, Michigan State University, USA as UNDP Fellow and University of Tehran for advanced programme in Productivity Concepts and Tools as a Fellow of Asian Productivity Organization (APO).

He was Vice President of World Packaging Organisation (WPO); Secretary General of Asian Packaging Federation (APF); Board Member of APEDA, Spices Board, FFDC, GS 1, CPPRI; Member of Expert Committee of FSSAI, MoFECC, MoFPI; Member Secretary, SAC, MoCI, Govt. of India. His illustrious career has been marked with several national and international milestones and accolades. As Director, IIP, his commendable contribution to completely face-lift the image and reputation of the institute and to get global recognition is well accepted by the packaging fraternity and Govt. of India. He has authored two books on 'Food Packaging' for IGNOU; one book on 'Packaging of Fragrances' for FFDC, Govt. of India; published 15 research papers, over 450 articles on packaging and acquired one patent on 'Packaging Container made of Plastic Laminated Tube for Liquid Jaggery' for the enhancement of shelf-life up to 180 days. He was also the Editor for the bi-monthly magazine 'Packaging India'.

CURRENT PORTFOLIO

- Chairman, India Biomass Project under the Indo-Dutch Sustainability Forum (INDUS), India initiated by The Embassy of Royal Kingdom of Netherlands, Govt. of Netherlands
- Chairman Five Sectional Committees Bureau of Indian Standards (BIS), Govt. of India
- Visiting Professor, Indian Institute of Technology (IIT), Delhi
- Board Member, World Packaging Organisation (WPO)
- Permanent Honorary Member, Asian Packaging Federation (APF)
- Board Member, Indian Centre for Plastics in the Environment (ICPE)
- Editor-in-Chief, Journal of Packaging Technology and Research, a well-accepted international journal on packaging published by Springer International
- Member of Editorial Board for number of packaging magazines and journals
- Technical Advisor to the government as well as privately sponsored 'waste-to-wealth' sustainability projects





Mrinal K. Banerjee Director (Innovations, Sustainability and Finance)

Mrinal Kanti Banerjee (MK) is an innovator and thought leader in the field of laminated and extruded tube packaging and allied polymer conversion field, including printing and decoration.

MK is a bachelor of Electrical Engineering with instrumentation as a special subject.

WORK EXPERIENCE

• Guardian Plasticoat: Production Engineer; Maintenance Manager; Project Manager. Total working experience - 5 years.

Product range includes single layer thermoplastic coating on paper, kraft paper, cloth, raffia and hessian. Special multilayer coating and laminated paper for defence. As a Project Manager, MK set up Guardian's second converting plant at Gujarat.

• Essel Propack Ltd.: Production Manager, General Manager, Director - Creativity & Innovation (Global). Worked for 33 years, thereafter 2 years as a consultant.

Started as a Customer Service Manager for EP's ultrasonic sealing division. Work included installation and commissioning of ultrasonic sealing machines, which was crucial for the tube end sealing post product filling.

Moved on to the production unit as a Production Manager and was responsible for manufacturing of blown films, tube laminates, printing and tubing.

As Production Planning and Control Manager, was exposed to close co-ordination with the sales force, production centres and had to see to it that all the machines were loaded fully with confirmed orders and execute the same.

Moved on to be the General Manager & Chief General Manager. Work load used to be co-ordination with various factories, sales as well as engineering departments. See to it that productivity, scrap, machine uptime, delivery (OTIF) and morale of the workforce is optimum.

As Director - Creativity & Innovation, the job was to innovate new and breakthrough products and commercialise those at faster speed. Second part of the job was to build the intellectual property of these innovative products and processes. MK has applied patents for 156 innovative products globally and out of that 55 patents got a global grant.

SPECIAL PROJECTS

- Barrier Science: Involving various polymeric materials, solids and emulsion coating.
- Recycling of Plastics: Including post-industrial and post-consumer packaging scrap, scrap to various moulding articles and its end use applications; pyrolysis process technique.





