6th International Conference on Emerging Advanced Nanomaterials (ICEAN-2026)

Detailed Program

Time	Date: 15th of November 2026
18:00-20:00	Registration (The Avenue at the NEX)
	Date: 16th of November 2026
	The Venue: The Arena at the NEX
From 7 am	Registration
8.45-9.15	Opening Ceremony (The Arena)
9.15-10.00	**Plenary Lecture 1** **Chair: Prof Craig Simmons** **Prof. Pulickel M. Ajayan, Rice University, U.S.A** *Solid Phases of Carbon-Boron-Nitrogen Compositions*
10.00-10.20	**Photo session & Coffee Break**
10.20-11.00	**Themed Lectures Chair: Prof PM Ajayan**
	Themed Lecture 1 **Prof. Dongyuan Zhao, Fudan University, China** *Controllable Synthesis and Application of Mesoporous Crystalline Frameworks*
11.00-11.40	**Themed Lecture 2** **Prof. Debra Bernhardt, The University of Queensland, Australia** *Ion Transport at Interfaces and in Nanostructured Materials*
11.40-12.20	**Themed Lecture 3** **Prof. Dmitri Golberg, Queensland University of Technology, Australia** *Nanomaterial Properties as Revealed by State-of-the-Art Methods of in situ TEM*
12.20-13.00	**Themed Lecture 4** **Prof. Husam Niman Alshareef, King Abdullah University of Science and Technology, Saudi Arabia** *MXenes for Energy Harvesting*
13.00-14.00	**Lunch Break**

	16th of November 2026					
	The Arena	**The Extra**	**The Vivid**	**The King St**	**The City View**	**The Game**
13.00-14.00	**Lunch**					
14.00-14.45	**Plenary Lecture 2** **Chair: Prof Debra Bernhardt** **Prof. Martina Stenzel, University of New South Wales, Australia** *Ultrasmall glycopolymer nanoparticles for drug delivery*					
Session	**2A** **Chair: Prof. Neeraj Sharma**	**2B** **Chair: Prof. Dmitri Golberg**	**2C** **Chair: Prof. Don Futaba**	**2D** **Chair: Prof. Huai Yong Zhu**	**2E** **Chair: A/Prof. Albert Fahrenbach**	**2F** **Chair: Prof. Ji-Hyun Jang**
14.50 - 15.20	**2A-KL-1:** Caloric Effects in Charge-Spin-Lattice Coupled Transition-Metal Oxides. **Prof. Yuichi Shimakawa**, Kyoto University, Japan	**2B-KL-1:** When Light Meets Sound: Photonic-Phononic Integration for the Next Generation of Signal Processing and Sensing **Prof. Benjamin Eggleton,** The University of Sydney, Australia	**2C-KL-1:** Thermochemical Transformation of Graphene Oxide for Engineering the Future of Sustainable Technologies. **Prof. Majumder Mainak**, Monash University, Australia	**2D-KL-1:** Nanostructure Engineering with Different Functionalities for Advanced Catalysis. **Prof. Yanli Zhao,** Nanyang Technological University, Singapore	**2E-KL-1:** Surface-Engineered Liquid Metal Nanoparticles for Wearable Sensing and Wound Healing. **Prof. Guozhen Liu,** The Chinese University of Hong Kong, Shenzhen, China	**2F-KL-1:** Demystifying Mn-dopant Emission in Semiconductor QD Hosts. **Prof. D.D. Sarma,** Indian Institute of Science, India
15.20 - 15.45	**2A-IL-1:** Achieving Superior Stability in All-Solid-State Lithium Metal Batteries through Competitive Cation Coordination. **Prof. Peng Cao,** University of Auckland, New Zealand	**2B-IL-1:** Chiral Epitaxy: Enantioselective Growth of Chiral Nanowires on Low-Symmetry Two-Dimensional Materials. **Prof. Ernesto Joselevich,** Weizmann Institute of Science, Israel	**2C-IL-1:** Fabrication of Josephson junctions with topological materials. **Prof. Koji Ishibashi,** Pioneering Research Institute, Japan	**2D-IL-1:** Photocatalytic Conversion of CO_2 Using $ZnTa_2O_6$ photocatalyst. **Prof. Shoji Iguchi**, Kyoto University, Japan	**2E-IL-1:** Near-Infrared Hyperspectral Imaging and Machine Learning for Lipid Profiling and Early Prediction of Non-Alcoholic Liver Disease. **Prof. Kohei Soga,** Tokyo University of Science, Japan	**2F-IL-1:** Continuous tuning of the spin cycloid in multiferroic $BiFeO_3$ thin films probed by neutron scattering. **Prof. Clemens Ulrich,** The University of New South Wales, Australia
15.45 – 16.10	**2A-IL-2:** Self-healing block copolymer electrolytes for stretchable Li-ion microbatteries. **Prof. Sebastien Maria,** Aix-	**2B-IL-2:** Antiphase Boundary-controlled Domain Wall Motion and Electronic Transport. **A/Prof. Pankaj Sharma,** Flinders University, Australia	**2C-IL-2:** Integration of III-V Nanowires on Si and Transistor Applications. **Prof. Katsuhiro Tomioka,** Hokkaido University, Japan	**2D-IL-2:** Dynamic Restructuring in Cu-Ga Catalysts. **A/Prof. Ken Chiang,** RMIT University, Australia	**2E-IL-2:** Multimodal immunofluorescence and elemental mass spectrometry imaging of biomolecules improved resolution from the micro- to the nanoscale.	**2F-IL-2:** Towards atomic resolution magnetic field mapping via four-dimensional scanning transmission electron microscopy. **Prof. Scott**

	Marseille University, France				**A/Prof. David Bishop,** University of Technology Sydney, Australia	**Findlay,** Monash University, Australia
16.10 – 16.35	**2A-IL-3:** Mechanisms of Structural Evolution in Lead-Free Halide Perovskites Uncovered by In Situ Multimodal Microscopy. **Dr. Shery Chang,** University of New South Wales, Australia	**2B-IL-3:** LLMs and Cognitive AI for Nanomaterials Research. **Prof. Yuan Miao,** Victoria University, Australia	**2C-IL-3:** Controlling Order and Dynamics in Solution-Processed Soft Functional Materials for flexible electronics. **Dr. Kenjiro Fukuda,** The University of Osaka, Japan	**2D-IL-3:** Catalyst and Interface Engineering for Real Seawater Splitting: Activity, Selectivity, and Long-Term Stability. **A/Prof. Ibrahim Khan,** University of Nottingham Ningbo, China	**2E-IL-3:** Single-Molecule Nanotechnologies: A Journey into Clinical Applications. **A/Prof. Alain Wuethrich**, The University of Queensland, Australia	**2F-IL-3:** Soft Magnetic Materials for Inductive Power Transfer in Electrified Road Transport. **Dr. Shen Chong,** Victoria University of Wellington, New Zealand
16.35-16.50	**Coffee Break**					
	Chair: Prof. Peng Cao	**Chair: Prof. Yuan Miao**	**Chair: Prof. Majumder Mainak**	**Chair: Prof. Yanli Zhao**	**Chair: Prof. Guozhen Liu**	**Chair: Prof. DD Sarma**
16.50- 17.15	**2A-IL-4:** Thermochemistry of Battery Materials and Devices. **Prof. Neeraj Sharma,** The University of New South Wales, Australia	**2B-IL-4:** Tuning the size and properties of Silver nanoparticles and its application as plasmonic back reflector in Thin film solar cells. **Prof. Pratima Agarwal,** Indian Institute of Technology Guwahati, India	**2C-IL-4:** Erbium in silicon and silicon carbide for integrated quantum photonics. **Prof. Sven Rogge**, University of New South Wales, Australia	**2D-IL-4:** Silver-nanoparticle Antenna-Reactor Photocatalysts for Ammonia Synthesis. **Prof. Huai Yong Zhu,** Queensland University of Technology, Australia	**2E-IL-4:** Self-assembling peptide hydrogels to avoiding tissue overgrowth within progenitor cell grafts. **Prof. David Nisbet,** The University of Melbourne, Australia	**2F-IL-4:** Impact of Heterojunction Interfaces on Carrier Dynamics in Organic and Perovskite Photovoltaics. **Prof. Hideo Ohkita,** Kyoto University, Japan
17.15-17.40	**2A-IL-5:** Surface reconstruction in carbonates with calcitic structure: when, why and how. **A/Prof. Raffaella Demichelis,** Curtin University, Western Australia	**2B-IL-5:** Strategies to mitigate electrode fouling during electrochemical sensing **Dr. S. Alwarappan**, CSIR-Central Electrochemical Research Institute, India	**2C-IL-5:** Accelerating CNT Research Through Materials Insight and Experimental Ecosystems at AIST. **Dr. Don Futaba,** National Institute of Advance Industrial Science and Technology (AIST), Japan	**2D-IL-5:** Catalytic application of carbon-based nanomaterials with variation of chemical structures. **Prof. Sungjin Park,** Inha University, Republic of Korea	**2E-IL-5:** Prebiotic RNA Chemistry**. A/Prof. Albert Fahrenbach,** University of New South Wales, Australia	**2F-IL-5:** A Solar-Powered Evaporator based on Perovskite oxide. **Prof. Ji-Hyun Jang,** Ulsan National Institute of Science and Technology Republic of Korea
17.40-18.05	**2A-IL-6:** Engineering Sulfur Reaction Pathways for High-	**2B-IL-6:** Nanoscale Precipitation and Atomic-Scale Grain	**2C-IL-6:** Regulation of Biomolecular Liquid-Liquid Phase Separation	**2D-IL-6:** Developing X-ray Based Strategies to Follow Redox	**2E-IL-6:** Engineering Micro/Nanostructured Interfaces for Controlled Transport,	**2F-IL-6:** Revisiting Methylammonium-based Perovskite Solar

	Energy Metal–Sulfur Batteries. **Dr. Nana Wang,** University of Technology Sydney, Australia	Boundary Chemistry in Direct-Aged Additively Manufactured 17-4 PH Stainless Steel. **Dr. Vitor Rielli,** The University of New South Wales, Australia	with Butterfly-shaped Gold Nanomaterials. **Dr. Nobeyama Tomohiro,** Kyoto University, Japan	Chemistry Across Space and Time. **Dr. Rosalie Hocking,** University of Technology Sydney, Australia	Mechanobiology and Sensing. **Dr. Navid Kashaninejad**, Griffith University, Australia	Cells: from Scalable Methylamine Gas Treatment to Stability Improvement. **Prof. Tzu-Chien Wei,** National Tsing Hua University, China
18.05-18.30	**2A-IL-7:** Sustainable LFP Electrodes for Advanced Battery Systems. **Prof. Marzi Barghamadi,** Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia	**2B-IL-7:** Silicon spin qubits with implanted single donor ions. **Dr. Danni Holmes,** The University of New South Wales, Australia	**2C-IL-7:** Flexible Active-Matrix Sensor Arrays based on Oxide Thin-Film Transistors. **Dr Bowen Zhu**, Westlake University, China	**2D-IL-7:** RF and Microwave Plasma for the Synthesis of Carbon Nanomaterials. **Prof. Mohan Jacob,** James Cook University, Australia	**2E-IL-7:** Multifunctional Materials and Interfaces for Healthcare Applications**. Prof. Sandeep Kumar**, Punjab Engineering College, India	**2F-IL-7:** High Entropy Electrocatalyst Design for Battery Applications. **Dr. Pramod Koshy,** The University of New South Wales, Australia
18.30-19.30	**Poster Session 1 (Posters should be placed before the lunch time)**					

