

PROGRAM

The 40th International Conference of the Microscopy Society of Thailand (MST40)

April 3rd - 5th, 2023 Long Beach Garden Hotel & Spa, Pattaya, Chonburi

Time	Room SaiManee	Room Rachawadee 1
Monday, April 3 rd , 2023		
08.30 - 09.00	Registration, Submission of Art Photo Contest, Poster/Exhibition Setup	
09.00 - 09.30	Opening Ceremony & Sponsorship Recognition [Room: SaiManee] Welcome address by Assoc.Prof. Dr. Wisuit Pradidarcheep (President of the Microscopy Society of Thailand) Report address by Dr. Ruttachuk Rungsiwiwat (Department of Anatomy, Faculty of Medicine, Srinakharinwirot University) Opening address by Emeritus Prof. Dr. Pansiri Phansuwan (Vice President for Academic Affairs, Srinakharinwirot University)	
09.30 - 09.40	Honorary Membership Award	
09.40 - 10.25	Session Chair: George W. Yip, Wisuit Pradidarcheep Plenary Lecture (PL-01) [Room: SaiManee] “Sectional versus dissectional anatomy: worlds apart?” <i>Wouter H. Lamers</i> Maastricht University and Academic Medical Center, The Netherlands	
10.25 - 10.30	Group Photo	
10.30 - 10.45	Coffee Break	
10.45 - 11.15	Chair: Nisaudah Radenahmad, Vichununt Kerdput Invited Lecture (IB-01) “Host Pathogen Interaction: Structural Studies of a Molecular Syringe” <i>Michael Kolbe</i> Department for Structural Infection Biology, Centre for Structural Systems Biology, University of Hamburg, Germany	Chair: Nattaphol Chomsaeng, Chanchana Thanachayanont Invited Lecture (IP-01) “Effects of Thermal Vibration Factors in Core-Loss Fine Structure” <i>Mitsutaka Haruta</i> Institute for Chemical Research, Kyoto University, Japan
11.15 - 11.45	Invited Lecture (IB-02) “Synthetic Scaffold for Tracheal Transplant: The Promise and Challenges” <i>Badrul Hisham Yahaya</i> Department of Biomedical Sciences, Universiti Sains Malaysia, Malaysia	Invited Lecture (IP-02) “Unusual Peaks in X-ray Spectra from Crystalline Materials” <i>Chris Boothroyd</i> School of Material Science and Engineering, Nanyang Technological University, Singapore
11.45 - 12.05	Technical Seminar (TS-01) “FESEM with Biological Application” <i>Tetsuo Oikawa</i> JEOL Asia Pte. Ltd. & BecThai Bangkok Equipment and Chemical Co., Ltd.	Technical Seminar (TS-02) “New Tools for Unlocking More Structural Information from SEM-EBSD Datasets” <i>Wu Jiang</i> Oxford Instruments Pte. Ltd.
12.05 - 13.00	-Lunch-	