Former Chief Secretary, Govt. of Manipur; Distinguished Fellow, The Energy & Resources Institute (TERI)

A senior IAS officer with decades of experience in policy making and public work. He is an expert on climate change and related environmental issues and policies. He holds the position of a Distinguished Fellow in The Energy & Resources Institute (TERI) as an independent environmental think tank in New Delhi. Currently, he is the Chairman of the 4th State Finance Commission of Manipur.



Dr. U. Venkateswarlu Retired I.A.S.

Former Chief Secretary, Govt. of Tripura

A senior IAS officer of 1986 batch Tripura-Manipur cadre with decades of experience in general administration, planning and statistics. He has served in many senior positions in different ministries including the Ministry of Food Processing Industries under Government of India. He was also the Chairman of the Executive Committee of Tripura Skill Development Mission. Currently, he is settled in Hyderabad.

ADVISORY BOARD



Padma Shri Awardee

Dr. S.Sivaram polymer chemist by profession, is the former Director of CSIR – National Chemical Laboratory, Pune, Shanti Swarup Bhatnagar Fellow of CSIR and J. C. Bose Fellow of DST, Govt. of India. He is currently a Professor Emeritus and INSA Emeritus Scientist at IISER, Pune, Honorary Professor at IISER-Kolkata, Professor of Eminence in Polymer Science at Somaiya Vidya Vihar University, Mumbai. He is a scientist with numerous awards and honors to his credit. He was conferred India's fourth highest civilian Honor Padma Shri by the President of India in 2006.



Prof. Rajagopalan Vasudevan Padma Shri Awardee

Prof Rajagopalan Vasudevan, is Known as Plastic Man of India for innovating the reuse of Plastic waste in building durable and cost effective roads. He is an Indian Scientist in Waste management with his research experience for last five decades. He is currently a Professor in Thiagarajar College of Engineering. He was conferred India's fourth highest civilian Honor Padma Shri by the President of India in 2018.



Former Director of National Institute of Design (NID), India's premier design institute. Currently, he is a Senior Advisor of Design Promotion and Innovation at Confederation of Indian Industry (CII) and Board of Directors of World Design Organisation. He acquired his Masters in Industrial Design from IIT, Bombay and 'Honorary Master of Arts' degree from University for Creative Arts in Farnham, United Kingdom.



Former Director of Ministry of Environment & Forests, Govt. of India. Currently, she is a visiting faculty in TERI School of Advanced Sciences in solid waste management, waste utilisation, industrial ecology. A guide to Doctoral and Post Graduate students in TERI & Amity University. An advisor & consultant in areas of environment & waste management and resource person in Swatch Bharat Mission Exposure Workshops.



He is the Doyen in Plastic Industry with more than 4 decades of experience. Former Promoter & Managing Director of Manjushree Techno pack Ltd, the leading manufacturer of PET containers in India. At present, the Group Chairman and Founder of Manjushree Ventures, Bangalore. He was honored by the President of India for "Outstanding Entrepreneurship", Game Changers of India by Economic Times in London as well as " Life time Achievement Award" by Economic Times Polymers.





A mechanical engineer from Bombay University, he started his career with his family business of manufacturing and marketing engineering capital goods. After 20 years of experience, he started Leevams Incorporated in 2001, stepping in the field of foreign agency representation business, specialising 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. He believes that effective and efficient waste management is the 'need-of-the-hour' in our country.

Sameer Joshi has done his Polymer Engineering from Pune University in 1990 and also Ph.D on plastic waste management in 2017. He has is own plastic moulding unit in Pune and is passionate and works for plastics sustainability, environment and circular economy. He is a Guinness World Record Holder for the world's largest "T" shirt from plastic waste and member of UN environment Marine Litter Action Group.





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. Praveen Bhatia, being a techno-commercial person, has a rich experience of over three decades in the consulting vertical of tube packaging machines. He is currently a member of the Board of esteemed Swiss group Wifag-Polytype India Marketing Private Limited, which is one of the leaders in the world of packaging and printing machines. Additionally, he is a founding member of the Tube Packaging Association in India.