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	The Arena	**The Extra**	**The Vivid**	**The King St**	**The City View**	**The Game**
8.00-8.45	**Plenary Lecture 3** **Chair: Prof. Martina Stenzel** **Prof. George C. Schatz, Northwestern University, U.S.A** *The Exciting World of Plasmonic Nanoparticles*					
	3A **Chair: Prof. Makoto Moriya**	**3B** **Chair: Prof. Hideo Ohkita**	**3C** **Chair: Prof. R. Jayavel**	**3D** **Chair: Prof. Torben Daeneke**	**3E** **Prof. Chia-Fu Chou**	**3F** **Chair: Prof. John Kennedy**
8.50 - 9.20	**3A-KL-1:** Discovery of Solid Electrolytes with Distinct Structural Frameworks for All-Solid-State Batteries. **Prof. Seung-Tae Hong,** DGIST, Republic of Korea	**3B-KL-1:** Energy Challenges from a Materials Perspective. **Prof. Rosei Federico,** University of Trieste, Italy	**3C-IL-1:** Transforming research data into strategic intelligence **Dr. Tomohisa Shimmachi** - Clarivate	**3D-KL-1:** Plasmonic Catalysis for Sustainable Energy Research. **Prof Jie Liu,** King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia	**3E-KL-1:** Architected and Translatable Biomaterial Platforms for Regenerative Medicine and Dynamic Biomedical Implants. **Prof. Fariba Dehghani,** The University of Sydney, Australia	**3F-TE-1:** Magnon Drag: A New Route of Enhancing the Seebeck Coefficient. **Prof. Masao Ogata**, National Institute of Advanced Industrial Science and Technology (AIST), Japan
9.20 - 9.45	**3A-IL-1:** Interfacial Engineering for Metal-Based Rechargeable Batteries. **Prof. Bin Luo**, The University of Queensland, Australia	**3B-IL-1:** Influence of encapsulating active ruthenium species for hydrogenation of carbon dioxide to formic acid in porous hollow spheres of silica. **Prof. Tetsuo Umegaki,** Nihon University, Japan	**3C-IL-2:** From Single to Periodic Pulses: Fourier Expansion Analysis to Thermo-Reflectance Signal for Thermal Diffusivity Measurements. **Dr. Jiunn Jieh Lee,** NETZSCH-Gerätebau, Germany	**3D-IL-1:** Transformation of isosorbide to polyols over supported Rh catalysts. **Prof. Masazumi Tamura**, Kyoto University, Japan	**3E-IL-1:** Ancestral Single-Component Hymenopteran ProtoSilk with Enhanced Properties. **Prof. Colin Jackson,** Australian National University, Australia	**3F-TE-2:** Structure-Property Relationships in Emerging Thermoelectric Chalcogenides and Phosphides. **Prof. David Berthebaud,** Nantes Université, CNRS, Institut des Matériaux de Nantes Jean Rouxel, France
9.45 - 10.10	**3A-IL-2:** Interfaces by Design: Unlocking Performance and Function in Advanced Composites Batteries. **Dr. James Randall**, Deakin University, Australia	**3B-IL-2:** From Colloidal Precision to Coherent Lattice Modes: Multiscale Engineering of Plasmonic Nanocubes. **Prof. Jeong-Eun Park,** Gwangju Institute of Science and Technology (GIST), Republic of Korea	**3C-IL-3:** Advanced Characterisation for the Development and Adoption of Nanomaterials. **Dr. Maxwell Moyle,** ATA Scientific Instruments, Australia	**3D-IL-2:** Reverse Water Gas Shift Reaction over Perovskite-type Oxide Catalysts. **Prof. Hidenori Yahiro,** Ehime University, Japan	**3E-IL-2:** Biodegradable Zinc-Lithium-Copper Alloys for Orthopaedic Implants. **Dr. Helen Xu,** University of Technology Sydney, Australia	**3F-TE-3:** Thermoelectric Materials and Devices Based on Carbon Nanotubes. **Prof. Shohei Horike,** Kobe University, Japan
10.10 - 10.35	**3A-IL-3:** Advanced conversion-based cathodes for aqueous Zn	**3B-IL-3:** Engineering Energy-Transfer Pathways in Perovskite	**3C-IL-4:** The AI Revolution for PVD System Software from Boson	**3D-IL-3:** Molten salt synthesis of heterogeneous catalysts	**3E-IL-3:** Engineering Biocatalytic Nanomaterials for	**3F-TE-4:** Various thermoelectric device architectures for

	batteries. **Dr. Junnan Hao,** Adelaide University, Australia	Nanomaterials. **Dr. Manoj Sharma,** Monash University, Australia	Engineering/Nano Vacuum. **Dr. James Carter,** Nanovacuum, Australia	for solar energy conversion: old chemistry for advanced materials. **Dr. Mu Xiao,** The University of Queensland, Australia	Precision Therapy and Biosensing. **Dr. Jieying Liang,** The University of New South Wales, Australia	different applications. **Prof. Woochul Kim,** Yonsei University, Seoul, South Korea
10.35 - 10.50	**Coffee Break**					
	Chair: Dr. Yong Zhao	**Chair: Dr. Manoj Sharma**	**Chair: Prof. Masazumi Tamura**	**Chair: Prof. Jie Liu**	**Chair: Prof. Fariba Dehghani**	**Chair: Prof. Woochul Kim**
10.50 - 11.15	**3A-IL-4:** Molecular Crystalline Electrolytes with Highly Selective Mg-Ion Conduction. **Prof. Makoto Moriya,** Shizuoka University, Japan	**3B-IL-4:** Next-generation lipid nanoparticles (ngLNPs) inspired by Extracellular Vesicles for targeted, PEG-free, RNA delivery for vaccines and gene therapies. **Prof. Nigel McMillan,** Griffith University, Australia	**3C-KL-1:** The Magical Role of Quantum Dots in Batteries. **Prof. Satish Ogale,** TCG-CREST and IISER Pune, India **(10.50 – 11.20)**	**3D-IL-4:** Liquid Metal Catalysts for Sustainable Chemical Transformations. **Prof. Torben Daeneke,** RMIT University, Australia	**3E-IL-4:** Single-Component Photo-Crosslinked Mucin Hydrogels: A Self-Healing Mucus Mimetic for Antiviral Protection. **Prof. Chia-Fu Chou,** Institute of Physics, Academia Sinica, Taiwan	**3F-TE-5:** Thermoelectrics for Ambient Energy Harvesting. **Prof. Ady Suwardi,** The Chinese University of Hong Kong, Hong Kong SAR, China
11.15 - 11.40	**3A-IL-5:** Rethinking EV Battery End-of-Life Management amid Rising LFP Uptake: Implications for Import-Dependent Markets. **Prof. Mahdokht Shaibani,** RMIT University, Australia	**3B-IL-5:** Control of Position and Self-Assembly of Colloidal Quantum Dots for Quantum Information Devices and High-Performance Solar Cells. **Prof. Kohki Mukai,** Yokohama National University, Japan	**3C-KL-2:** Design of MOF Photocatalysts for Efficient H_2O_2 Production **Prof. Hiromi Yamashita,** The University of Osaka, Japan **(11.20 – 11.50)**	**3D-IL-5:**Mixed-potential catalysis: Interfacial reaction fields for controlling catalytic rate and selectivity. **A/Prof. Kotaro Takeyasu,** Institute for Catalysis, Hokkaido University, Japan	**3E-IL-5:** From Intercalation Chemistry to Functional Biomaterials: Inorganic Nanohybrids for Biomedical Applications. **Prof. Goeun Choi,** Dankook University, Republic of Korea	**3F-TE-6:** Defect Control in Mg2Sn1-xGex Epitaxial Thin Films for Advanced Thermoelectric Applications. **Prof. Sakurai Takeaki,** University of Tsukuba, Japan
11.40 - 12.05	**3A-IL-6:** High-Throughput Synchrotron XRD and XAFS Characterization for Data-Driven Exploration of Energy-Storage Materials. **Prof. Kenjiro Fujimoto,** Tokyo University of Science, Japan	**3B-IL-6:** Development of Organic Energy Materials. **Prof. Kouki Oka,** Tohoku University, Japan	**3C-KL-3:** Adaptive Soft Robots of Liquid Crystal Elastomers. **Prof. Yanlei Yu,** Fudan University, China **(11.50 – 12.20)**	**3D-IL-6:** Key Synthetic and Post-Synthetic Factors for Enhancing the Catalytic Performance of Zeolites with Newer Framework Topologies. **Prof. Yoshihiro Kubota,** Yokohama National University, Japan	**3E-IL-6:** Upcycle food waste into cellulose nanofibers and their applications. **Dr. Noriko Kanai,** Yokohama National University, Japan	**3F-TE-7:** Defect Architectures and Pressure-Associated Polymorph for High-Performance Thermoelectric Materials. **Prof. In Chung, Seoul** National University, Republic of Korea
12.05 - 12.30	**3A-IL-7:** Anisotropic Mesoporous Nanocomposites. **Prof.**	**3B-IL-7:** Design and Synthesis of POSS- and DDSQ-Based Thermally Stable Organic-Inorganic	**3C-KL-4:** Zero-Emission Thermoelectrics for Solid-State Heat Management. **Prof. Zhi-Gang Chen**,	**3D-IL-7:** From Instrument Development to Atomistic Understanding of	**3E-IL-7:** Low Volume, High Throughput Polymer Syntheses for Accelerating Discovery of	**3F-TE-8:** Composable Neural Emulators Accelerate Thermoelectric

	Xiaomin Li, Fudan University, China	Hybrid Materials for Electronic and Nanomaterials. **Prof. Dongsoo Shin,** Changwon National University Busan, Republic of Korea	Queensland University of Technology, Australia **(12.20 – 12.50)**	Single-Atom Catalysts. **Dr. Jiri Pavelec,** TU Wien, Viennajieh, Austria	Novel Biomaterials. **Dr. Jonathan Yeow,** The University of New South Wales, Australia	Generator Design. **Dr. Airan Li**, National Institute for Materials Science (NIMS), Japan
12.30 - 12.55	**3A-IL-8:** Nanoporous Silicon for High-Capacity and Durable Lithium Storage. **Prof. Liang Zhou**, Wuhan University of Technology, China	**3B-IL-8:** A General One-Pot Route to Three-Dimensional Nanocrystal Superlattices. **Dr.Masaki Saruyama,** Kyoto University, Japan	-	**3D-IL-8:** High Yield and Sustainable Conversion of Lignocellulosic Biomass To Graphene Via Pyrolysis And High Shear Vortex Fluidics. **Dr. Elsa Antunes,** James Cook University, Australia	**3E-IL-8:** Biofunctionalized Nanomaterials for Next-Generation Point-of-Care Diagnostics: From Green Synthesis to Clinical Validation **Prof. Arpita Pandey Tiwari**, The D.Y. Patil Education Society, India	**3F-TE-9:** Axis-dependent conduction polarity of $Mg_3(Bi,Sb)_2$ for transverse thermoelectrics. **Dr. Yosuke Goto,** National Institute of Advanced Industrial Science and Technology (AIST), Japan
12.55 - 13.20	**3A-IL-9:** Computational Investigation of Opipramol Dihydrochloride. **Prof. B.P. Siddaraju,** CIT Mandya, India	**3B-IL-9:** Nanostructured materials and designed interfaces in advanced electrical energy storage systems/batteries. **Prof. Sudeshna Chattopadhyay,** Indian Institute of Technology Indore, India		**3D-IL-9:** Tuning Catalytic Sites in Au/Mesoporous Silica Catalyst for Highly Efficient Hydrogenation of 4-Nitrophenol. **Dr. Siva kumar Krishnan,** Meritorious Autonomous University of Puebla, Mexico		**3F-OP-1:** Leveraging carrier mobility and interfacial engineering for high-performance $Mg_3(Sb,Bi)_2$ thermoelectrics, **Longquan Wang,** NIMS Japan.
13.10-14.00	**Lunch**					
14.00-14.45	**Plenary Lecture 4** **Chair: Prof. George C. Schatz** **Prof. Takashi Taniguchi, National Institute for Materials Science, Japan** *Single crystals growth of Diamond and Boron Nitride under high pressure and their impurity control for quantum sensing applications*					
	4A **Chair: A/Prof. Kenjiro Fujimoto**	**4B** **Chair: Prof. Dongsoo Shin**	**4C** **Chair: Prof. Satish Ogale**	**4D** **Chair: Prof. Hidenori Yahiro**	**4E** **Chair: Prof. Kohki Mukai**	**4F** **Chair: Prof. Sakurai Takeaki**
14.50 - 15.20	**4A-KL-1:** Synergistic Heterojunction Electrocatalysts for Renewable Chemistry. **Prof. Antonio Tricoli,** The	**4B-KL-1:** Synthesis, Shaping and Recycling of Nanostructured Materials using Sub- and Supercritical Solvo-/Hydrothermal	**4C-KL-1:** Nanocluster-Based Glassy Scintillators for High-Performance X-Ray Imaging. **Prof. Omar F.Mohammed**, King Abdullah University of	**4D-KL-1:** Advanced Functional Materials for Sustainable Energy Conversion and Carbon Neutrality. **Prof. Jiabao Yi**, King Fahd University	**4E-IL-1:** Additive Manufacturing of HAp/Col Porous Bodies and Accuracy Evaluation of Pore Structure using X-ray μ-CT. **Prof. Masanori**	**4F-TE-1:** Bi_2Te_3-Based Thermoelectrics Revisited: From Materials Development to Module Engineering. **Prof. Michihiro Ohta,** National

