

ADVANCED MATERIALS AND CHARACTERIZATION CONFERENCE

APRIL 25-26 & 28, 2023

Organized by SG LAB FORUM & ISAS

Program Highlights

April 25, 2023 – Py-GCMS Seminar (Expand your lab capabilities using Pyrolysis GCMS)

April 26, 2023 – Advanced Materials Research and Characterization techniques

April 27, 2023 – Visit to ANACON Lab Expo (Networking Lunch)

April 28, 2023 - Recent Advances in Analytical Sciences

TECHNICAL PROGRAM AGENDA

Time	Title	Speaker
April 25, 2023 (Tuesday), Venue: The Fern Goregaon Hotel, Mumbai – Theme: Expand your lab capabilities using Py-GCMS		
9.00 – 9.45	Latest developments in GCMS Technique: MS/MS Tools and Hydro inert	Dr Manoj Surwade , Product Manager, Agilent Technologies, Mumbai
9.45 – 10.30	Recent Developments in Analytical Pyrolysis Technology: New Tools and Accessories	Dr Sathrugnan Karthikeyan , Technical Marketing Manager, Frontier Laboratories, Singapore
10.30 – 11.00	Tea Break	
11.00 – 11.30	Use of Py-GCMS in Biomass Research studies	Prof. R. Vinu Professor, Dept of Chemical Engineering, IIT, Chennai
11.30 – 12.00	Environmental Microplastics: latest updates & their presence in table salt	Prof. K. Mohanty Professor, Dept of Chemical Engineering, IIT, Guwahati

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12.00 – 12.30	Detection of trace level microplastics by Py-GCMS	Dr Sathrugnan Karthikeyan, Technical Marketing Manager, Frontier Laboratories, Singapore
12.30 – 14.00	NETWORKING LUNCH	
14.00 – 15.00	Py-GCMS Applications for Polymer, Rubber, Forensic, EFS industries	Dr Sathrugnan Karthikeyan, Technical Marketing Manager, Frontier Laboratories, Singapore
15.00 – 15.30	Waste Plastics characterization by Py-GCMS	Prof. R. Vinu Professor, Dept of Chemical Engineering, IIT, Chennai
15.30 – 16.00	A new magic Chemisorber for TD-GCMS Applications	Dr Sathrugnan Karthikeyan, Technical Marketing Manager, Frontier Laboratories, Singapore
16.00 – 16.30	Tea Break	
16.30 – 17.30	Short Demo on F-Search Software for Py-GCMS data interpretation & Group discussion	

The day Ends.

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Time	Title	Speaker
April 26, 2023 (Tuesday), Venue: The Fern Goregaon Hotel, Mumbai; Theme: Advanced Materials and Characterization		
Session 1: Chair- Prof R. Vinu, IIT M		
9.00 – 9.20	Greener and Energy-efficient intensification of nanomaterial processes through cavitation	Prof Sivakumar Manickam, Professor, Dept of Petroleum and Chem Eng Universiti Teknologi Brunei, Brunei Darussalam
9.20 – 9.40	Cost Effective Electrocatalysts for Sustainable Metal Air Batteries	Dr T. Maiyalagan, Associate Professor, Dept of Chemistry SRM Institute of Sci. and Tech., Chennai
9.40 – 10.00	First-row transition metal-based molecular catalysts for hydrogen evolution reaction (HER)	Dr Arnab Dutta, Associate professor, IDP in Climate studies Indian Institute of Technology, Mumbai
10.00 – 10.20	Nano materials characterization	Prof. Prafulla K Jha Professor, Dept of Physics, M S University of Baroda, Vadodara
10.20 – 10.40	Tea Break	
Session 2		
Chair: Prof Kaustuba Mohanty, IIT Guwahati		
10.40 – 11.00	Towards a real-time release of blends using NIR spectroscopy at commercial scales	Dr Gautam Samanta VP, QbD, CIPLA Ltd, Mumbai
11.00 – 11.20	Detection of emerging environmental contaminants by GCxGC-TOFMS	Prof Suparna Mukherji, Professor, Dept of Environmental Science and Eng. IIT, Mumbai

