



International Conference on Translational Biophotonics in Healthcare (ICTBH-26)
4-6 February, 2026
Manipal School of Life Sciences, Manipal Academy of Higher Education,
Manipal, India

Day 1 (04-02-2026)	
8:15 am – 9:00 am	<i>Breakfast</i>
9:00 am- 9:30 am	<i>Registration</i>
9:30 am – 10:15 am	Inauguration
10:15 am – 10:30 am	<i>High Tea</i>
10:30 am – 11:00 am	Keynote address Dr. Kaustabh Kumar Maiti CSIR-NIIST, Kerala, India <i>Advancement of Diagnostic Platform for Clinical Translation using Surface-Enhanced Raman Spectroscopy</i>
11:00 am – 11:10 am	Session 1 Chair: Dr. Shovan Majumder RRCAT Indore, Madhya Pradesh, India & Co-Chair: Sajan D. George Manipal Institute of Applied Physics, MAHE Manipal, India
11:10 am – 11:30 am	Dr. Matthew R. Foreman Nanyang Technological University, Singapore <i>Counting Every Molecule: Computational Strategies for High-Throughput Digital Assays</i>
11:30 am – 11:50 am	Dr. Pornsak Srisungsitthisunti Thai-French Technology Innovation Institute King Mongkut's University of Technology, Bangkok, Thailand <i>Translational Electrochemistry and Laser Processing for Corrosion Evaluation of Medical Materials</i>
11:50 am – 12:10 pm	Dr. Lim Way Soong Multimedia University, Melaka, Malaysia <i>Intelligent Cloud-Based Pressure Sensor Grid for Healthcare Monitoring</i>
12:10 pm -12:30 pm	Dr. Jasleen Lugani IIT Delhi, New Delhi, India <i>Integrated Photonics for Biomedical Applications</i>
12:30 pm- 12:50 pm	Dr. Prasanta Kumar Datta IIT Kharagpur, West Bengal, India <i>THz Spectroscopy and Fluorescence Lifetime Imaging Microscopy for Biological Applications</i>
12:50 pm– 2:00 pm	<i>Lunch break</i>

2:00 pm -3:00 pm	Poster Session 1/ Oral Presentation 1
3:00 pm – 3:10 pm	Session 2: Chair: Dr. Murali Krishna Chilakapati ACTREC Mumbai, Maharashtra, India & Co-Chair: Dr. Raghavendra U. Manipal Institute of Technology, MAHE Manipal, India
3:10 pm – 3:30 pm	Dr. Rajapandiyam Panneerselvam SRM University-AP, Andhra Pradesh, India <i>From Nanostructures to Real Samples: Advances in SERS Substrates for Biological and Environmental Applications</i>
3:30 pm – 3:50 pm	Dr. Chandima J. Narangoda University of Sri Jayewardenepura, Sri Lanka <i>Development of Light Controlled Slow-Release Transdermal Drug-Loaded Porous Rubber Materials</i>
3:50 pm – 4:05 pm	Dr. Jayeeta Lahiri Banaras Hindu University, Uttar Pradesh, India <i>Ultrathin Hexagonal Boron Carbon Nitride Films as Universal SERS Substrate</i>
4:05 pm – 4:20 pm	<i>Tea break</i>
4:20 pm – 4:30 pm	Session 3 Chair: Dr. Matthew R. Foreman Nanyang Technological University, Singapore & Co-Chair: Dr. Shama Prasada K. Manipal School of Life Sciences, MAHE Manipal. India
4:30 pm – 4:50 pm	Dr. Yury Kistenev (Online) Tomsk State University, Russia <i>IR and Terahertz Spectroscopy and Machine Learning for Medical and Ecological Applications</i>
4:50 pm – 5:10 pm	Dr. Subrata Das CSIR-NIIST, Kerala, India <i>X-ray Scintillator Screens Based on the Efficient Photoconversion of Innovative Phosphor Powders and Composites</i>
5:10 pm -5:30 pm	Dr. Sampath U Gunathilake University of Sri Jayewardenepura, Sri Lanka <i>Bio-based Solutions for Translational Biophotonics in Healthcare</i>
5:30 pm- 5:50 pm	Dr. Rishikesh Pandey IIT Roorkee, India <i>Morpho-Molecular Microscopy: Transforming Cancer Diagnosis and Surgical Decision-Making</i>
5:50 pm – 6:00 pm	<i>Industry talk 1- Dr. Tanay Desai, ZEISS India</i> <i>Volumetric Imaging via Fourier Lightfield Microscopy</i>
6:30 pm onwards	<i>Dinner</i>