	University of Sydney, Australia	Chemistry. **Prof. Cyril Aymonier,** CNRS, University of Bordeaux, France	Science and Technology, Saudi Arabia	of Petroleum and Minerals, Saudi Arabia	**Kikuchi,** National Institute for Materials Science, Japan	Institute of Advanced Industrial Science and Technology (AIST), Japan
15.20 - 15.45	**4A-IL-1:** A Sustainable Pathway to 2-Hydroxyadipic Acid via Electrocatalytic Ring-Opening of Biomass-Derived FDCA. **Prof. Chia-Yu Lin,** National Cheng Kung University, Taiwan	**4B-IL-1:** Microwave heating of laser-graphitised diamond. **Prof. Saulius Juodkazis,** The Institute of Science Tokyo, Japan	**4C-KL-2:** Carbon Nitrides: Next Generation Emitters for Electrochemiluminescence. **Prof. Yuanjiang Zhang,** Southeast University, China **(15.20 - 15.50)**	**4D-IL-1:** High-Entropy Intermetallics: Multifunctional Catalysts for Challenging Molecular Conversions. **Prof. Shinya Furukawa,** The University of Osaka, Japan	**4E-IL-2:** Lighting up detection: Next generation biosensing and bioimaging using plasmonic nanohole arrays. **Dr. Ying Zhu,** University of Technology Sydney, Australia	**4F-TE-2:** Thinner Peltier Sheets: A Building Block for the Better World. **Dr. Norifusa Satoh,** National Institute for Materials Science (NIMS), Japan
15.45 - 16.10	**4A-IL-2:** Challenges in the development of free radical scavengers for durability enhancement of PEMFC devices. **Prof. Taehyun Kwon,** Incheon National University, Republic of Korea	**4B-IL-2:** SiC-Grown Epitaxial Graphene: A Platform for Floquet Engineering and Molecular Spintronics. **Prof. Paola Barbara,** Georgetown University, United states of America	**4C-KL-3:** Nanoengineered Materials and Coatings for Medicine and Beyond. **Prof. Krasimir Vasilev,** Flinders University, Australia **(15.50 – 16.20)**	**4D-IL-2:** Mesoporous Supraparticles: Synthesis and Applications. **Prof. Zaiwang Zhao,** Inner Mongolia University, China	**4E-IL-3:** Molecular editing of amine-containing bioactive molecules. **Prof. Kei Murakami,** Kwansei Gakuin University, Japan	**4F-TE-3:** Nano-Structured SiGe Alloys for Potential Integration into an Advanced RTG. **Dr. Thierry Caillat,** California Institute of Technology, United States of America
16.10 - 16.35	**4A-IL-3:** Crystal Vacancy Engineering for High-Performance Electrocatalysis. **Prof. Xiaoyan Jin,** University of Seoul, Republic of Korea	**4B-IL-3:** Raman scattering and Photoluminescence Enhancement Mechanisms in Ga/GaN/Graphene Hybrid Nanostructures. **Dr. Tomas Sikola,** Brno University of Technology, Czech Republic		**4D-IL-3:** Engineering Catalytic Function through Two-Dimensional Nanoconfinement. **Dr. Nitee Kumari,** Pohang University of Science and Technology (POSTECH), Republic of Korea	-	**4F-TE-4:** Development and Applications of STEM-Based Nanoscale Thermal Transport Characterization. **Dr. Naoyuki Kawamoto,** National Institute for Materials Science, Japan
16.35 - 16.50	**Coffee Break**					
	Chair: Prof. Taehyun Kwon	**Chair: Prof. Paola Barbara**	**Chair: Prof. Yuanjiang Zhang**	**Chair: A/Prof. Kotaro Takeyasu**	**Chair: Dr. Ying Zhu**	**Chair: Dr. Thierry Caillat**

16.50 - 17.15	**4A-IL-4:** Hydride-ion-conducting solid electrolyte enabling electrochemical NH_3 production. **Prof. Genki Kobayashi,** Institute of Pioneering Research, Japan	**4B-IL-4:** Thermally Reversible Interconversion between Two Isomeric Forms of Silver Sulfide Magic-Size Clusters. **Prof. Guohua Jia,** Curtin University, Australia	**4C-KL-4:** Metal Organophosphate Molecules and Nanomaterials for Energy Applications and Catalysis. **Prof. R Murugavel**, Indian Institute of Technology Bombay, India **(16.50 - 17.20)**	**4D-IL-4:** Fullerene Electronic Buffer for Precision Catalysis. **Dr. Youzhu Yuan,** Xiamen University, China	**4E-IL-5:** Alloy Phase Stability upon Electric Current Stressing. **Prof. Shih-Kang Lin,** National Cheng Kung University, Taiwan	**4F-TE-5:** Vaporionic Thermoelectrics. **Dr. Jing Cao,** Institute of Materials Research and Engineering, Agency for Science, Technology and Research, Singapore
17.15-17.40	**4A-IL-5:** Porous Metal-Organic Materials for Electrochemical CO_2 Reduction. **Dr. Hao-Lin Zhu,** Sun Yat-Sen University, China	**4B-IL-5:** Fabrication of Hybrid Electrode Systems Using Unique Inorganic Materials for Electrochemical Applications and Nanoenergy Technology. **Prof. Hyojong Yoo**, Hanyang University, Republic of South Korea	**4C-KL-5:** Copper-Based Materials for Low- to Medium-Temperature Thermoelectric Applications: Advances, Challenges, and Emerging Trends. **Prof. John Kennedy,** GNS Science, New Zealand **(17.20 – 17.50)**	**4D-IL-5:** Conversion of rice bran-derived myo-inositol into phenolic compounds. **Dr. Kiyoyuki Yamazaki**, National Institute of Advanced Industrial Science and Technology (AIST), Japan	**4E-IL-6:** Reconfigurable 2D Materials for Low-Energy Electronics. **Prof. Nikhil Medhekar,** Monash University, Australia	**4F-TE-6:** Plastic Inorganic Thermoelectric Materials: Linking Crystal Structure, Defects, and Deformation. **Dr. Zhengyang Zhou,** Shanghai Institute of Ceramics, Chinese Academy of Sciences, China
17.40 - 18.05	**4A-IL-6:** Oxygen Evolution Reaction on Mn-Zr Binary Oxide-based Thin Film in Alkaline Medium. **A/Prof. Matsuzawa Koichi,** Yokohama National University, Japan	**4B-IL-6:** New Generation Electron Microscopes Based on Ultrahigh Brightness Nanowire-emitter. **Dr. Han Zhang,** National Institute for Materials Science, Japan	**4C-KL-6:** Advanced Nanostructured ceramic membrane electrochemical technologies for power-TO-X, carbon utilisation and sustainable fuel production. **Dr. Gurpreet Kaur**, CSIRO, Australia **(17.50 – 18.20)**	**4D-IL-6:** Nanoparticle Design for Magnetically Induced Catalysis. **Dr. Lucy Gloag,** The Australian National University, Australia	**4E-IL-7:** Coacervate-based Platforms for Intracellular Delivery of Biomacromolecules. **Dr. Yoshimasa Kawaguchi**, Kyoto University, Japan	**4F-OP-1:** Phase-Pure Flexible MgAgSb Thermoelectrics with Exceptional Performance. **H. Zhao,** National Institute for Materials Science (NIMS), Japan **(17.40 - 17.50)** **4F-OP-2:** Strain-mediated grain-boundary reconstruction unlocks high near-room-temperature thermoelectric performance in Mg_3Sb_2-based alloy. **G. Wu,** National Institute for Materials Science (NIMS), Japan **(17.50 - 18.00)** **4F-OP-3:** ZnSb for cost-effective and sustainable thermoelectric
18.05 - 18.30	**4A-IL-7:** Low voltage operating solid-state organic transistor sensors/biosensors. **Prof. Soniya Yambem,** Queensland University of Technology, Australia	**4B-IL-7:** Bulk Nanobubbles in Water: Interfacial, Stability and Rheological Properties. **Prof. Ahmad Jabbarzadeh,** The University of Sydney, Australia	**4C-IL-1:** Thermal Energy Storage Materials: Design of High Energy Storage Capacity Eutectic Systems. **Dr. Karolina Matuszek**, Monash University, Australia.	**4D-IL-7:** Liquid Crystal-Passivated Gold Nanoparticles: Strategies for Widening the Layered Phase and Realizing a Technologically Relevant Nematic State. **Dr. C.V. Yelamaggad**, Centre for Nano and Soft Matter Sciences (CeNS), India	**4E-IL-8:** Host-Guest and Association Interactions of Cucurbit[n]uril and Tiara[n]uril and Their Derivatives. **Dr. Anthony Day**, University of New South Wales, Australia	

						generation. **X. Wu,** National Institute for Materials Science (NIMS), Japan **(18.00 - 18.10)**
18.30-19.30	**Nobel Laureate Lecture I: Prof Dan Shechtman Technological entrepreneurship key to world prosperity and peace**					