THOUGHT LEADERS



A Founder and Managing Director, Knack Packaging Pvt Ltd, Ahmedabad, Gujarat, established in 1994 for the manufacturing of Multi-colour printed BOPP laminated PP Woven bags for consumer goods and fabrics and also introduce Pinch Bottom Bags which considered as one of the most premium packaging in the world. Today, the company has become the global leader with its exports to more than 75 countries. The company is certified with Grade A in BRCGS food grade for packaging material certification. ISO 9001:2018,ISO 14001:2015 and ISO 45001:2018. Mr. Alpesh Patel done his Post Graduate Diploma in Management from Institute of Management – Nirma University, Ahmedabad.

A Chemical Engineer, started career in 1985 with a German Multinational subsidiary – Hoechst AG. Chemical Engineer. Head Manufacturing Hoechst AG, HDPE, EVA, UHMW, PE Wax. Having 40 years experience in Manufacturing, Projects, Polymer Technical Services, Plant & amp; amp; Process Technical Services, Product Development, Marketing and Brand Building. He is now Chairman & amp; Managing Director, Advance Catalyst Pvt Ltd, deals with speciality additives, master batch for plastic processing. He is the recipient of the Plastics Award 2003 for innovation in Plastics for Agriculture. He is member of AIPMA, IPI,OPPI, SPE etc.





The head of packaging & amp; commercial devices at Takeda Pharmaceuticals. His prior work experience includes working at GlaxoSmithKline, J&J, and a few other companies. He is a Mechanical Engineer with post-graduation in Packaging, Plastics, and Financial management. He has several global awards to his credit and has presented at conferences on devices and packaging. Sriman is an avid traveler and loves reading.

He is an Engineering Graduate from Bangalore University in 1991 and joined into his family business in paper trading and started in manufacturing of paper based flexible packaging. He is the Director, Narsingh Dass & amp; Co Pvt Ltd, New Delhi. He is trained at Central Pulp and Paper Research Institute, Saharanpur and got training in paper coating at Dow Chemical, Michigan, USA and BASF, Germany. He is a Member of Technical Association of Pulp and Paper Institute (TAPPI) since 2004.







Dr. Susmita Dey Sadhu



Dr. Biswajit Panda

Dr. Susmita Dey Sadhu has been working as an Associate Professor at Bhaskaracharya College of Applied Sciences, University of Delhi since 2005. She completed her Masters in Chemistry at the University of Burdwan, WB, followed by a Ph.D. in Rubber Technology from IIT-Kharagpur in 2005. Her research interests include fields such as packaging, blend and composites, nanocomposites and adhesive applications. She has nearly 50 publications in reputable international journals, 2 patents, nearly 10 book chapters, and 3 books published to her credit. She has successfully completed about 5 projects funded by various agencies. She has been associated with FIPS since its inception.

Dr. Biswajit Panda is currently an Associate Professor at Pillai College of Engineering, New Panvel campus, with research interests in Polymer blends and Nano-composites. He obtained his M.Tech from NIT Durgapur and Ph.D. from IIT Bombay. With approximately 14 years of research experience, he has published over 20 research articles in peer-reviewed international journals. Additionally, he serves as a reviewer for several international journals. He has authored around ten books on Engineering Chemistry and has been honored with numerous awards from various organisations.



Dr. Meenakshi Garg

Dr. Meenakshi Garg is currently employed as an Associate Professor at the Department of Food Technology, Bhaskaracharya College of Applied Sciences, University of Delhi. With 17 years of experience, she specialises in teaching Food Science and Packaging. She holds an M.Sc. and Ph.D. degree in Foods and Nutrition from Chaudhary Charan Singh Haryana Agriculture University, Hisar, and a PG Diploma in Packaging from IIP, Mumbai. Her research interests encompass food processing, food packaging, and food science and nutrition. Additionally, she is guiding several Ph.D. students, two of whom have successfully completed their doctoral degrees under her guidance. Her research findings have been published in over 25 international and national peer-reviewed journals. She has also authored numerous books and book chapters in collaboration with national and international publishers. She has been granted two patents and has presented oral and poster papers at various national and international conferences. She has also completed four major and minor research projects as principal investigator. She is a Life Member of the Association of Food Scientists and Technologists (India), Indian Dietetic Association and Green Chemistry.