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11.20 – 11.40	Elemental characterization of structural materials using Total reflection X-Ray Fluorescence (TXRF)	Dr Sangita Dhara Lenka, Scientific Officer, Fuel Chemistry Division Bhabha Atomic Research Centre, Mumbai
11.40 – 12.00	High Performance Compact Mass Spectrometer	Dr Harshawardhan Agarkar Regional Manager, Mass Spectrometry Div. Advion Inc, Hyderabad
12.00 – 13.40	NETWORK LUNCH	
Session 3	Chair: T. Maiyalagan, SRM University, Chennai	
13.40 – 14.00	Synthesis, Characterisation and Application of a Unique Inorganic Nanostructure as a Universal Drug Delivery Vehicle	Prof. Deepa Kushalani Professor, Dept of Chemistry, Tata Institute of Fundamental Research, Mumbai
14.00 – 14.20	Advanced Materials for energy storage devices and its characterization	Prof. Habib Pathan Associate Professor, Savitribai Phule Pune University, Pune.
14.20 – 14.40	Development of Ion Imprinting Polymers and Molecular imprinting polymer for trace contaminant removal	Prof. Anupama Kumar Professor & Head, Dept of Chemistry, Visvesvaraya National Institute of Technology (VNIT), Nagpur
14.40 – 15.00	Improved characterization of malodours from recycled plastics using TD–GC×GC–TOF MS	Dr Kiran Piduru Market Development Specialist. Markes International Ltd, UK
15.00 – 15.20	Pyrolysis-GCMS for advanced materials characterization: 3D Printing polymers, Coating materials, HIPS	Dr Sathrugnan Karthikeyan Regional Technical Marketing Manager Frontier Laboratories, Singapore

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15.20 – 15.40	Tea Break	
Session 4	Chair: Prof Suparna Mukherji, IIT Mumbai	
15.40 – 16.00	'Regulatory Compliance in Pharmaceutical Analytical Development- Current Trends & Practices'	Dr. Archana Bahuguna Regulatory & Quality Compliance SME Dehradun
16.00 – 16.20	Pulsed RF GD-OES, fast and flexible Tool for Material Elemental Characterisation, Coatings, Thin Films & Corrosion studies	Mr Vinay Naik Technical Director, Marketing. ASE Ltd, Mumbai
16.20 – 16.35	Molecular Level Characterization of Sustainable Aviation Fuels by Advanced Analytical Techniques.	Dr Ravindra Kumar Chief Research Manager Indian Oil, Faridabad
16.35 – 16.50	Characterization of Carbon Black using Particle Size Analyzer (PSA)	Mr Gaurang Parikh, Sr. Manager, R&D CEAT Ltd, Gujarat
16.50 – 17.05	Extraction of silica from rice husk ash and bagasse ash, comparing it through XRD analysis	Mr. Muskan Bharadia Chemical Engineering Student MIT Academy of Engineering, Pune
17.05 – 17.15	Closing Remarks and Vote of Thanks	

The day Ends.

April 27, 2023 – ANACON Visit, Network Lunch and Sight Seeing (Free and Easy)

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April 28, 2023 – Venue: Anacon, Bombay Exhibition Centre

Time	Title	Speaker
Theme: Recent Advances in Analytical Sciences		
Session 1 – Pharmaceutical Applications		
11.00 – 11.30	How Analytical Technologies help improving Productivity & Efficiency'	Dr Archana Bahuguna, Regulatory & Compliance
11.30 – 12.00	Recent Advancement in Analytical Science: Sample Preparation Kit	Dr Akshay Holkar, Account Manager, Chromatography, Avantor, Mumbai
12.00 – 12.30	Method Development and Validation – Case study	Dr <u>Amol Yelgaonkar</u> Director Business Development, Q&C, Propharma, Mumbai, India
12.30 – 13.00	Panel Discussion – All Panellists	
13.00 – 14.30	NETWORK LUNCH	
14.30 – 15.00	Py-GCMS for emerging contaminants: Microplastics and VOCs	Dr Sathrugnan K, SG LAB FORUM Singapore
15.00 – 15.30	Simultaneous, targeted analysis of common fumigants found in various food matrices with automated multi-step enrichment–headspace–trap (MSE–HS–trap) and GC–MS	Dr Kiran Piduru, Markes International Ltd, UK
15.30 – 16.00	LC/MSMS profiling- residues and extractables	Dr Krishna Priya BCP, Mumbai - tentative
16.00 – 16.30	Panel Discussion- All Panellists	

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