	18th of November 2026					
	The Arena	**The Extra**	**The Vivid**	**The King St**	**The City View**	**The Game**
8.00-8.45	**Plenary Lecture 5** **Chair: Prof. Hui-Ming Cheng** **Prof Frank Caruso, University of Melbourne, Australia** *Leveraging Materials Chemistry to Direct Nanoparticles to Specific Organs*					
	5A **Chair: Prof. Yutaka Amao**	**5B** **Chair: Prof. Srinivasan Ramakrishnan**	**5C** **Chair: Prof. Yi-Hsuan Lai**	**5D** **Chair: Prof. Sanjog Nagarkar**	**5E** **Chair: Prof. Yan Pang**	**5F** **Chair: Prof. In Young Kim**
8.50-9.20	**5A-KL-1:** Next Aqueous Battery: A View of Redox Couples. **Prof. Dongliang Chao,** Fudan University, China	**5B-KL-1:** Carbon Dots for Photonic Conversion in Solar Cells. **Prof. Conchi Ania,** Université d'Orléans, France		**5D-IITB-UON-1:** Seeing the Invisible: Scanning Helium Atom Microscopy for Next Generation Materials. **Prof. Paul Dastoor,** University of Newcastle, Australia	**5E-KL-1:** From Nano-Bio Discovery to Diagnostic Translation: Lessons from an Evolving Academic Translation Ecosystem. **Prof. Vipul Bansal,** RMIT University, Australia	**5F-KL-1:** Elastic Protein as a Driver of 3D Complex Architectures and Cell Performance. **Prof. Anthony S. Weiss,** The University of Sydney, Australia
9.20-9.45	**5A-IL-1:** Non-Precious-Metal Oxygen Reduction Catalysts from Polyimides and Fourteen-Membered Macrocyclic Complexes. **Prof. Yuta Nabae,** The Institute of Science, Tokyo, Japan	**5B-IL-1:** Nucleation and growth of piezoelectric lead-free oxide thin films and nanostructured materials. **Prof. Mari-Ann Einarsrud,** Norwegian University of Science and Technology, Norway	**5C-IL-1:** Electric bias-free solar-to-hydrogen peroxide conversion in a photoelectrochemical cell using a covalent triazine framework photocathode in situ-deposited on a mesoporous ITO film. **Prof. Masayuki Yagi,** Niigata University, Japan	**5D- IITB-UON-2:** Optical Instabilities of Perovskite Crystals: Blink-in-Sync or Not To? **Prof. Arindam Chowdhury**, Indian Institute of Technology Bombay, India		**5F-IL-1:** Spontaneous Resolution of Enantiomers in Gelation Is Opposite in Mechanism to Living Polymerization. **Prof. Kentaro Tashiro,** National Institute for Materials Science (NIMS), Japan
9.45-10.10	**5A-IL-2:** Ultra-thin materials for next-generation electronics and optoelectronics Technologies. **Prof. Sumeet Walia**, RMIT University, Australia	**5B-IL-2:** Synergistic Functionalities Arising from Dynamic Interfaces of Organic-Inorganic Hybrid Dendrimers. **Prof. Kiyoshi Kanie,** Tohoku University, Japan	**5C-IL-2:** Hierarchical Architecture of Anisotropic Alkynyl-Protected Au22 Nanoclusters Enables Multifunctional Catalysis toward Photocatalytic Cross-Dehydrogenative Coupling. **A/Prof. Katsuhiro Isozaki,** Kyoto University, Japan	**5D- IITB-UON-3:** Anomalous Polarization Driven Quantum Confined Stark Effect in Halide Perovskite Polymer Quantum Structures for Single-Layer Electroluminescence. **Prof. Aswani Yella,** Indian Institute of Technology Bombay, India	**5E-IL-2:** Probing Mesophase Structure Changes of Ionisable Lipid Nanoparticles for mRNA Delivery **A/Prof. Jiali Zhai**, RMIT University, Australia	**5F-IL-2:** Multi-material 3D printing: Additive manufacturing of electronics. **Prof. Luke Connal,** Australian National University, Australia
10.10-10.35	**5A-IL-3:** Materials for Functional Liquid Wettability. **Prof. Uttam Manna**, Indian	**5B-IL-3:** Microfluidic Methods for Controlled Mixing and In-Situ Monitoring of Nanomaterial Synthesis.	**5C-IL-3:** Geometrical Control and Functionalization of Anodically Formed Porous Gallium Oxide. **Dr.**	**5D- IITB-UON-4:** Supramolecularly Directed Confined Crystallization of Lamellar Carbon Nitride for Efficient Photocatalytic	**5E-IL-3:** Pretargeting for precise delivery of polymeric radiotherapeutics. **Dr. Nicholas Fletcher,**	**5F-IL-3:** Additive Manufacturing Techniques for the Fabrication of Flexible Solar Cells Using Coating Techniques. **Prof.**

	Institute of Technology Guwahati, India	**Prof. Alan Tuncay,** Monash University, Australia	**Toshiaki Kondo,** Aichi University of Technology , Japan	Hydrogen Generation. **Dr. Nithinraj P Dharmarajan,** University of Newcastle, Newcastle, Australia	University of Queensland Australia	**Nirmala Grace,** Vellore Institute of Technology, India
10.35-10.50	**Coffee Break**					
	Chair: Prof. M. Lakshmi Kantam	**Prof In Chung**	**Chair: Prof. Michael Stöcker**	**Chair: Prof. Arindam Chowdhury**	**Chair: Prof. Vipul Bansal**	**Chair: Prof. Nirmala Grace**
10.50 - 11.15	**5A-IL-4:** Visible light-driven fumarate production from gaseous CO_2 using $FeOOH/BiVO_4/CuInS_2$ tandem electrochemical system with biocatalyst. **Prof. Yutaka Amao,** Osaka Metropolitan University, Japan	**5B-IL-4:** Photon-Pair Generation and Quantum Measurements with Metasurfaces. **Prof. Andrey Sukhorukov**, Australian National University, Australia	**5C-IL-4:** Solar-Driven Organic Waste Valorisation using Earth-Abundant Photoactive Materials for Hydrogen and Value-Added Chemical Production. **Prof Yi-Hsuan Lai,** National Cheng Kung University, Taiwan	**5D- IITB-UON-5:** Designer Porous Liquids for Sustainable Chemical Conversions. **Prof. Sanjog Nagarkar,** Indian Institute of Technology (IIT) Bombay, India	**5E-IL-4:** The Construction, Functionization and Application of Long-term Drug Delivery Systems for Ocular Diseases. **Prof. Yan Pang,** Shanghai Jiao Tong University, China	**5F-IL-4:** Phosphorus-Free $Sb2S3-GeS_2$ Sulfide Glass Electrolytes with an Exceptionally High Critical Current Density for All-Solid-State Batteries**. Prof. In Young Kim,** Ewha Womans University, Republic of Korea
11.15 - 11.40	**5A-IL-5:** Rational Design of Three-Phase Interfaces for CO_2 Electroreduction to Multi-Carbon Products. **Prof. Kazuhide Kamiya,** The University of Osaka, Japan	**5B-IL-5:** Metallosupramolecular Frameworks: A New Class of Hierarchical Materials. **Prof. Adam Mechler,** La Trobe University, Australia	**5C-IL-5:** Green Hydrogen and Ammonia: Enabling the Decarbonization of Future Energy Systems. **Dr. Dattatray Dhawale**, CSIRO Energy, Australia	**5D- IITB-UON-6:** Manufacturing of Next-Generation MOF/COF/Polymers/2D Materials via Continuous Mechanochemistry. **Prof. Anil Kumar**, Indian Institute of Technology Bombay, India	**5E-IL-5:** Understanding the interactions of polymer nanomedicines with lipid membranes. **Dr. Nathan Boase,** Queensland University of Technology, Australia	**5F-IL-5:** Novel Nanoporous (Supramolecular) Polymers for Molecular Separation. **Prof. Yoshimitsu Itoh,** The University of Tokyo, Japan
11.40 - 12.05	**5A-IL-6:** Capillary-Fed Alkaline Water Electrolysis for Green Hydrogen Production. **Dr. Chong Yong Lee**, University of Wollongong, Australia	**5B-IL-6:** Engineering Nanostructured Antibody Systems: From Gold Conjugates to Complex Nanoarchitectures. **A/Prof. Veysel Kayser,** The University of Sydney, Australia		**5D- IITB-UON-7:** Allenes in Metal catalyzed C-H activation Reactions**. Prof. Chandra M.R. Volla,** Indian Institute of Technology Bombay, India	**5E-IL-6:** Visualising Nanoparticle Extravasation across the Blood–Brain Barrier in Live Zebrafish. **Dr. Yiqing Lu,** Macquarie University, Australia	**5F-IL-6:** Bioinspired hydrogels based on high aspect ratio hectorite clays. **Prof. Olli Ikkala,** Aalto University, Finland
12.05 - 12.30	**5A-IL-7:** Carbon Edge selective decoration of Pt for HOPG through substrate-enhanced electroless deposition. **Dr. Qingfeng Zhai,** University of New South Wales, Australia	**5B-IL-7:** Atom Probe Tomography of Nanostructured Alloys. **Dr. Andrew Breen**, University of New South Wales, Australia	**5C-IL-7:** Green Ammonia Combustion: Technology Development and Demonstration Strategy in Korea. **Dr. Byoung-Hwa Lee,** Pusan National University, Republic of Korea	**5D- IITB-UON-8:** Optimization of interfaces by Selective Charge transport Layers for Stable and Scalable Wide Bandgap Perovskite Solar Cells. **Prof. Dinesh Kabra,**	**5E-IL-7:** Smart Microneedle for Targeted Eradication of Deep Biofilm Infections and Wound Repair. **Dr. Hanif Haidari**, Flinders University, Australia	

				Indian Institute of Technology Bombay, India		
12.30 - 12.55	**5A-IL-8:** Dynamic Electrocatalysis Through High-Frequency Electromechanical Excitation. **A/Prof. Amgad Rezk,** RMIT University, Australia	**5B-IL-8:** Understanding Catalysts and Ionomer Degradation in Hydrogen related Technologies. **Dr. Paulo Ferreira**, University of Lisbon, Portugal	**5C-IL-8:** Integrating Advanced Nanomaterials in Large-Scale Afforestation by Using Tech-Driven Planting to Cut Pakistan's Carbon Emissions. **Prof. Bibi Saira Nouman,** Minhaj University, Pakistan	**5D-IITB-UON-9:** Mitigating First Cycle Sodium Loss in Hard Carbon Anodes through Additive Induced Presodiation. **Prof. Srinivasan Ramakrishnan,** Indian Institute of Technology, Bombay, India	**5E-IL-8:** Mesoporous Silica to Stabilize/Destabilize Overloaded Amorphous Pharmaceuticals. **Dr. Kohsaku Kawakami,** National Institute for Materials Science, Japan	**5F-IL-8:** Rapid, Sustained Copper-Mediated Deoxygenation for Open-Air Aqueous Controlled Radical Polymerization. **Dr. Valentin Bobrin,** The University of Queensland, Australia
12.55 – 13.05	**5A-OP-1:** Post-Synthetic Sodium Insertion for Modulating the Near-Infrared Plasmonic Response of Tungsten Oxide Nanocrystals. **Merve N.G. Bicer,** RMIT University, Australia	**5B-OP-1:** Unlocking Photodetection Mode Switching from a Simple Lateral Design**. Z. Yong**, University of Melbourne, Australia	**5C-OP-1:** Monodisperse and Size-modulable Optical Resonators from Synthetic Polymers by Inkjet Printing. **K. Dewi,** Tsukuba University, Japan		**5E-OP-1:** Effect of Catalyst Surface Hydrophilicity on Oxygen Evolution Reaction. **K.Oiwa,** University of Tsukuba, Japan	**5F-OP-1:** Ni-MOF as a Precursor for Highly Dispersed Ni in Mg-Based Hydrogen Storage Composites. **K. Tabata,** University of Tsukuba, Japan
13.10-14.00	**Lunch**					
14.00-14.45	**Plenary Lecture 6** **Chair: Prof Mauricio Terrones** **Prof. Hui-Ming Cheng, Shenzhen Institutes of Advanced Technology, China** *Exploration of new 2D materials*					
	6A **Chair: Prof. Kazuhide Kamiya**	**6B** **Chair: Prof. Adam Mechler**	**6C** **Chair: Prof. Masayuki Yagi**	**6D** **Chair: In Young Kim**	**6E** **Chair: A/Prof. Jiali Zhai**	**6F** **Chair: Prof. Yoshimitsu Itoh**
14.50 - 15.20	**6A-KL-1:** Rational Design of Energy-Functional 2D Nanohybrids. **Prof. Seong-Ju Hwang,** Yonsei University, Republic of Korea	**6B-KL-1:** Advancing MOF Simulations with Machine-Learned Potentials. **Prof. Guillaume Maurin,** ICGM, University of Montpellier, CNRS, ENSCM, France	**6C-KL-1:** Water Tolerant Catalysts for Biomass Transformations. **Prof. Karen Wilson,** Griffith University, Australia	**6D- IITB-UON-1:** Agonies and Ecstasies in Total Synthesis. **Prof. K.P. Kaliappan,** Indian Institute of Technology Bombay, India	**6E-KL-1:** Nanocoating of Living Bacterial Therapeutics. **Prof. Jinyao Liu,** Shanghai Jiao Tong University, China	**6F-KL-1:** From Nanomaterials to Molecular Intelligence: Transforming Diagnostics for Early, Rapid and On-the-Go Detection. **Prof. Muhammad Shiddiky,** Charles Sturt University, Australia
15.20 - 15.45	**6A-IL-1:** Upcycling Biosolids into Hybrid Electrocatalysts for Electrolysers. **A/Prof. Surbhi Sharma,**	**6B-IL-1:** Three-Dimensional Mesoporous Graphene as a Confinement Framework for Highly Dispersed	**6C-IL-1:** Surface Modification of Photocatalysts with Bimetallic Nanoparticles	**6D-IITB-UON-2:** Proton-Tuned Surface Chemistry Promotes Multicarbon Formation in Acidic CO_2 Electroreduction. **Dr. Yong**	**6E-IL-1:** Nanozymes and Polymers for Nitric Oxide Delivery. **Dr. Rona Chandrawati,** University	**6F-IL-1:** Amorphous Conjugated Polymer Networks for Energy-Related Applications. **Prof. Yuya**