Day 2 (05-02-2026)	
8:15 am – 9:00 am	<i>Breakfast</i>
9:00 am – 9:10 am	Session 4 Chair: Dr. Kaustabh Kumar Maiti CSIR-NIIST, Kerala, India & Co-Chair: Dr. Santhosh Chidangil Manipal Institute of Applied Physics, MAHE Manipal, India
9:10 am – 9:30 am	Dr. Murali Krishna Chilakapati ACTREC Mumbai, Maharashtra, India <i>Raman Theranostics in Cancer Across Species: Insights from Animal Models</i>
9:30 am – 9:50 am	Dr. Arunasish Layek Adamas University, West Bengal, India <i>Single Nanocrystals Spectroscopic Correlation of Defect and Dopant Photoluminescence</i>
9:50 am – 10:10 am	Dr. Ankur Gogoi Jagannath Barooah University, Assam, India <i>Light Scattering in Particulate and Turbid Media: Principles, Measurements, and Biophotonic Applications</i>
10:10 am – 10:30 am	Dr. Pabitra Nath Tezpur University, Assam, India <i>Ultrasensitive Detection of Mycobacterium tuberculosis Cells Using a Smartphone</i>
10:30 am – 10:45 am	<i>High Tea</i>
10:45 am – 10:50 am	Session 5 Chair: Dr. Jayeeta Lahiri Banaras Hindu University, Uttar Pradesh, India & Co-Chair: Dr. Babitha K.S. Manipal School of Life Sciences, Manipal, India
10:50 am – 11:10 am	Dr. Surya Pratap Singh IIT Dharwad, Karnataka, India <i>Stable Isotope Coupled Raman Imaging for Translational Biophotonics</i>
11:10 am – 11:30 am	Dr. Naveen V. Kulkarni Amrita Vishwa Vidyapeetham, Kerala, India <i>Structure-Engineered Uranyl Complexes: Luminescence Enhancement and Biological Evaluation</i>
11:30 am – 11:50 am	Dr. Uttam Mrinal Pal IIITDM Kancheepuram, Tamil Nadu, India <i>GynoSight v3.0: Real-Time Multispectral Transvaginal Probe for Early Cervical Cancer Detection</i>
11:50 am – 12:10 pm	Dr. Jamuna A Bai JSS Academy of Higher Education & Research, Karnataka, India <i>Imaging the Future of Healthcare: The India BioImaging National Network</i>
12:10 pm -12:30 pm	Dr. Anil K Thakur Hindustan Institute of Technology and Science, Tamil Nadu, India <i>Light Driven Pulley-System</i>

12:30pm- 12:50 pm	Dr. Sanchita Roy University of Science & Technology Meghalaya, India <i>Biophotonics of Black Turmeric: Linking Light Scattering-guided Signatures to Antibacterial Efficacy</i>
12:50 pm – 2:00 pm	<i>Lunch break</i>
2:00 pm -3:00 pm	Poster Session 2/ Oral Presentation 2
3:00 pm – 3:10 pm	Session 6 Chair: Dr. Somenath Chatterjee Sikkim Manipal Institute of Technology, Sikkim, India & Co-Chair: Dr. Manjunath B. Joshi Manipal School of Life Sciences, Manipal, India
3:10 pm – 3:30 pm	Dr. Rajib Biswas Tezpur University, Assam, India <i>Unleashing the Potentialities of Intensity Modulation Based Schemes for Efficient Signal Readout</i>
3:30 pm – 3:50 pm	Dr. Nithyanandan Kanagaraj IIT Hyderabad, Telangana, India <i>Towards a Multifunctional 2-micron Thulium-doped Fiber for High-precision Biomedical Applications</i>
3:50 pm – 4:10 pm	Dr. Fu-Jen Kao (Online) National Yang Ming Chiao Tung University, Taipei, Taiwan <i>Towards Tera-Voxel Multiview Expansion Tomography</i>
4:10 pm – 4:25 pm	<i>Tea break</i>
4:25 pm - 4:35 pm	Session 7 Chair: Dr. Surya Pratap Singh IIT Dharwad, Karnataka, India & Co-Chair: Dr. Niranjana Sampathila Manipal Institute of Technology, MAHE Manipal India
4:35 pm – 4:55 pm	Dr. K. K. Mahato Manipal School of Life Sciences, Manipal, India <i>Spectroscopic Innovations in Translational Disease Diagnostics</i>
4:55 pm – 5:15 pm	Dr. Indrajit Shown Hindustan Institute of Technology and Science, Tamil Nadu, India <i>Photon-Matter Coupling and Optical Density of States Engineering in S-Scheme Photocatalysts for Solar-to-Chemical Energy Conversion</i>
5:15 pm – 5:35 pm	Dr. Rajesh Kumar IIT Ropar, Punjab, India <i>AI-Driven Quantitative Assessment of Collagen Remodelling in Histopathology</i>
5:35 pm- 5:45 pm	<i>Industry talk 2- Mr. Shiva Prasad P. S., DSS Imagetech Pvt. Ltd. Introduction to the Newly Launched FV5000 Confocal Microscope</i>
6:30 pm onwards	Cultural night and Gala dinner

