

One Week Online Faculty Development Programme

“Smart Materials for Sustainable Development”

03.08.2026 to 07.08.2026

Session	Topic	SDG Goals	Resource Person
Session 1	Green Chemistry Pathways in Smart Materials for a Sustainable Future	SDG 12 - Responsible Consumption and Production SDG 9 - Industry, Innovation and Infrastructure SDG 13 - Climate Action SDG 6 - Clean Water and Sanitation	Dr. Savita Dixit (HAG), Professor, Department of Chemistry, M.A.N.I.T., Bhopal
Session 2	Smart Materials for Biomedical Application	SDG 3 - Good Health and Well-being SDG 9 - Industry, Innovation and Infrastructure SDG 12 - Responsible Consumption and Production	Dr. A. Hemalatha, Associate Professor, Department of Mechanical Engineering, K.L.N. Engineering College, Pottapalayam, Sivagangai Dt.
Session 3	Basics of Photocatalysis and Its Applications	SDG 6 - Clean Water and Sanitation SDG 7 - Affordable and Clean Energy SDG 12 - Responsible Consumption and Production SDG 13 - Climate Action	Prof. R. Renganathan, UGC-Emeritus Fellow (Retd.), School of Chemistry, Bharathidasan University, Tiruchirappalli
Session 4	Role of AI in Recent Material Research	SDG 9 - Industry, Innovation and Infrastructure SDG 12- Responsible Consumption and Production SDG 7- Affordable and Clean Energy SDG 13- Climate Action	Dr. B. Karthikeyan, Associate Professor, Department of Chemistry, Annamalai University, Annamalai Nagar, Chidambaram
Session 5	Nano-biomaterials for Targeted Chemotherapy with Natural Drugs towards Human Gastric Cancer	SDG 3 - Good Health and Well-being SDG 9 - Industry, Innovation and Infrastructure SDG 12 - Responsible Consumption and Production	Dr. J. Annaraj, Associate Professor & Head, Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Madurai
Session 6	Biosensors and Diagnostics	SDG 3 - Good Health and Well-being SDG 9 - Industry, Innovation and Infrastructure	Dr. M. Jayalakshmi, Associate Professor & Head, Department of Immunology, School of Biological Sciences, Madurai Kamaraj University, Madurai

Session 7	Sustainable Energy & Need of Future Battery	SDG 7 - Affordable and Clean Energy SDG 9 - Industry, Innovation and Infrastructure SDG 12 - Responsible Consumption and Production SDG 13 - Climate Action	Dr. A. Selvan , Associate Professor & Head, Department of Chemistry, Government Arts College for Women, Nilakottai
Session 8	Special and Smart Materials for Aerospace	SDG 9 - Industry, Innovation and Infrastructure SDG 12 - Responsible Consumption and Production SDG 13 - Climate Action	Dr. N. Sivasubramanian , Senior Scientist & Former Chief General Manager (Retd.), ISRO, Thiruvananthapuram, Kerala
Session 9	Turning CO₂ into Opportunity: Making Sustainable Cyclic Carbonates and Polycarbonates	SDG 13 - Climate Action SDG 13 - Climate Action SDG 9 - Industry, Innovation and Infrastructure	Dr. Gulzar Ahmad Bhat , Assistant Professor, Department of Chemistry, University of Kashmir, Srinagar
Session 10	Biomedical Transducer	SDG 3 - Good Health and Well-being SDG 9 - Industry, Innovation and Infrastructure SDG 10 - Reduced Inequalities	Mr. Pandiyan Arumugam , Technical Process Management Staff Engineer, Flex, Singapore & Mr. Venkatesh Arumugam , Senior Manager, Advanced Sourcing & Supply Chain, Flex, Chennai
Session 11	Sustainable Composites for Lightweight and Structural Applications	SDG 9 - Industry, Innovation and Infrastructure SDG 13 - Climate Action	Dr. Vinod Ayyappan , Assistant Professor (SG), Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai
Session 12	Electrosens Power Innovation	SDG 7 - Affordable and Clean Energy SDG 9 - Industry, Innovation and Infrastructure SDG 12 - Responsible Consumption and Production SDG 13 - Climate Action	Electrosens Power Innovation , Madurai, Tamil Nadu