	Federation University, Australia	Transition Metal Carbide Nanoparticles toward Efficient Hydrogen Evolution. **Prof. Hyun Jung,** Dongguk University, Republic of Korea	for Hydrogen Generation. **Prof. Hynd Remita,** Université Paris-Saclay, France	**Zhao**, University of Newcastle, Australia	of New South Wales, Australia	**Oaki,** Keio University, Japan
15.45 - 16.10	**6A-IL-2:** Minimizing Energy Loss in Electrocatalysts for Water Splitting. **Dr. Wenxian Li,** University of New South Wales, Australia	**6B-IL-2:** Multi-Component Mesoporous Materials: Synthesis, Assembly and Applications. **Prof. Zhen-An Qiao,** Jilin University, Changchun, China	**6C-IL-2:** Photocatalytic Energy Conversion using Nanostructured Semiconductors. **Prof. Kei Noda,** Keio University, Yokohama, Japan	**6D- IITB-UON-3:** advancing mhat radical chemistry for carbo- and heterocycle synthesis. **Prof. Santosh J. Gharpure**, Indian Institute of Technology (IIT) Bombay, India	**6E-IL-2:** Quantitative Surface Chemistry of Carbon Nanomaterials for Controlled Nanobiointeraction and Targeted Drug Delivery. **Dr. Yajuan Zou,** Okayama University, Japan	**6F-IL-2:** When Molecular Shape Governs Phase Separation: Bottlebrush Polymers for Ordered Structures and Soft Materials. **Dr. Yoshihiro Yamauchi,** National Institute for Materials Science, Japan
16.10 - 16.35	**6A-IL-3:** Atomically precise metal clusters: from fundamentals to applications in catalysis and energy. **Dr. Vladimir Golovko**, University of Canterbury, New Zealand	**6B-IL-3:** Electrospun Functional Materials for Advanced Biological Applications: From eDNA Capture to Biomineralization and Carotenoid Recovery. **Dr. Yen Truong,** CSIRO Technology Research Unit, Victoria, Australia	**6C-IL-3:** Growing Synthetic Nacre: Simultaneous Printing and Assembly of Interlocking Building Blocks. **Dr. Mohammad Mirkhalaf,** Queensland University of Technology, Australia	**6D- IITB-UON-4:** 5,6-Diaryl Dipyrroethenes as Precursors for the Synthesis of Porphyrinoids and Coordination Chemistry of Acyclic Oligopyrrolic Ligands. **Prof. Ravikanth Mangalampalli,** Indian Institute of Technology, Bombay, India	**6E-IL-3:** Molecular Precision: Targeting RNA–Protein Interfaces and Reprogramming Genomes with seekRNA. **Dr. Sandro Ataide,** The University of Sydney, Australia	**6F-IL-3:** Development of Thermoplastic Protein Materials Using Discarded Feathers. **Dr. Takashi Morinaga,** National Institute of Technology, Japan
16.35 - 16.50	**Coffee Break**					
	Chair: Prof. Seong-Ju Hwang	**- Chair: Dr. Siva kumar Krishnan**	**Chair: Prof Kei Noda**	**Chair: Prof Ravikanth Mangalampalli**	**- Chair: Dr. Yajuan Zou**	**-Prof Noushin Nasiri**
16.50 - 17.15	**6A-IL-4:** Engineering Biomimetic Nanomaterials for Targeted Drug Delivery in TripleNegative Breast Cancer **A/Prof. Pegah Varamini,** The University of Sydney, Australia	**6B-IL-4:** Selective Recovery of Uranyl Ions from Sea Water Using Covalent Organic Framework Membranes. **Prof. Prabal Kumar Maiti,** Indian Institute of Science, India	**6C-IL-4:** Defect Evolution in Wide-Bandgap Kesterite Solar Cells Revealed by Advanced Multi-Scale Characterization. **Dr. Jialiang Huang,** University of New South Wales, Australia	**6D-IITB-UON-5:** Machine-Learning-Accelerated Design of Vanadium-Phosphate Glass Cathodes. **Prof. Elena Levchenko**, University of Newcastle, Australia	**6E-IL-4:** Sugar-Coating mRNA: Molecular Insights into Maltoheptaose-Based Encapsulation. **Dr. Nevena Todorova,** RMIT University, Australia	**6F-IL-4:** High-Efficiency Actuation and Bionic Applications of Artificial Muscle Fibers. **Prof. Jiangtao Di,** Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China
17.15 - 17.40	**6A-IL-5:** Polarization Engineering of Functional Materials for Next	**6B-IL-5:** Artificial Nanostructure Design in Oxide Nanocomposites through Supersaturation Control. **Prof. Yoshida**	**6C-IL-5:** Optically Coupled Advanced Photovoltaic Concepts for Efficiency Enhancement. **Dr. Santosh Shrestha,** The University	**6D- IITB-UON-6:** Surface-Engineered Carbon Nitrides for Enhanced Photocatalytic Hydrogen Production. **Dr. Jae-Hun**	**6E-IL-5:** Digital Droplet Microfluidic Platforms for Nucleic Acid Diagnostics. **Dr. Ming Li,** The University	**6F-IL-5:** Self-Oscillation of Liquid Droplets with Excitable Dynamics Driven by Surfactant Self-Assembly and Chemical

	Generation Energy Conversion. **Dr. Simrjit Singh,** University of Ostrava, Czech Republic	**Yutaka,** Nagoya University, Japan	of New South Wales, Australia	**Yang,** The University of Newcastle, Australia	of New South Wales, Sydney, Australia	Control. **Dr. Ai Kohata,** Institute of Science Tokyo, Japan
17.40 - 18.05	**6A-IL-6:** Inorganic Nanosheet Membranes as Proton-Conducting Electrolytes for Fuel Cells. **Dr. Shintaro Ida,**Kumamoto University, Japan	**6B-IL-6:** Co-assembling Mesoporous ZIFs for Enhanced H_2 Storage. **Dr. Min Liu,** The University of Queensland, Australia	**6C-IL-6:** Direct fabrication of micron-scale structures using Super Inkjet **Dr. Kazuhiro Murata,** SITechnology, Inc., Japan		**6E-IL-6:** Advanced Bio-Inspired Nanomaterials for Cancer Theranostics: Integrating Targeted Delivery, 3D Models, and AI. **A/Prof. Nanasaheb Thorat,** University of Limerick, Ireland	**6F-IL-6:** Enhancement of Electro-optic Response in AlScN Films. **Prof. Tomoaki Yamada,** Nagoya University, Japan
18.05-18.50	**Plenary Lecture 7** **Chair: Prof Rose Amal** **Prof Meifang Zhu** **Emerging Organic–Inorganic Nanohybrids: From Design and Fabrication to Applications**					
18.50-19.30	**Poster Session II**					

	19th of November 2026					
	The Arena	**The Extra**	**The Vivid**	**The King St**	**The City View**	**The Game**
8.00-8.45	**Plenary Lecture 8** **Chair: Prof. Taeghwan Hyeon** **Prof. Rose Amal, University of New South Wales, Australia** *Sunlight to X: Advanced Nanomaterials and Cooperative Catalytic Ensembles*					
	7A **Chair: Prof. Yun Liu**	**7B** **Chair: Dr. Jae-Hun Yang**	**7C** **Chair: Prof. Chang Liu**	**7D** **Chair: Prof. Anup Kumar Keshri**	**7E** **Chair: Prof. Amir Karton**	**7F** **Chair: Prof. Yohei Yamamoto**
8.50 - 9.20	**7A-AL-1:** Plastic waste transformation and degradation to value-added materials. **Prof. Shaobin Wang,** Adelaide University, Australia (8.50- 9.20)	**7B-IL-1:** Momentum Microscopy for Characterisation of 2D Materials. **Prof. Sarah Harmer,** Flinders University, Australia	**7C-KL-1:** Rapid Multiplexed Diagnostics: Scaling Silicon-Based Biosensor Technology. **Prof. Madhu Bhaskaran,** RMIT University, Australia	**7D-KL-1:** Nanowire Array Materials and Devices for Optoelectronic Applications. **Prof. Lan Fu**, Australian National University, Australia	**7E-KL-1:** Optimizing Data Extraction from Materials Science Literature: A Study of Tools Using Large Language Models **Prof. Jeffrey Reimers,** University of Technology Sydney, Australia	**7F-SACSEM-1:** Recent Progress of Hydrogen Boride Nanosheets. **Prof. Takahiro Kondo,** University of Tsukuba, Japan
9.20 - 9.45	**7A-AL-2:** Liquid Metal Interfaces in Bio-applications. **Prof. Kourosh Kalantar-Zadeh,** The University of Sydney, Australia (9.20-9.50)	**7B-IL-2:** 2D Covalent Thin Films for Light-Induced Energy Conversion. **Dr. Paolo Giusto,** Max Planck Institute of Colloids and Interfaces, Germany	**7C-IL-1:** High entropy alloys for plasmonic application. **Prof. Yoshiaki Nishijima**, Yokohama National University, Japan	**7D-IL-1:** Conjugated organic materials for high-performance photodetectors: from molecular design to device applications. **Prof. In Hwan Jung,** Hanyang University, Republic of Korea	**7E-IL-1:** Orbmol-v2: Learnable long-range electrostatics for universal molecular Simulation. **Prof. Timothy Duignan,** Orbital Industries,	**7F-SACSEM-2:** Room-Temperature Hydrogen Adsorption in Porous Materials. **Prof. Osamu Oki,** University of Tsukuba, Japan
9.45 - 10.10	**7A-AL-3:** Ion-selective membranes and solar-driven separation. **Prof. Huanting Wang,** Monash University, Australia **(**9.50-10.20)	**7B-IL-3:** Alloys and heterostructures of 2D TMDs. **Prof. Ranjan Datta,** Jawaharlal Nehru Centre for Advanced Scientific Research, India	**7C-IL-2:** Ionic Nanoarchitectonics for Various Functional Devices, Including Neuromorphic Computing. **Prof. Kazuya Terabe,** National Institute for Materials Science (NIMS), Japan	**7D-IL-2:** Vapour-Phase Synthesis of Two-Dimensional Transition Metal Dichalcogenides for Energy and Sensing Applications. **Prof. Anjana Devi,** Leibniz Institute for Solid State and Materials Research, TU Dresden, Germany	**7E-IL-2:** How Ligand Structure Affects the Colloidal Stability of Apolar Nanoparticles. **Dr. Asaph Widmer-Cooper**, The University of Sydney, Australia	**7F-SACSEM-3:** Hierarchically Porous Carbon Materials from Fullerene Crystals for Energy Storage Applications. **Dr. Lok Kumar Shrestha,** National Institute for Materials Science (NIMS), Japan
10.10 - 10.35		**7B-IL-4:** Conversion of Epitaxial Graphene to 2D diamane on Silicon Carbide. **Prof. Nunzio Motta,** Queensland	**7C-IL-3:** Cryogenic Surface Engineering for Improved Superconducting Qubit Coherence. **Dr. Maja**	**7D-IL-3:** Synthesis of Yolk@Shell Nanocrystals for Solar Hydrogen Production. **Prof. Yung-Jung Hsu,** National Yang	**7E-IL-3:** Graphene Dimples. **Prof. Natalie Thamwattana,** University of Newcastle, Australia	**7F-SACSEM-4:** The Slow Electronics Revolution: Long-Timescale Neuromorphic Devices