THE OBJECTIVE

Established in September, 2020, the Foundation for Innovative Packaging and Sustainability is a non-government, non-profit organisation registered under section 8(1) of the Companies Act, 2013 (CIN: U85300MH2020NPL345503). The objectives of the establishment are listed here.

- To create awareness, promote and disseminate knowledge by imparting training programmes, skill development programmes and special economic programmes for the adolescents and adults from all communities, including backward communities like schedule castes, schedule tribes, in the field of packaging and circular economy and to guide them towards a productive future. FIPS would be associated with 'Self-help Women's Group' so to enrich their knowledge in packaging of ethnic food; enhancing the shelf-life for better marketability and profitability, and thus enhancing their own livelihood.
- To promote and work with target beneficiaries, their families and communities through carefully curated programmes with the following aims:
 - o Building aspirations and motivation, non-cognitive skills and digital aptitude.
 - o Providing technical and non-technical exposure to enhance learning and thus offer plethora of opportunities.
 - o Enabling an ecosystem of curiosity, information, knowledge and support to make them 'self-reliant' through residential and non-residential engagements.
 - o Striving to achieve economic prosperity, improvement in livelihood and poverty reduction for the backward communities.
- To conduct research by means of primary and secondary data collection on packaging and circularity; conduct laboratory study and publish reports, white paper and bulletins by engaging the youth of the targeted community, considering their level of aspiration.
- To organise research conclaves, conferences and workshops along with short-term training programmes on specific subjects of packaging and circular economy in collaboration with leading industry associations, reputed educational institutions and skill development councils, for the 'skill development' of the youth belonging to different communities and for upgradation of their knowledge on these specialised topics. And finally, to help make their careers by adopting unique business models.
 - To use technology to develop innovative solutions, products and tools to enable large scale outreach of the organisation and expand its network by partnering with reputed national level institutions like IITs, NITs, colleges and universities towards the

common vision of an equitable and prosperous society. To closely work with the agricultural colleges and universities to identify the various exotic agricultural crops and dairy products to develop suitable packaging system to increase their shelf-life through innovative packaging systems and branding for better marketability, thus helping farmers for better productivity.

• To provide mentorship to the aspirational youth of the country, promoting their 'start-up' initiative by way of innovative technologies, while providing guidance for utilisation of natural resources so as to conceive value-added products to meet requirements of the circular economy.

FOUNDATION FOR INNOVATIVE PACKAGING AND SUSTAINABILITY

Unveiled by

Prof. M. M. Sharma

Padma Vibhushan Awardee, FNA, FRS Distinguished Emeritus Professor of Eminence Former Director of ICT (then UDCT), Mumbai

on

28th January, 2021

to boost sustainable packaging.

In the gracious presence of

Rajani Ranjan Rashmi

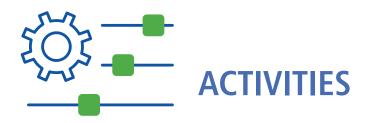
Retired I.A.S., Former Chief Secretary, Manipur

&

Dr. U. Venkateswarlu

Retired I.A.S., Former Chief Secretary, Tripura





INNOVATION



To act as a platform to promote the translational R&D in collaboration with IITs, NITs, colleges and universities in India and overseas in the field of packaging for the upgradation of social needs and benefits.



To carry out basic research for the development of natural resource based alternative packaging materials in collaboration with R&D institutions and industry in India and overseas.



To provide technical support on 'innovative design' in collaboration with the World Design Organization for upgradation of product and package design for the benefit of industry and society.