13.00 - 14.00	<p>Chair: Ruttachuk Rungsiwiwat, Paiwan Sudwan</p> <p>Oral Presentation Session I</p> <p>OB-01: Prognostic Value of Interferon Induced Protein with Tetratricopeptide Repeats 3 in Breast Cancer <i>San Hue Hua</i></p> <p>OB-02: Alpha-Smooth Muscle Actin Expression Positively Correlates with the Fibrous Formation from Early to Advanced Stages of Liver Disease in Rat Model <i>Natapong Thaneerat</i></p> <p>OB-03: ARID1A Immunolocalization Reveals Significantly Higher Expression in Cirrhotic Liver Tissues <i>Sasipa Jaruchanapongtorn</i></p>	<p>Chair: Sankum Nusen, Witchukorn Phuthong</p> <p>Oral Presentation Session II</p> <p>OP-01: SEM, TEM, and EELS Study of Carbides in Annealed 28wt.%Cr-1wt.%Mo Cast Iron <i>Kittikhun Ruangchai</i></p> <p>OP-02: Processing and Characterization of CdSe Thin Films Prepared by Vacuum Thermal Evaporation Method <i>Montree Hankoy</i></p> <p>OP-03: Comparative X-ray Shielding, Mechanical, and Morphological Properties of Single-Layered and Multi-Layered Bi2O3/NR Composites <i>Donruedee Toyen</i></p>
14.00 - 14.20	<p>OP-01</p> <p>Technical Seminar (TS-03)</p> <p>"Advances SEM In-Situ Nano Mechanical Technology" <i>Jimmy Juan</i> Crest Nanosolution (Thailand) Co., Ltd.</p>	<p>Technical Seminar (TS-04)</p> <p>"Optimized FIB/SEM Solution for Comprehensive Characterization of Lithium-Based Battery Materials" <i>Antonin Doupal</i> Absotec Co., Ltd.</p>
14.20 - 14.35	Coffee Break	
14.35 - 15.15	<p>Chair: Ruttachuk Rungsiwiwat, Paiwan Sudwan</p> <p>Oral Presentation Session III</p> <p>OB-04: Chrysin Protects Against a Reduction of Vascular Associated Cell Proliferation in the Subgranular Zone of D-Galactose Induced Brain Aging <i>Ram Prajit</i></p> <p>OB-05: Effects of Melatonin on Feline Adipose-derived Mesenchymal Stem Cells <i>Natthima Suwan</i></p>	<p>Chair: Sankum Nusen, Witchukorn Phuthong</p> <p>Oral Presentation Session IV</p> <p>OP-04: Effects of Gamma Irradiation and Thermal Aging on Mechanical and Morphological Properties of Natural Rubber Latex Films Containing Fruit Peel Powder <i>Arkarapol Thumwong</i></p> <p>OP-05: Investigation of Sterling Silver Alloyed with Platinum <i>Nattarit Khowlueang</i></p>
15.15 - 15.35	<p>Technical Seminar (TS-05)</p> <p>"Battery Foreign Particle Identification Application" <i>Dat Thanh Chau</i> Absotec Co., Ltd.</p>	<p>Technical Seminar (TS-06)</p> <p>"Revealing the Hidden World of 2D Materials and Moiré with Atomic Force Microscope (AFM)" <i>Simon Fong</i> Oxford Instruments Pte. Ltd.</p>
15.35 - 17.00	<p>Chair: Udom Sae-Ueng, Worawit Suphamungmee</p> <p>Poster Presentation [Room: Rachawadee 2]</p>	
17.00 - 18.00	Annual Meeting of the Microscopy Society of Thailand [Room: SaiManee]	
18.00 - 22.00	Welcome Reception Banquet (<i>Sponsored by Becthai Bangkok Equipment and Chemical Co., Ltd.</i>)	

Tuesday, April 4 th , 2023		
09.00 - 09.45	Session Chair: Nattapol Laolodphan, Thapanee Sarakonsri Plenary Lecture (PL-02) [Room: SaiManee] “Video Imaging of Biological Molecules in Action by High-Speed Atomic Force Microscopy” <i>Noriyuki Kodera</i> WPI Nano Life Science Institute, Kanazawa University, Japan	
09.45 - 10.15	Chair: Nattapol Laolodphan, Thapanee Sarakonsri Invited Lecture (IP-03) “Analysis of Interface Structures Using Convergent-Beam Electron Diffraction” <i>Kenji Tsuda</i> Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, Japan	Chair: Ratchadaporn Pramong, Pariwat Wisetwongsa Invited Lecture (IB-03) “Virtual Microscopy – Lessons Learned from COVID-19 in Problem-Based Learning Curricula” <i>Susanne Eleonore Köhler</i> Department of Anatomy and Embryology, Maastricht University, The Netherlands
10.15 - 10.35	Technical Seminar (TS-07) “Atom Probe Tomography of Advanced Functional Materials” <i>Devin Giddings</i> CAMECA, AMETEK (Thailand) Co., Ltd.	Technical Seminar (TS-08) “Innovation in Microscopy Products and Technology” <i>Ampol Assavanatenapa</i> The Science and Educational Co., Ltd.
10.35 - 10.50	Coffee Break	
10.50 - 11.20	Chair: Krai Meemon, Sirinush Sricharoenvej Invited Lecture (IB-04) “TOMM20 in Breast Cancer” <i>George W. Yip</i> Department of Anatomy, National University of Singapore, Singapore	Chair: Udom Sae-Ueng, Somjai Apisawetakan Oral Presentation Session V OB-07: The Threats of Artificial-Intelligence Generated Microscopic Imaging <i>Pumipat Tongyoo</i>
11.20 - 11.50	Invited Lecture (IB-05) “Preclinical Applications of Fluorescent-Based Imaging in Cancer Models” <i>Panomwat Amornphimoltham</i> International College of Dentistry, Walailak University, Thailand	Technical Seminar (TS-09) “New Advances in CryoEM for Protein Structure Determination and Structure-Based Drug Discovery” <i>Xin Nie</i> Thermo Fisher Scientific Co., Ltd.
11.50 - 12.10	Oral Presentation Session VI OB-06: Scanning Ion Conductance Microscopy (SICM) of Living Cells <i>Petr V. Gorelkin</i>	Technical Seminar (TS-10) “mIRage®-LS IR, a Breakthrough in IR Characterization for a Wide Range of Life Science Applications” <i>Fei Tieng Lim</i> Hi-Tech Imaging Co., Ltd.
12.10 - 13.00	-Lunch-	
13.00 - 13.45	Chair: Sukanda Jiansirisomboon, Surasak Kuimalee Plenary Lecture (PL-03) [Room: SaiManee] “Microscopy Techniques Critical in Hard Disk Drive Manufacturing” <i>Duangporn Sompongse</i> Western Digital Storage Technologies (Thailand) Ltd., Ayutthaya, Thailand	