		University of Technology, Australia	**Cassidy,** University of New South Wales, Australia	Ming Chiao Tung University, Taiwan		and Reservoir Computing for Low-Power Edge AI**. Dr. Isao Inoue**, National Institute of Advanced Industrial Science and Technology (AIST), Japan
10.35-10.50	**Coffee Break**					
	Chair: Prof. Huanting Wang	**Chair: Prof. Sarah Harmer**	**Chair: Prof. Nunzio Motta**	**Chair: Prof. Madhu Bhaskaran**	**Chair: Prof. Natalie Thamwattana**	**Chair: Prof. Takahiro Kondo**
10.50 - 11.15	**7A-AL-4:** Plasma technologies providing new capabilities in biomedicine. **Prof.Marcela Bilek,** University of Sydney, Australia **(10.50 - 11.20)**	**7B-IL-5:** Gram-Scale Production of High-Quality 2D Materials**. Prof. Anup Kumar Keshri**, Indian Institute of Technology Patna, India	**7C-IL-4:** Future directions for silicon solar cells. **Prof. Daniel Macdonald,** The Australian National University, Australia	**7D-IL-4:** Recent Advances in Organic Narrow-Band Near-Infrared Photodetectors. **Prof. Frank Nuesch,** Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland	**7E-IL-4:** Reactive Molecular Simulations of Catalytic Surfaces and Solid-Liquid Interfaces Using Neural Network Potentials. **Prof. Akira Nakayama**, The University of Tokyo, Japan	**7F-SACSEM-5:** Organic Electrochemical Transistors using π-ion gels: PIGT. **Prof. Soh Kushida,** Tsukuba University, Japan
11.15 - 11.40	**7A-AL-5:** Earth-Abundant Electrocatalysts for Hydrogen Energy Conversion. P**rof. Chuan Zhao**, University of New South Wales, Australia I **(11.20 - 11.50)**	**7B-IL-6:** Functionalised graphene oxide for high-purity ZBLAN precursor materials. **Dr. Kwang Jun Lee,** Adelaide University, Australia	**7C-IL-5:** 3D flat band in ultra-thin Kagome metal, Mn3Sn **Dr. James Blyth**, Monash University, Australia	**7D-IL-5:** Optical manipulation of diamond surfaces from mesoscopic pattern formation to sub-monolayer modification. **Prof. Rich Mildren,** Macquarie University, Australia	**7E-IL-5:** Theoretical examination of ionic liquids capable of maintaining long-lived electric fields. **Dr. Peter Halat,** Monash University, Australia	**7F-SACSEM-6:** High-Performance Thermoelectric Materials & Devices for Power Generation and Cooling. **Dr. Takao Mori**, National Institute for Materials Science (NIMS), Japan
11.40 - 12.05	**7A-AL-6:** Beyond the Flat Model: Structural Complexity and Functional Design in 2D Materials. **Prof. Yun Liu,** Australian National University, Australia **(11.50 - 12.20)**	**7B-IL-7:** Reducing Critical Threshold for Electron-Hole Plasma in 2D Transition Metal Dichalcogenide Crystals. **Dr. Masanobu Iwanaga,** National Institute for Materials Science (NIMS), Japan	**7C-IL-6:** Towards Sustainable Plastic Additives. **Dr. George Vamvounis,** James Cook University, Australia	**7D-IL-6:** The search for stable and scalable high-performance semiconductors for silicon tandem solar cells. **Dr. Robert Patterson**, University of New South Wales, Australia	**7E-IL-6:** Using Big Data to Stress-Test DFT and MLIP Methods Across the Chemical Space. **Dr. Amir Karton,** University of New England, Armidale, Australia	**7F-SACSEM-7:** Observation of novel hydrogen-rich hydride of TiFe based compounds. **Dr. Kouji Sakaki,** National Institute of Advanced Industrial Science and Technology (AIST), Japan
12.05 - 12.30	**7A-IL- 1**-Multi-Technique Surface Characterization of 2D Materials: Case Studies	**7B-IL-8:** Designing catalysts for photo-thermal conversions. **Dr. Emma Lovell,** University of	**7C-IL-7:** Optoelectronic devices based on low dimensional nanomaterials. **Prof.**	**7D-IL-7:** Laser Ablation: A Versatile Tool for the Synthesis of Nanostructured Materials for Photonics	**7E-IL-7:** Mechanistic Insights into π-Conjugation-Enhanced Excited-State Proton	**7F-SACSEM-8:** Heterogeneous hydrogenation of CO_2 to methanol catalyzed by a dinuclear iridium complex

	in Graphene and MAX Phases. **Dr. J.E. Mann**, Physical Electronics, United States of America **(12.20 to 12.40)**	New South Wales, Australia	**Dongming Sun**, Institute of Metal Research, China	Applications. **Prof. Alika Khare**, Indian Institute of Technology Guwahati, India	Transfer in Aromatic Urea Derivatives. **Dr. Yoshinobu Nishimura,** University of Tsukuba, Japan	under gas-solid phase conditions. **Dr. Yuichiro Himeda,** National Institute of Advanced Industrial Science and Technology, Japan
12.30 - 12.55	**7A-IL-1:** Advanced Manufacturing Alkaline Electrolyser Cell-Stacks for Green Hydrogen Production. **Dr Mahroo Baharfar**, University of Sydney, Australia **(12.40-13.05)**	**7B-IL-9:** Carbon Nanotube Macrostructure-Based Hybrids. **Prof. Chang Liu,** Institute of Metal Research, Chinese Academy of Sciences, China	**7C-IL-8:** Unique Structural Interaction Designs for High-Performance Organic and Perovskite Photovoltaic Devices. **Prof. Wallace C.H. Choy,** The University of Hong Kong, Hong Kong	**7D-IL-8:** From Discovery to Dissemination: AI, Ethics, and Open Access in Scientific Publishing. **Dr. Esther Levy,** Wiley	**7E-IL-8:** Computational Design of High-performance Materials for Energy Conversion and Storage. **Dr. Jodie Yuwono,** University of New South Wales, Australia	**7F-SACSEM-9:** Boron-Doped Diamond as a Functional Electrode Material for Nanomaterial-Based Non-Enzymatic Biomarker Sensing. **Dr. Hiroshi Aoki,** National Institute of Advanced Industrial Science and Technology (AIST), Japan
12.55 - 13.20		**7B-OP-1:** Combined Surface Modification-Hybridization Approach for Stabilizing Silicon Nanoparticle Electrodes. **J.Y.Lee**, Yonsei University, Republic of Korea **(12.30 - 12.40)**	**7C-OP-2:** Selective Control of Crystal Defect Ionicity to Boost Electrocatalytic Nitrate Reduction. **K.E.Sung**, Yonsei University, Republic of Korea **(12.55 - 13.05)**	**7D-OP-1:** Lewis-Acidic Non-Metal-Doping-Assisted Optimization of Urea Oxidation Mechanism in Amorphous Metal Hydroxide. **S. Kim**, Yonsei University, Republic of Korea **(12.55 - 13.05)**	**7E-OP-1:** Rational Molecular Design of Mesoporous Covalent Organic Frameworks for Enhanced Photosynthesis and Aqueous Zinc-Ion Batteries. **A/Prof. Di Liu**, Fudan University, China	**7F-SACSEM-10:** Multi-Stimuli-Responsive Dynamic Crystals Based on Azobenzene Derivatives. **Dr. Yasuo Norikane,** National Institute of Advanced Industrial Science and Technology (AIST), Japan
13.10 - 14.00	**Lunch**					
14.00-14.45	**Plenary Lecture 9** **Chair: Prof. Nam Trung** **Prof. Taeghwan Hyeon, Seoul National University, Republic of Korea** *Designing Single-atom Catalysts and Nanocatalysts for Hydrogen Production and Utilization*					
	8A **Chair:**	**8B** **Chair: Prof. Anup Kumar Keshri**	**8C** **Chair: Prof. Masaki Mizuguchi**	**8D** **Chair: Dr. George Vamvounis**	**8E** **Chair: Prof. Michael Stöcker**	**8F** **Chair: Dr. Takao Mori**
14.50 - 15.20	**8A-AL-8:** Flexible microfluidics and electronics for wearable preventive-care and wellness applications. **Prof. Nam Trung,** Queensland Quantum and Advanced	**8B-KL-1:** Integrated CO_2 Capture-Upgrading. **Prof. Tianyi Ma**, RMIT University, Australia	**8C-KL-1:** Electrochemical Prevention of Macrofouling Organisms on Marine Surfaces. **Prof. Mats R Andersson,** Flinders University, Australia	**8D-KL-1:** Nanoscale Stochastic Physical Cues: Their Role in Mechanobiology and Pathologies in the Brain. **Prof. Prasad Shastri**, Institute for Macromolecular	**8E-KL-1:** Numerical Modelling of Transport and Reaction Phenomena for Controlled Graphene Growth by Chemical Vapour Deposition. **Prof. Yiannis Ventikos,** Monash University, Australia	**8F-SACSEM-1:** Recent breakthroughs across both solid-state and liquid-state thermal energy harvesting systems. **Prof. Wei Qingshuo,** National Institute of

	Technologies Research Institute, Griffith University, Australia			Chemistry, University of Freiburg, Germany		Advanced Industrial Science and Technology (AIST), Japan
15.20 - 15.45	**8A-KL-1:** Approaches Toward High Power Density Redox Flow Battery. **Prof. Walid Daoud**, University of Hong Kong, Hong Kong **(15.20 - 15.50)**	**8B-IL-1:** Induced Transmission based Linear Variable Filter for hyperspectral imager. **Prof. Colin Hall**, Future Industries Institute, Adelaide University, Australia	**8C-IL-1:** Autonomous Discovery of Photovoltaic Materials and Photoinduced Halide Dynamics in Lead Halide Perovskites. **Prof. Udo Bach,** Monash University, Australia	**8D-IL-1:** Structure Properties of a Crystalline Molecular Dipolar Rotor. **Prof. Setaka Wataru,** Metropolitan University, Japan	**8E-IL-1:** QM/MM/MD Modelling of Raman Optical Activity Spectra as a Probe of Carbohydrate Conformation. **Prof. Ewan Blanch,** RMIT University, Australia	**8F-SACSEM-2:** Approach toward Optochemistry from Organic Materials Science View. **Prof. Yohei Yamamoto,** University of Tsukuba,Japan
15.45 - 16.10	Meeting and Discussion with Editors from Wiley, Elsevier and RSC	**8B-IL-2:** Physicochemical Properties of 2D Materials Revealed by In Situ Transmission Electron Microscopy. **Dr. Konstanstin Faershteyn,** Queensland University of Technology, Australia	**8C-IL-2:** Double-cable Polymers for High Efficiency Single-Component Organic Solar Cells with Controlled Nanostructure. **Prof. Christopher McNeill,** Monash University, Australia	**8D-IL-2:** Molecular Engineering of Diketopyrrolopyrrole Semiconductors for Multifunctional Electronics. **Dr. Qian Liu,** Queensland University of Technology, Australia	**8E-IL-2:** Data-driven Screening of Multi-element Materials. **Prof. Michihisa Koyama,** Shinshu University, Japan	**8F-SACSEM-3:** Proximal Cu-Co Sites Anchored on Mesoporous C_3N_5 for Selective Electrochemical Nitrate Reduction to Ammonia. **Dr. Muhammad Ibrar,** The University of Newcastle, Australia
16.10 - 16.35			**8C-IL-3:** Highly Sensitive Time-Resolved Absorption and Luminescence Spectroscopy for Photoenergy Conversion Materials. **Prof. Ryuzi Katoh,** Nihon University, College of Engineering, Japan	**8D-IL-3:** Thermophysical Properties of Polygonally Engineered PEGs. **Dr. Kazushi Kinbara,** Institute of Science Tokyo, Japan	**8E-IL-3:** Automated Reaction Path Exploration, Robotic Synthesis Platform, and Machine Learning for Yield Prediction and Mechanistic Insight. **Dr. Doba Takahiro,** Kyoto University, Japan	**8F-SACSEM-4:** Convection Effects on Thermal Conductivity and Resistivity Components in Liquid Thermoelectric Converters **Prof. Yutaka Moritomo,** University of Tsukuba, Japan
16.35 - 16.50	**Coffee Break**					
		Chair: Prof. Colin Hall	**Chair: Prof. Udo Bach**	**Chair: Prof. Prasad Shastri**	**Chair: Prof. Ewan Blanch,**	**Chair: Dr. Yasuo Norikane**
16.50 - 17.15		**8B-IL-3:** Supercritical Fluid Engineering of 2D/3D Advanced Nanostructures for Energy Generation and Conversion: A Paradigm Shift. **Prof. Dinesh Rangappa,** Visvesvaraya	**8C-IL-4:** Thermomagnetic Effect in Nano-porous Materials. **Prof. Masaki Mizuguchi,** Nagoya University, Japan	**8D-IL-4:** Superacid-Resistant BODIPYs Inspired by Calix[3]pyrrole Chemistry. **Prof. Yasuhide Inokuma,** Hokkaido University, Japan	**8E-IL-4:** Coarse-grained molecular dynamics simulation study on condensate formation of intrinsically disordered proteins. **Prof. Zhong-Yuan Lu,** Jilin University, China	**8F-OP-1:** Nanoarchitectonics of Fullerene-derived Nanoporous Carbon: Cavity Engineering for Ammonium-ion Storage. **S. Shahi,** National Institute for Materials Science (NIMS), Japan

