

## 📅 Day 1: SAIL25


📍 **Venue:** Ground Floor, Library and Information Building

📅 **Date:** 23rd April, 2025

Time	Session	Speaker /Affiliation	Title of the talk
08:30 - 09:00	Registration & Welcome Coffee		
09:00 - 09:30	Opening Ceremony & Welcome Address	Conference Chair Prof. Sajal Biring Ming Chi University of Technology	Session chair: Dr. Shih-Hsin Chang
09:30 - 10:15	Keynote Speech 1	Prof. Peter A. Lieberzeit University of Vienna	Highly Defined, Single or Multiple: Molecularly Imprinted Nanoparticles Targeting Biospecies for Sensors and Assays
10:15 - 10:45	Invited Talk 1	Dr. Kai Chen Victoria University of Wellington	Probing Excited-State Dynamics in Optoelectronic Materials via Ultrafast Broadband PL Spectroscopy
10:45 - 11:00	Oral Presentation 1	Mr. Po-Hsiu Su National Taipei University of Technology	Data Prediction of NBA Player Improvement: Model Selection and Optimization
11:00 - 11:15	Oral Presentation 2	Ms. Ni Putu Devi Kristina Ming Chi University of Technology	Fe <sub>3</sub> O <sub>4</sub> -Au core-shell nanoparticles integrated with MXene nanosheets for rapid SERS detection and hyperthermia treatment
11:15 - 11:30	Oral Presentation 3	Mr. Rakha Saputra Ming Chi University of Technology	Multivariate SnO <sub>2</sub> Sensor Classification for Detecting NO, NH <sub>3</sub> , H <sub>2</sub> S, O <sub>2</sub> , CO <sub>2</sub> , and N <sub>2</sub> Gases Based on a Hybrid Approach: PCA and SVM Verified by PetriNet
11:30 - 11:45	Oral Presentation 4	Ms. Tong-En Lee Ming Chi University of Technology	Effect of Double Magnetodielectric Materials on Ladder-Type Monopole Antenna
11:45 - 12:00	Oral Presentation 5	Mr. I Gusti Nyoman Anton Surya Diputra Ming Chi University of Technology	A 5G-Enabled Traffic Sign Recognition Framework for Autonomous Systems: Integration of TurtleBot 3, ROS, Edge Computing, and MATLAB
12:00 - 13:30	Lunch Break		Session chair: Prof. Terence K.S. Wong
13:30 - 14:15	Keynote Speech 2	Prof. Paul C.-P. Chao National Yang Ming Chiao Tung University	Predicting Blood Pressures for Pregnant Women by PPG Devices for Prognosis of Preeclampsia via Deep Learning and Personalization
14:15 - 14:45	Invited Talk 2	Dr. Sabyasachi Chakraborty SRM University AP, Andhra Pradesh	Role of Cu-based Nano-Hybrid Materials for Hydrogen Generation
14:45 - 15:00	Oral Presentation 6	Ms. Ko, Pei-Tsen Ming Chi University of Technology	Influence of T-shaped Magnetodielectric Material on Radiation Pattern of Dual-band Planar Antenna
15:00 - 15:15	Oral Presentation 7	Mr. Yi-Cheng Wu Ming Chi University of Technology	Design and Synthesis of a Voltage-Mode Multifunction Filter with High-Input Impedance Based on DDCCs
15:15 - 15:30	Afternoon Tiffin Break		Session chair: Dr. Kai Chen
15:30 - 16:00	Invited Talk 3	Dr. Shih-Hsin Chang MSSCORPS CO., LTD.	The application of transmission electron microscope in IC industry
16:00 - 16:15	Oral Presentation 8	Ms. Shintia veronica Ming Chi University of Technology	Gas Classification with varying Concentration using Random Forest
16:15 - 16:30	Oral Presentation 9	Mr. Ching-Yi Hu Ming Chi University of Technology	A Simplified ESD Testing Platform Applied for DRAM Modules
16:30 - 16:45	Oral Presentation 10	Mr. Jing-Yu Hu Ming Chi University of Technology	Design and Analysis of a CFOA-Based Voltage-Mode Second-Order Filter with High-Input and Low-Output Impedance
16:45 - 17:00	Oral Presentation 11	Mr. Genanew Mulugeta Kassaw Ming Chi University of Technology	Nanoporous Membrane-Based Sensor for Dissolved Oxygen Detection via Fluorescence Quenching