13.45 - 14.15	Chair: Sukanda Jiansirisomboon, Surasak Kuimalee Invited Lecture (IP-04) “Characterizing Low-Dimensional Materials by Low-Voltage Scanning/Transmission Electron Microscopy” <i>Masanori Koshino</i> Nanomaterials Research Institute, National Institute of Advanced industrial Science and Technology, Japan	Chair: Thewarid Berkban, Pattanapong Boonprom Invited Lecture (IB-06) “Ferroptosis-Inducing Effect of Benja-ummarit: From Molecular to Novel Morphological Observation” <i>Arnatchai Maiuthed</i> Department of Pharmacology, Faculty of Pharmacy, Mahidol University, Thailand
14.15 - 14.45	Technical Seminar (TS-11) “Low Damage and High Sensitivity Analysis – Optimum Bright-Field (OBE) STEM and Electron Dose Modulator (EDM) System” <i>Tetsuo Oikawa</i> JEOL Asia Pte. Ltd. & Becthai Bangkok Equipment and Chemical Co., Ltd.	Invited Lecture (IB-07) “Consuming Young Coconut Juice for Glowing Skin” <i>Nisaudah Radenahmad</i> Division of Health and Applied Sciences, Faculty of Science, Prince of Songkla University, Thailand
14.45 - 15.00	Coffee Break	
15.00 - 15.30	Chair: Nattaphol Chomsaeng, Nattapol Laolodphan Oral Presentation Session VI OI-01: Finite Element Analysis and Resin Rich Area Characterization of Spread Tow Carbon Fibre Fabrics from Synchrotron X-ray Tomographic Microscopy <i>Siriganya Kampanthong</i>	Chair: Punyavee Dechkrong, Hans de Jong Invited Lecture (IB-08) “Novel Strategies in Microscopic Analyses of Variegated Leaf Phenotypes” <i>Hans de Jong</i> Laboratory of Genetics, Wageningen University and Research, The Netherlands
15.30 - 16.00	Technical Seminar (TS-12) “XFlash® 7 EDS Series for Electron Microscopy Fastest Quantitative and Qualitative Measurements at High Spatial Resolution” <i>Baojun Yu</i> Bruker Malaysia	Invited Lecture (IB-09) “Visualization of Male Sterility in Plants” <i>Pornsawan Sutthinon</i> Department of Botany, Faculty of Science, Kasetsart University, Thailand
16.00 - 16.20		Oral Presentation Session VII OB-08: Sugarcane Leaf Anatomical Plasticity Under Drought Stress <i>Kao Fujimoto</i>
17.30 - 20.00	Award Winner Announcement Closing ceremony Dinner [Room SaiManee]	
Wednesday, April 5 th , 2023		
09.00 - 12.00	Post-Conference Training & Conference Excursion	