		Institute of Advanced Technology (VIAT), India				**(16.50 – 17.00)** **8F-OP-2:** Catalytic formic acid dehydration via lattice hydrogen and hydrogen vacancies in hydrogen boride. **Z. Kang,** University of Tsukuba, Japan **(17.00 - 17.10)** **8F-OP-3:** Thermal Dehydrogenation-triggered Dispersion and Stabilization of Magnesium on Hydrogen Boride Nanosheets. **N. Noguchi,** University of Tsukuba, Japan **(17.10 - 17.20)** **8F-OP-4:** Nanopore Engineering of Hierarchical Porous Carbon from Biomass for Advanced Hybrid Supercapacitors. **A. Puri**, National Institute for Materials Science (NIMS), Japan **(17.20 - 17.30)** **8F-OP-5:** Topochemical Synthesis of Oxynitride Photocatalysts Assisted by Hydrides. **I. Yamamoto,** Institute of Science Tokyo, Japan **(17.30 - 17.40)** **8F-OP-6:** Asymmetric Brownian Motion of Chiral Molecules Probed by Pump Polarization-Angle-Dependent Optical Kerr Effect Spectroscopy. **K. Murakami,** University of Tsukuba, Japan **(17.40 – 17.50)**
17.15 - 17.40		**8B-IL-4:** Control of Graphene Dirac Fermions via 2D Molecular Self-Assembly. **Dr. Agustin Schiffrin,** Monash University, Australia	**8C-IL-5:** $Co/BiFeO_3$ interfacial multiferroics. **Prof. Naganuma Hiroshi**, University of Toyama, Japan	**8D-IL-5:** Direct Measurement of the Magnetoelectric Effect in Liquids for Wireless Biomedical Devices. **Prof. Michael Higgins**, University of Wollongong, Australia	**8E-IL-5:** Engineering Excited-State Coupling for Efficient Copper Iodide X-Ray Scintillators. **Dr. Simil Thomas,** King Abdullah University of Science and Technology, Saudi Arabia	
17.40 - 18.05		**8B-IL-5:** TPC-Coated Nanoparticles as Dispersing Units for MXene-Based Photothermal Polymer Composites.**Dr. Shuta Hara,** Kanagawa University, Japan	**8C-IL-6:** Opto-Magnetically Guided Monocytes for Enhanced Nanotherapy in 3D Bioprinted Tumor Models. **Dr. Josep Nogues,** Catalan Institute of Nanoscience and Nanotechnology (ICN2), Spain	**8D-IL-6:** Wiring Proton Gradients via Light-Responsive Molecular Switches. **Dr. Dong Jun Kim**, University of New South Wales, Sydney, Australia	**8E-IL-6:** Graph Neural Network for High-Throughput Screening of Nanocluster Electrocatalysts. **Prof. Biswarup Pathak,** IIT Indore, India	
18.05 - 18.30		**8B-IL-6:** Scalable Synthesis of Mesoporous Ni-Phyllosilicate Tubes: Analysis of Durability and CO_2 Methanation. **Prof. Eun-Bum Cho**, Seoul National University of Science and Technology, S.Korea	**8C-IL-7:** A pH-responsive Sludge-magnesium-alginate Composite for Self-healing Concrete **Prof. Yan Zhuge,** Adelaide University, Australia	**8D-OP-1:** Liquid phase exfoliation of rhombohedral boron monosulfide (r-BS) to two-dimensional BS nanosheets. **J.Li,** Tsukuba University, Japan **(18.05 - 18.15)**	**8E-OP-1:** Staging-Dependent Thermoelectric Behavior of Li_xC_6 Electrodes for Thermorechargeable Batteries. **Q. Gao,** University of Tsukuba, Japan **(18.05 - 18.15)**	
				8D-OP-2: Structure-Property Relationships in High-Entropy LaFeMnCoAlCr Perovskite Electrode: Charge-Storage Kinetics. **Manjesh DM,** Visvesvaraya Technological University, India **(18.15 - 18.25)**	**8E-OP-2:** Anisotropy and multi-colour of circularly polarized luminescence from microspheres of chiral conjugated polymer. **S. Nakayama,** University of Tsukuba, Japan **(18.15 – 18.25)**	

						8F-OP-7: Effect of Heteroatom Doping on the Structure of Rhombohedral Boron Monosulfide **K. Mori,** Tsukuba University, Japan **8F-OP-8:** Ion-Exchange-Like Nickel Introduction into Hydrogen Boride. (**Y. Tamegai,** University of Tsukuba, Japan **(17.50 - 18.00)** **8F-OP-9:** Mechanistic insights into urea-controlled morphological evolution of $NiCo_2O_4$ nanostructures on stainless steel mesh (SSM). **N. Alam,** University of Tsukuba, Japan **(18.00 - 18.10)** **8F-OP-10:** Evaluation of Room Temperature H_2 Storage Properties of Alkali Metal Decorated Organic Porous Materials. **K. Nakayama**, University of Tsukuba, Japan **(18.10 - 18.20)**
19.00 - 21.30	**Banquet**					

	20th of November 2026					
	The Arena	**The Extra**	**The Vivid**	**The King St**	**The City View**	**The Game**
8.00-8.40	**Themed Lecture 5** **Chair: Prof Hirotomo Nishihara** **Prof Mauricio Terrones, Pennsylvania State University, U.S.A** *Ultra-thin Metal Carbide Phases and Carbide-Dichalcogenide Heterostructures: Synthesis, Superconductivity, Electrocatalysis and more*					
	9A **Chair: Prof. Brian Abbey**	**9B** **Chair: Prof. L. Kantam**	**9C** **Chair: Prof. Ehsan Tavakkoli**	**9D** **Chair: Prof. Qingwen Li**	**9E** **Chair: Prof. R. Jayavel**	**9F** **Chair:**
8.50 - 9.20	**9A-KL-1:** Strain Generated Actuation and Sensing for Soft Robotics. **Prof. Pooi See Lee,** Nanyang Technological University, Singapore	**9B-IL-1:** Black Phosphorus Infrared Photodiodes. **A/Prof. James Bullock,** University of Melbourne, Australia (**8.50 - 9.15**)	**9C-ICPN-1:** Single-Cell Genome Engineering Through Plant In Vitro Fertilization and Anionic Polymer Delivery. **Prof. Markita Landry,** University of California, USA	**9D-C-1:** Carbon Nanotubes as Conductive Additives in Lithium-Ion Batteries for Electric Vehicles. **Prof. Yoon Ahm Kim**, Chonnam National University, Republic of Korea	**9E-OP-1:** Affordable Green Hydrogen Production via Electrochemical Upcycling of Biomass-Derived 1’3-Propanediol to 3-Hydroxypropionic Acid. **Yuwei Liu,** The University of Sydney, Australia **(8.50 - 9.00)** **9E-OP-2:** Adaptive Non-Covalent Molecular Architecture Enabling Cooling-Reinforced Adhesion and Electrical Release. **P.M.M. Ihara,** University of Tsukuba, Japan **(9.00 - 9.10)** **9E-OP-3:** Experimental and Numerical Study of Combustion Characteristics and NO Formation in Oxygen-Enriched COG/NH_3 Jet Flame **Eungyeong Kang,** Pusan National University, Republic of Korea	**9F-OP-1:** Emerging Cellulose Nanocrystal Hydrogels for Potential Chronic Wound Healing. **D. Seneviratne,** University of Southern Queensland, Australia **(8.50 - 9.00)** **9F-OP-2:** Fabrication of a Polymeric Scaffold Infused with Silver Nanoparticles and Curcumin for Wound Care. **P. Diyora,** Indrashil University, Gujarat, India **(9.00 - 9.10)** **9F-OP-3:** Nanocellulose Hydrogels with Tunable Rheology for Filament Fidelity in 3D Bioprinting. **Z. A. Ara,** Monash University, Australia **(9.10 - 9.20)** **9F-OP-4:** Plasma engineering of hydrogel-elastomer interfaces for soft robotics and wound dressing applications. **M. Zhianmanesh,** The University of Newcastle, Callaghan, Australia **(9.20 - 9.30)**
9.20 - 9.45	**9A-IL-1:** Solid state nanopores: from single molecule sensing to osmotic power generation: **Prof. Patrick Kluth,** Australian National University, Australia	**9B-IL-2:** Rational synthesis of 2-dimensional III-V semiconductors. **Prof. Jong-Young Kim**, Korea Institute of Ceramic Engineering, Republic of Korea (**9.15-9.40**)	**9C-ICPN-2** Nano-Enabled Micronutrient Delivery in Plants: From Leaf Interactions to Molecular Responses and Environmental Transformations. **Prof. Izabela Josko,** Institute of Plant Genetics, Breeding and Biotechnology, University of Life Sciences, Poland	**9D-C-2:** Catalytic Conversion of Lignocellulosic Biomass into Valuable Chemicals. **Prof. Aritomo Yamaguchi**, National Institute of Advanced Industrial Science and Technology (AIST), Japan		
9.45 - 10.10	**9A-IL-2:** Engineering Porosity and Interfaces in Nanomaterials for Next-Generation Sensing. **Prof. Noushin Nasiri,** Monash University, Australia	**9B-IL-3:** The Pursuit of Low-Dimensional Diamond **A/Prof. Sam Chen,** The University of Newcastle, Australia (**9.40-10.05**)	**9C-ICPN-3:** Nanotechnology-Based Seed Priming Strategies for Improved Plant Resilience. **Prof. Zsuzsanna Kolbert,** University of Szeged, Hungary	**9D-C-3:** Colloidal Synthesis of Photocatalytic Quantum Dots Heterostructure. **Dr. Dechao Chen,** University of Southern Queensland, Australia		
10.10 - 10.35	**9A-IL-3:** Fluorescence-based detection of illicit drugs with perylene diimides. **Dr. Paul Shaw,** The University of Queensland, Australia	**9B-IL-4:** NIR Active Nanoconstructs for Cancer Imaging and Therapy. **Prof. Sharad Gupta (10.05-10.30)**	**9C-ICPN-4: Prof. Thava Palanisami**	**9D-C-4:** Toluene Disproportionation and Alkylation using 3D interconnected MCM-22. **Dr. Michael Stöcker,** SINTEF Industry, Norway		

