


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

30 Apr 2026 - 01 May 2026

## CONFERENCE PROGRAMME

### Thursday, 30th April 2026

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| 14:00 | **Inauguration** |
| 14:05 | **Welcome Address**<br>**Sanjay Bajaj** , CEO & MD , Glostem Private Limited , India |
| 14:10 | **Address by the Chief Guest**<br>**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**<br>**Satish Kumar Dubey** , Associate Professor, Mechanical Engineering , BITS Pilani, Hyderabad , India |
| 14:45 | **Diagnostics using Impedance Spectroscopy**<br>**Shantanu Bhattacharya** , Director , CSIR-Central Scientific Instruments Organisation , India |
| 15:05 | **Translating Electronic Field Effect Transistors from Lab to Practice**<br>**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**<br>**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**<br>**Gary Tarver** , Site Head , Chemveda Life Sciences , United Kingdom |
| 16:10 | **Microfluidics as a Scalable Strategy for Continuous-Flow Chemical Synthesis**<br>**Paul Watts** , Research Chair in Microfluidic Bio/Chemical Processing , Nelson Mandela University , South Africa |

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| 16:30 | **Machine Learning Meets Microfluidics: Rapid Optimisation of Continuous-Flow API Synthesis**<br>**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**<br>**Amit Bhat** , Business Development Manager , Molecular Devices , India |
| 17:10 | **Microfluidic device fabrication using soft lithography**<br>**Devendra Rawat** , National Sales Manager , SIMCO Global Technology & Systems , India |
| 17:25 | **Digital Posters 1-10** |

## Friday, 1st May 2026

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| 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**<br>**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**<br>**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**<br>**Amit Asthana** , Professor and Head, Pharmaceutical Analysis , NIPER Hyderabad , India |
| 14:25 | **Designing wearable sweat sensors - bioinspired approaches**<br>**Siddhartha Panda** , Professor, Chemical Engineering , Indian Institute of Technology Kanpur , India |
| 14:45 | **Emerging Microfluidics: Applications in Energy and Healthcare**<br>**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**<br>**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**<br>**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**<br>**Manjunath Siddaramaiah** , Diagnostics and Genomics Senior FAS - APAC , Cytiva , India |
| 16:05 | **Session 6: DRUG DEVELOPMENT AND DEVELOPMENT OF DELIVERY SYSTEMS** |

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| 16:10 | **Tuning microreactor synthesised quantum dots for targeted imaging and delivery**<br>**Dhananjay Bodas** , Scientist , MACS - Agharkar Research Institute , India |
| 16:30 | **Programmable ultrasonic fields enhances intracellular delivery in cell clusters**<br>**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**<br>**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**<br>**Ragavendran Sivakumarasamy** , CEO & Founder , Point-of-Care Microfluidics Private Limited , India |
| 17:30 | **Digital Posters 11-20** |
| 18:25 | **Closing Remarks**<br>**Sanjay Bajaj** , CEO & MD , Glostem Private Limited , India |