Microfluidics and Lab-on-a-Chip (MLC26)

30 Apr 2026 - 01 May 2026

CONFERENCE PROGRAMME

Thursday, 30th April 2026

14:00	**Inauguration**
14:05	**Welcome Address** **Sanjay Bajaj** , CEO & MD , Glostem Private Limited , India
14:10	**Address by the Chief Guest** **Shantanu Bhattacharya** , Director , CSIR-Central Scientific Instruments Organisation , India
14:20	**Session 1: FOUNDATIONS OF MICRO & NANOFLUIDICS: ENGINEERING & SCALABLE FABRICATION TECHNOLOGIES**
14:25	**Integrated Lab-on-Chip Architectures for Point-of-Care Bio and Environmental Sensing** **Satish Kumar Dubey** , Associate Professor, Mechanical Engineering , BITS Pilani, Hyderabad , India
14:45	**Diagnostics using Impedance Spectroscopy** **Shantanu Bhattacharya** , Director , CSIR-Central Scientific Instruments Organisation , India
15:05	**Translating Electronic Field Effect Transistors from Lab to Practice** **Chirasree Roy Chaudhuri** , Associate Dean, Consultancy Professor , Indian Institute of Engineering Science and Technology, Shibpur , India
15:25	**Development of Innovative Point-of-Care Microdevices** **Amit Agrawal** , Professor, Mechanical Engineering , Indian Institute of Technology Bombay , India
15:45	**Session 2: FRONTIER CHEMISTRY: BIOORGANIC, MEDICINAL, AND SYNTHETIC CHEMISTRY USING MICROFLUIDICS**
15:50	**Microfluidic synthesis:-Application in Medicinal and Synthetic Chemistry** **Gary Tarver** , Site Head , Chemveda Life Sciences , United Kingdom
16:10	**Microfluidics as a Scalable Strategy for Continuous-Flow Chemical Synthesis** **Paul Watts** , Research Chair in Microfluidic Bio/Chemical Processing , Nelson Mandela University , South Africa

16:30	**Machine Learning Meets Microfluidics: Rapid Optimisation of Continuous-Flow API Synthesis** **Cloudius Ray Sagandira** , Principal Researcher , Council for Scientific and Industrial Research , South Africa
16:50	**Session 3: THE MICROFLUIDICS INNOVATION ECOSYSTEM 1**
16:55	**High Content Screening in Microfluidic Devices** **Amit Bhat** , Business Development Manager , Molecular Devices , India
17:10	**Microfluidic device fabrication using soft lithography** **Devendra Rawat** , National Sales Manager , SIMCO Global Technology & Systems , India
17:25	**Digital Posters 1-10**

Friday, 1st May 2026

13:30	**Day 2 Opening Session & Highlights from Day 1**
13:35	**Robust Viral RNA Sensing Using Non-Negative Matrix Factorization of Optical and Electrochemical Signals** **Shantanu Bhattacharya** , Director , CSIR-Central Scientific Instruments Organisation , India
13:50	**A Vision-Guided and Deep-Learning Based Automation System with PCB-Based Digital Microfluidic Biochips** **Sudip Roy** , Associate Professor, Computer Science and Engineering , Indian Institute of Technology, Roorkee , India
14:00	**Session 4: DIAGNOSTICS, BIOSENSORS, AND BIOMEDICAL MICROFLUIDIC DEVICES**
14:05	**From Lab to Clinical Trial: Lateral Flow Prototyping for Childhood Diarrhea and Sepsis, and Modified Microfluidic Systems for Particle Engineering** **Amit Asthana** , Professor and Head, Pharmaceutical Analysis , NIPER Hyderabad , India
14:25	**Designing wearable sweat sensors - bioinspired approaches** **Siddhartha Panda** , Professor, Chemical Engineering , Indian Institute of Technology Kanpur , India
14:45	**Emerging Microfluidics: Applications in Energy and Healthcare** **Bhanu Prakash** , Scientist E (Associate Professor) & Group Leader, Microfluidics Research Laboratory , Institute of Nano Science & Technology , India
15:05	**Session 5: PRECISION ANALYSIS USING MICROFLUIDICS: BIO-ANALYTICAL SYSTEMS & OMICS**
15:10	**Sensors & Remediation for Environment Monitoring; A step towards Sustainability** **Suman Singh** , Scientist-F , CSIR-Central Scientific Instruments Organisation , India
15:30	**Frugal Microfluidics for Public Health: Rapid Detection of Ethanol Content and Food Adulterants** **Naresh Kumar Mani** , Professor, Biotechnology , Manipal Academy of Higher Education, Manipal , India
15:50	**Advance your Single cell Lab on Chip for successful omics application** **Manjunath Siddaramaiah** , Diagnostics and Genomics Senior FAS - APAC , Cytiva , India
16:05	**Session 6: DRUG DEVELOPMENT AND DEVELOPMENT OF DELIVERY SYSTEMS**

16:10	**Tuning microreactor synthesised quantum dots for targeted imaging and delivery** **Dhananjay Bodas** , Scientist , MACS - Agharkar Research Institute , India
16:30	**Programmable ultrasonic fields enhances intracellular delivery in cell clusters** **Ashis Kumar Sen** , Professor, Mechanical Engineering , Indian Institute of Technology Madras , India
16:50	**Design and Fabrication of Micro Array Batch for transdermal painless vaccine/drug delivery platform** **Tarun Kanti Bhattacharyya** , Institute Chair Professor , Indian Institute of Technology Kharagpur , India
17:10	**Session 7: THE MICROFLUIDICS INNOVATION ECOSYSTEM 2**
17:15	**Bridging Engineering and Scalable Manufacturing of Micro- and Nanofluidic Systems for Advanced Biomedical Diagnostics** **Ragavendran Sivakumarasamy** , CEO & Founder , Point-of-Care Microfluidics Private Limited , India
17:30	**Digital Posters 11-20**
18:25	**Closing Remarks** **Sanjay Bajaj** , CEO & MD , Glostem Private Limited , India