SUSTAINABILITY



To carry out techno-economic feasibility studies on 'circularity' so as to attract foreign investments towards achieving the 'Make-in-India' mission.



To develop innovative conversion technologies for utilisation of waste, including biomass, so as to help the success of 'waste to wealth' projects, while helping upgrade the livelihood of farmers and the lowincome group of the society.



To act as a platform to provide guidance and technical support towards collection, segregation and recycling of packaging waste so as to create a sustainable and green environment.

POLICY ADVOCACY



To collaborate with NGOs dealing with waste management and prepare a white paper on EPR to support the government for policy making on packaging waste management in India.



To act as the 'think tank' to provide technical support and prepare a 'road map' related to the packaging industry for achieving the mission of 'Atmanirbhar Bharat'.



To collaborate with industry associations, NGOs and government agencies to create a 'brain storming platform' for innovative packaging and circularity.

SKILL DEVELOPMENT



To conduct basic level training programmes / workshops for 'Self-help Women's Group' on innovative packaging of ethnic food available in India.



To conduct 'skill development programmes' for all communities including schedule castes, schedule tribes and backward castes on innovative packaging and circular economy; motivating them for 'start-up' initiatives and making them 'self-reliant'.



To conduct advanced level executive programmes on innovative packaging and circular economy for the benefit of society.



To organise national and international meets on innovative packaging and circularity in collaboration with R&D institutions and the relevant industry.

PUBLICATIONS

Reference Documents

To publish reports, journals, books and monographs on sustainable packaging for the benefit of industry, academia and research scholars.



To carry out market research on circularity in collaboration with NGOs, societies and to publish reports, bulletins for the benefit of industries and academia.



COLLABORATIVE INSTITUTIONS



North East Centre for Technology Application and Reach (NECTAR)

(Set up by Department of Science and Technology, Govt. of India), Shillong



Mahatma Gandhi University Kottayam, Kerala



National Institute of Design, Madhya Pradesh

(An autonomous institute under the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India)



National Institute for Micro, Small and Medium Enterprises (ni-msme)

(An Organisation of the Ministry of MSME, Govt. of India), Hyderabad



Foundation For Innovation And Technology Transfer (FITT) IIT Delhi, New Delhi



University of Science and Technology (USTM) Meghalaya



Bhaskaracharya College Of Applied Sciences New Delhi

COLLABORATIVE ASSOCIATIONS



PHD CHAMBER OF COMMERCE AND INDUSTRY



THE ALL INDIA PLASTICS MANUFACTURERS ASSOCIATION With a desire to provide a momentum in the right direction for the packaging industry, FIPS presents its two prominent brands, namely the ResPack Conference and the FIPSA Awards. By combining a knowledge-sharing platform with the recognition of excellence, FIPS establishes a robust foundation for fostering industry growth.

Pioneering Conference in India on **Responsible** Packaging

RESPECT

A pioneering initiative undertaken by FIPS, it highlights the vital need today for responsible packaging. ResPack is an annual conference, supported by the packaging industry, aims to create awareness about the latest trends and technologies for optimal design, innovative materials and sustainable technologies. The event has already made its mark in the annual calendar of the packaging industry and attracts spontaneous participation from all over India and abroad.

AWARDS FOR RESPONSIBLE PACKAGING

The FIPSA Awards for Excellence in Responsible Packaging have been established to recognise the efforts of packaging manufacturers, users as well as designers and innovators who make notable contributions to the realm of Responsible Packaging. Supported by the National Institute of Design, Madhya Pradesh under the Ministry of Commerce & Industry, Government of India as a Knowledge Partner, FIPSA gauges its success by the extensive participation of competitive entries, including those from start-ups and students.



Book, the core element connotes knowledge, while the cube embedded within the book signifies the operational zone of packaging. The circularity is captured by the earth and its clockwise motions. The graphics are toned in colours to imply earth forest (fresh green), pure water (dark blue) and fresh air (light blue).

FOUNDATION FOR INNOVATIVE PACKAGING AND SUSTAINABILITY

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