Day 3 (06-02-2026)	
8:15 am – 9:00 am	Breakfast
9:00 am – 9:10 am	Session 8 Chair: Chair: Dr. Indrajit Shown Hindustan Institute of Technology and Science, Tamil Nadu, India & Co-Chair: Dr. Sanchita Roy University of Science & Technology Meghalaya, India
9:10 am – 9:30 am	Dr. Tapas Kumar Kundu JNCASR, Karnataka, India <i>Recent Advances in Precision Medicine and Cancer</i>
9:30 am – 9:50 am	Dr. Khageshwar Sahu RRCAT Indore, Madhya Pradesh, India <i>Harnessing Light for Precision Medicine: Photodynamic and Photobiomodulatory Approaches for Infection Control and Regenerative Medicine Applications</i>
9:50 am – 10:10 am	Dr. Sweta Rani University of Delhi, New Delhi, India <i>Femtosecond Laser-Enabled Fabrication of Functional Biophotonic Micro/Nanostructures</i>
10:10 am – 10:30 am	Dr. Sudha Mokkalapati (Online) Monash University, Australia <i>Novel 2D Materials: Synthesis and Applications</i>
10:30 am – 10:45 am	High Tea
10:45 am – 10:55 am	Session 9 Chair: Dr. Khageshwar Sahu RRCAT Indore, Madhya Pradesh, India & Co-Chair: Dr. Srinivas Mutalik Manipal College of Pharmaceutical Sciences, MAHE Manipal, India
10:55 am – 11:15 am	Dr. Somenath Chatterjee Sikkim Manipal Institute of Technology, Sikkim, India <i>Surface Topography of Materials from Microscopic to Nanoscale</i>
11:15 am – 11:35 am	Dr. Vyas Akondi IISER Berhampur, Odisha, India <i>Wavefront Sensing for Ophthalmic Imaging and Vision Science</i>
11:35 am – 11:55 am	Dr. Shaiju Nazeer Yenepoya University, Mangalore, India <i>Seeing Cancer Before It Forms: How Fluorescence and Infrared Spectroscopy Reveal Malignancy-Associated Changes in the Oral Cavity</i>
11:55 am – 12:15 pm	Dr. Annamalai Muthusamy Manipal School of Life Sciences, Manipal, India <i>He-Ne Laser-Mediated Alterations in Physio-biochemical Traits and Plant Bioactive Compounds</i>
12:15pm – 12:35 pm	Dr. R. S. Jayasree Sree Chitra Tirunal Institute for Medical Sciences & Technology, Thiruvananthapuram, Kerala, India <i>Recent Advances in Biophotonics Research</i>
12:35 pm – 2:00 pm	Lunch break

2:00 pm – 2:10 pm	<p style="text-align: center;">Session 10 Chair: Dr. Suresh Kumar Shetty Kasturba Medical College, Mangalore, India & Co-Chair: Dr. Chetana Chandrashekar Manipal College of Dental Sciences, MAHE Manipal, India</p>
2:10 pm – 2:30 pm	<p style="text-align: center;">Dr. J. B. Jeeva VIT Vellore, Tamil Nadu, India <i>Role of Optical Sensors in Healthcare</i></p>
2:30 pm – 2:50 pm	<p style="text-align: center;">Dr. Satyajit Patra Elevance Health, Ohio, USA <i>From Photonic Signals to Actionable Intelligence: Designing AI-Enabled Clinical Decision Pathways for Translational Imaging</i></p>
2:50 pm -3:10 pm	<p style="text-align: center;">Dr. Subhadeep Banerjee BITS-Pilani, Goa, India <i>Single Benzene Fluorescent Dyes for Bioimaging Applications - A Journey from Academia to Entrepreneurship</i></p>
3:10 pm -3:20 pm	<p style="text-align: center;">Dr. Neeraj Pandey IRDE, DRDO, Uttarakhand, India <i>Computational Phase Microscopy using Transport of Intensity Equation</i></p>
3:20 pm-3:30 pm	<p style="text-align: center;"><i>Industry Talk 3- Dr. Gitanjal Deka, Prospexis Research Pvt. Ltd.</i> <i>Bio-mimicking Diatoms to Simulate Natural Terahertz Material</i></p>
3:30 pm - 4:30 pm	<p style="text-align: center;">Valedictory Ceremony and Prize Distribution</p>
4:30 pm onwards	<p style="text-align: center;"><i>Tea break and Certificate Distribution</i></p>