## Day 2: SAIL25

 **Venue:** Ground Floor, Library and Information Building

 **Date:** 24th April, 2025

Time	Session	Speaker/Affiliation	
08:30 - 09:00	Registration & Morning Coffee		Session chair: Dr. Sabyasachi Chakraborty + Dr. Sumalay Roy
09:00 - 09:45	Keynote Speech 3	Prof. Terence K.S. Wong Nanyang Technological University, Singapore	Vision transformer model versus convolutional neural networks for denoising computed tomography images
09:45 - 10:15	Invited Talk 4	Dr. Bhaskar Biswas University of North Bengal	Operando Electro-oxidation Reconstitution of a Newly-designed 2D Co(II)-MOF on Nickel Foam to Cobalt Oxyhydroxide Nanosheet Towards Energy Sustainability: A Holy Grail in Electrocatalytic Water Splitting
10:15 - 10:30	Oral Presentation 12	Mr. Chien-Hao Chiua Ming Chi University of Technology	Design and Implementation of Voltage-Mode Low-Pass and Band-Pass Filters, and a Quadrature Sinusoidal Oscillator Using CFOAs
10:30 - 10:45	Oral Presentation 13	Mr. Faril Pirwanhadi Ming Chi University of Technology	RIS-Assisted ISAC Systems: Deep Reinforcement Learning-Based Beamforming Optimization
10:45 - 11:00	Oral Presentation 14	Mr. YIHSI-LIN Ming Chi University of Technology	An English Reading Assistance System Based on Language Models: Summary Generation and Vocabulary Simplification
11:00 - 11:15	Oral Presentation 15	Mr. Mahesha K Hegde National Institute of Technology Andhra Pradesh, India	Luminescence properties of color centers of Sm <sup>3+</sup> - activated phosphor – in – glass (P-i-G) structures for solid-state lighting applications
11:15 - 11:30	Oral Presentation 16	Mr. Meng-xiu Lee Ming Chi University of Technology	(ASEP) Adaptive Smart Pet Carrier with TinyML for Personalized Environmental Control and Health Monitoring
11:30 - 11:45	Oral Presentation 17	Mr. Humaidi Ming Chi University of Technology	Ammonia Sensing for Chicken Meat Spoilage Detection Using Anodic Aluminum Oxide-Based Sensors
11:45 - 12:00	Oral Presentation 18	Mr. M. Siva Kumar National Institute of Technology , India	LiYF4: Er phosphor synthesized through the microwave-assisted combustion route for optical thermometry and NIR detection applications
12:00 - 13:30	Lunch Break		Session chair: Prof. Peter A. Lieberzeit
13:30 - 14:15	Keynote Speech 4	Prof. Zong-Hong Lin National Taiwan University, Taiwan	Thermosensitive Smart Robotic Self-Powered Sensor for Material Identification
14:15 - 14:45	Invited Talk 5	Prof. Kuntal Chatterjee Vidyasagar University, India	Engineered Two Dimensional Electrocatalysts for Sustainable Clean Energy Harvesting
14:45 - 15:15	Invited Talk 6	Prof. Gangi Reddy Salla SRM University, India	Automated Grain size analysis using auto-correlation and Image processing algorithms
15:15 - 15:30	Afternoon Tiffin Break		Session chair: Dr. Bhaskar Biswas
15:30 - 16:00	Invited Talk 7	Prof. Anil Suresh SRM University, India	Mechanically extractable large-capacitance sustainable supports for nano-catalysis and cleansing of POPs in sewage-waters
16:00 - 16:30	Invited Talk 8	Dr. Sumalay Roy University of Delhi, India	Thickness-dependent microstructures and optical properties of Bismuth thin films and periodic Bismuth bilayers
16:30 - 17:00	Closing Ceremony & Best Paper Awards	Conference Chair Prof. Sajal Biring Ming-Chi University of Technology	


### Day 3: SAIL25

 Date: 25th April, 2025

15:00 - 17:00 Visit to research centers

### Day 4: SAIL25

 Venue: Ground Floor, Library and Information Building


 Date: 26th April, 2025


9:00 - 20:00 One-day trip Itinerary in the conference website

## Day 5: SAIL25

### One-Day Virtual Conference Program

 **Date:** 27th April, 2025

 **Time Zone:** UTC + 8 [Taiwan]

 **Platform:** [Google Meet] The Link will be sent to the participants by email directly.

#### Morning Session

Session chair: Prof. Sajal Biring

Time (Hrs)	Session Type	Speaker /Affiliation	Title of the talk
10:00 - 10:10	Opening Remarks	Conference Chair Prof. Sajal Biring Ming-Chi University of Technology	
10:10 - 10:50	Keynote Speech 1	Prof. Subhas Mukhopadhyay Macquarie University, Australia	Next Generation of Smart Devices, IoT and Drones
10:50 - 11:20	Invited Talk 1	Prof. Sujit Kumar Ghosh Jadavpur University, India	Self-assembly of gold nanorods for photovoltaic applications
11:20 - 11:50	Invited Talk 2	Mr. Pralaypati Ta Vir Softech Pvt. Ltd., India	Automate document processing using AI – real-world case studies
11:50 - 12:20	Oral Presentation 1	Mr. Rispani Universitas Andalas, Indonesia	Achieving a high ruthenium (II) complex response for detection of optical oxygen sensor based on AAO templates and silver nanoparticles
12:20 - 13:30	Lunch Break		

#### Afternoon Session

Session chair: Prof. Sujit Kumar Ghosh

Time (Hrs)	Session Type	Speaker/Affiliation	
13:30 - 14:10	Keynote Speech 2	Prof. Andreas Güntner ETH Zürich, Switzerland	Breath Sensors for Health Monitoring
14:10 - 14:40	Invited Talk 3	Dr. Shital Das Fortum Recycling and Waste Solutions Oy, Finland	Rethinking Recycling with Carbon2x: Developing Circular Material with Carbon Capture and Utilization
14:40 - 15:00	Oral Presentation 2	Ms. Sabatini Tyagi Banasthali Vidyapith Niwai, India	Electrospun PVDF/NiFe <sub>2</sub> O <sub>4</sub> Nanocomposites for Energy Harvesting applications
15:00 - 15:30	Afternoon Break		
15:30 - 15:45	Oral Presentation 3	Ms. Shrabonti Chatterjee Visva-Bharati University, India	Mapping Tissue-Specific Pathways in Monkeypox Virus Infection: A Data-Driven Framework for Diagnostics and Interventions
15:45 - 16:00	Oral Presentation 4	Ms. Shrodha Mondal Visva-Bharati University, India	Ethephon Adulteration in Agricultural Products: Creation of a Nanosensor for Food Industry and Export Food Quality Assurance
16:00 - 16:15	Oral Presentation 5	Ms. Divya Chauhan Banasthali Vidyapith Rajasthan, India	Bacterial Inhibition studies of Electrospun PVDF-ZnO Nanocomposites for biomedical applications
16:15 - 16:30	Oral Presentation 6	Mr. Joydeep Mahata Institute for Stem Cell Biology and Regenerative Medicine, India	Mapping Herpesvirus-Host Interactions to Parkinson's Disease Pathogenesis: Implications for Early Diagnosis and Personalized Care
16:30 - 16:45	Oral Presentation 7	Mr. Swarnajit Bhattacharya Haldia Institute Of Technology, India	Multi-Stack IoT-Based Air Health Monitoring System with LoRaWAN Encrypted FSO Communication for Industrial and Domestic Applications
16:45 - 17:00	Closing Remarks	Conference Chair Prof. Sajal Biring Ming-Chi University of Technology	