					(9.10 - 9.20) **9E-OP-4:** Coordination-Engineered Mesoporous Ni/N-Doped Graphitic Carbon Nanocomposites for Efficient Alkaline Hydrogen Evolution. **H.X. Dao**, Niigata University, Japan. **(9.20 - 9.30)** **9E-OP-5:** Theoretical prediction of heterostrain at nanobubbles in moiré graphene. **L. Fu,** The Australian National University, Australia **(9.30 - 9.40)** **9E-OP-6:** Engineering Lignin-Derived Carbon Dots for Microwave-Responsive PAN Fibre Processing. **H.S. Ahmed,** University of Limerick, Ireland **(9.40 – 9.50)** **9E-OP-7:** Facet-Dependent Plasmonic Photocatalytic Activity of M(=Ag, Au)-Cu_2O Metal-Semiconductor Nanostructures. **D. Samarasinghe,** University of New South Wales, Australia **(9.50- 10.00)** **9E-OP-8:** Flow-assembly of phenolic nanocoatings for	**9F-OP-5:** Development and Application of Ti/Zr based MOF nanocomposites for gas adsorption.Prof. **H. Muhammad Zaheer Aslam,** University of Engineering and Technology, Pakistan **(9.30 - 9.40)** **9F-OP-6:** Hierarchically Porous Confined Nanochannels for Enhanced Molecular and Ion Separation. **Y. Huang,** The University of Sydney, Australia **(9.40 – 9.50)** **9F-OP-7:** Preparation of Metal Phosphates and Transition Metal Cation Hybrids and Application to NH_3 Adsorption Materials. **T. Takei,** University of Yamanashi, Japan **(9.50- 10.00)** **9F-OP-8:** Accelerating valorization of biomass-derived 5-hydroxymethylfurfural towards aldehydes via photoactive nickel-cobalt borate-derived oxyhydroxide electrocatalyst. **F.N.I. Sari,** National Cheng Kung University, Taiwan **(10.00 – 10.10)**

					smoke toxicant scavenging. **T.A. Baigh,** University, Melbourne, Australia **(10.00 – 10.10)** **9E-OP-9:** Fluorinated Oxide Shells Enable Sintering-Free Conductive Liquid Metal Composites for Flexible Electronics. **Yuqin Wang,** University of Sydney, Australia **(10.10 - 10.20)**	
10.35 - 10.50	**Coffee Break**					
	Chair: Prof. Pooi Sei Lee	**Chair: A/Prof. James Bullock**	**Chair: Prof. Franklin Gregory**	**Chair: Prof. Yoon Ahm Kim**	**Chair: Dr. Sam Chen**	**Chair: Prof. Michael Stöcker**
10.50 – 11.15	**9A-IL-4:** Plasmonic Nanoaperture Arrays as Active Optical Sensors for Biological and Chemical Imaging**. Prof. Brian Abbey,** La Trobe University, Australia	**9B-IL-5:** Two-Dimensional Hybrid Perovskite Monolayers for Optoelectronics. **Prof. Sudha Mokkapati,** Monash University, Australia	**9C-ICPN-5:** Next-generation priming towards food security: when chemistry meets nanotechnology. **Prof. Vasileios Fotopoulos,** Cyprus University of Technology, Cyprus	**9D-C-5:** Defect-Engineered Graphene Growth on Oxide Ceramics: From Growth Mechanisms to Catalytic Applications. **Prof. Hirotomo Nishihara,** Tohoku University, Japan	**9E-OP-10:** Hydrophobic Nanostructured Materials for Efficient Catalysis. **Yugen Zhang,** Agency for Science, Technology and Research (A*STAR), Singapore **(10.50 – 11.00)** **9E-OP-11:** Ionomer Distribution and Its Effect on Oxygen Reduction Reaction Activity at Nitrogen-Doped Carbon Model Interfaces. **Homma Kaito,** Hokkaido University, Japan **(11.00 – 11.10)** **9E-OP-12:** NiFe-LDH Electrocatalyst for Hydrogen Production via Anion Exchange	**9F-OP-10:** Aqueous Conversion of Ga-Based Liquid Metal Alloys into High-Performance 2D Electrocatalysts for Nitrate Reduction. **Z. Zhang,** University of New South Wales, Sydney, Australia **(10.50 – 11.00)** **9F-OP-11:** Plasmonic Nanodevices for Bioorthogonal Cellular Applications. **A. Kumar,** Pohang University of Science & Technology (POSTECH), Republic of Korea **(11.00 – 11.10)** **9F-OP-12:** Coordination-Directed Transparent Mesoporous $FeNiO_x$ Films for Efficient Electrocatalytic Water
11.15 - 11.40	**9A-IL-5:** Mid-infrared upconversion detection with Si detector at room-temperature. **Dr. Chaohao Chen**, University of Technology Sydney, Australia	**9B-IL-6:** Coordination Polymers with Metal-Sulfur Bonding Motifs for CO_2 Conversion. **Prof. Kazuhiko Maeda,** Institute of Science Tokyo, Japan	**9C-ICPN-6:** Ionic Liquid-Engineered Nanomaterials for Controlled Nutrient Delivery to Enhanced Photosynthetic CO_2 Sequestration. **A/Prof. Dibyendu Mondal,** Institute of Plant Genetics of the Polish Academy of Sciences, Poland	**9D-C-6:** Kinetics of Proton Generation from Activated Carbon in Capacitive Deionization. **Dr. Peter Kovalsky,** The University of Waikato, New Zealand		
11.40 - 12.05	**9A-IL-6:** Low-Cost Biosensors for Rapid Biomarker Detection: Pathways to Non Invasive Point-of-Care Diagnostics. **Dr. Syamak**	**9B-IL-7:** Two-dimensional van deer Waals heterostructures for multi-functional electronic devices. **Dr. Yukata Wakayama,** National Institute	**9C-ICPN-7:** Engineering Plant Leaf Biomimetic Platforms to Understand Fungal Disease Progression in Agricultural Crops. **Dr. Bryan Coad,**	**9D-C-7:** Understanding Li-O_2 Battery Chemistry in Carbon Nanospaces. **Dr. Wei Yu,** Tohoku University, Japan		

	Farajikhah, The University of Sydney,Australia	for Materials Science (NIMS), Japan	Adelaide University, Australia		Membrane Water Electrolysis Using Synthetic Municipal Wastewater. **Bhawana Gehlot,** Victoria University, Australia **(11.10 – 11.20)** **9E-OP-13:** Localised energy dissipation from 10-100nm spidroin II domains in the spider silk core. **Y.T. How,** Queensland University of Technology, Brisbane, Australia **(11.20 – 11.30)** **9E-OP-14:** Low-Temperature Conversion of PTFE into Functional Materials Using Li–Ga Liquid Metal. **Sina Mehdifar,** RMIT University, Australia **(11.30 – 11.40)** **9E-OP-15:** Mechanically Interlocked Dry Electrodes Enabled by Al Mesh Current Collectors. **Soojin Choi,** Pusan National University, Republic of Korea **(11.40 – 11.50)** **9E-OP-16:** Flexoelectric Catalysis for Mechanically Driven Hydrogen Generation and Environmental Remediation. **S.**	Oxidation. **X. Huang,** Niigata University, Japan **(11.10 – 11.20)** **9F-OP-13:** Liquid Metal Reactors for Scalable Advanced Production of Nanophotocatalysts. **H. Al-Fayyad,** The University of Sydney, Australia **(11.20 – 11.30)** **9F-OP-14:** Flame-grown CoNi Bimetallic Phosphide as Bifunctional Catalyst for Electro-Reforming of Plastic Derivatives. **P.N.M. Le,** University of Sydney, Australia **(11.30 – 11.40)** **9F-OP-15:** Niobium-Modified MoS_2 for Sulfide Oxidation-Assisted Hydrogen Production in Hybrid Seawater Electrolysis. **M. Pal,** Indian Institute of Technology Bombay, India **(11.40 – 11.50)** **9F-OP-16:** Rational Design of Superaerophobic Catalysts for High-Current Density Alkaline Water Electrolysis. **J.Z. Soo,** Monash University, Malaysia **(11.50 – 12.00)** **9F-OP-17:** Sub-Microgram Pt for Durable Ampere-Scale Hydrogen Evolution through Pt Restructuring. **A. Suresh,** Indian Institute of
12.05 - 12.30	**9A-IL-7:** Fluorescent nanodiamonds and hexagonal boron nitride for quantum sensing applications **Dr. Philipp Reineck,** RMIT University, Australia	**9B-IL-8:** Applications of Two-dimensional Materials in Energy, Water, and Healthcare. **Dr. David Estrada**, Boise State University, United States of America	**9C-ICPN-8:** Light-Matter Interactions in Carbon and Bio-Derived Nanomaterials: Optical Probing of Functional Interfaces in Agro-Environmental Systems. **Dr. Jenaina Ribeiro Soares**, Federal University of Lavras, Brazil	9D-C-8: Multifunctional CNT films: Scalable synthesis and application perspective. **Prof. Qingwen Li**, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China		
12.30 - 12.55	**9A-IL-8:** High Throughput Nanometrology Using Active Microelectromechanical Systems Cantilevers. **Dr. Michael Ruppert,** University of Technology Sydney, Australia	**9B-IL-9:** Nanoengineered Degradable Polymer Films via Aqueous Emulsion Polymerization. **Dr. Yasemin Fadil,** The University of New South Wales, Australia		**9D-C-9:** Photo- vs. Thermal degradation of pigment nanoparticles in paints: Reactivity of As-based Pigments in Artworks of the 17th and 19th Century. **Prof. Koen Janssens,** University of Antwerp, Belgium		
12.55 - 13.05	**9A-OP-1:** Nanoporous MOF-Based Aptasensors for Ultrasensitive Detection of Veterinary Antibiotic Residues. **I.M. Khan,** University of Nottingham, China	**9B-OP-1:** Studying single atom layers using spatially resolved neutral atom diffraction. **M. Bergin,** University of Newcastle, Australia **(12.55-13.05)** **9B-OP-2:** Nanoporosity induced dramatic changes in electron-phonon interactions, plasmonics and electronic behaviour of PLD grown MoO_2 film, **M. Kumar**, Indian Institute of Technology (IIT) Indore, India (13.05-13.15)				

					Mondal, University of Wollongong, Australia **(11.50 – 12.00)** **9E-OP-17:** Numerical study of coal–ammonia co-firing in a 550 MWe USC CFB boiler. **Joonwoo Kweon,** Pusan National University, Republic of Korea **(12.00 – 12.10)** **9E-OP-18:** Development of Highly Luminescent $AgInS_2$ Quantum Dots for Luminescent Solar Concentrator-based Solar Windows" for consideration **S. H. Dehigaspitiya,** Macquarie University, Australia **(12.10 – 12.20)** **9E-OP-19:** Polyphenolic coatings on gallium nanodroplets: morphology study. **D. Lagos,** RMIT University, Australia **(12.20 – 12.30)** **9E-OP-20:** Predicting the Onset of Nucleation of Ferrite and Composition Evolution in Ferritic Steel. **B.C. Ugwuanyi,** The University of Sheffield, United Kingdom **(12.30 – 12.40)** **9E-OP-21:** Rapid photothermal	Technology Bombay, India/ Monash University, Australia **(12.00 – 12.10)** **9F-OP-18:** Synergistic Oxide Heterostructures for High-Performance Anion Exchange Membrane Water Electrolysis. **T.T.K. Tran,** The University of Sydney, Australia **(12.10 – 12.20)** **9F-OP-19:** Synthesis-Regulated Active-State Reconstruction in High-Entropy Oxides for Oxygen Evolution. **Q.Wang,** The University of Sydney, Australia **(12.20 – 12.30)** **9F-OP-20:** Titanium Substitution–Induced Modulation of the Intrinsic Hydrogen Evolution Reaction Activity of $SrFe_{1-x}TixO_3$-δ. **Lavaneethan T,** National Institute of Technology, Tiruchirappalli India **(12.30 – 12.40)** **9F-OP-21:** Closed-Loop Upcycling of Spent $LiCoO_2$ Cathodes via Zn-Co Redox Flow Batteries **D. Kim** Pusan National University, South Korea **(12.40 – 12.50)** **9F-OP-22:** Photocatalytic degradation and Mineralization of Pharmaceutical Pollutants Using TiO_2-SiO_2 Nanocomposites **Dr. Alok**

					conversion of nitrates to ammonia by phase-engineered FeRu nanosystems. **G. Nayak,** Indian Institute of Technology Bombay, India **(12.40 – 12.50)**	**Garg**, National Institute of Technology, Hamirpur, India **(12.50 – 13.00)**
13.15-14.00	**Lunch**					
14.00-14.45	**Plenary Lecture 10** **Chair: Paul Dastoor** **Prof Michael Grätzel, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland** *Mesoscopic Photo-electrochemical and Perovskite Solar Cells*					
	10A **Chair: Prof. Sudha Mokkapati**	**10B** **Chair: Prof. G.D. Yadav**	**10C** **Chair: Prof. Zsuzsanna Kolbert**	**10D** **Chair: Dr. Wei Yu**	**10E** **Chair: Prof. Thava Palanisami**	**10F** **Chair: Dr. Yong Zhao**
14.50 – 15.20	**10A-KL-1:** Nano-Inspired Metal-Organic Frameworks for Smart Electrochemical Sensing and Biosensing: From Molecular Recognition to Real World Monitoring. **Prof. Samuel Adeloju,** Monash University, Australia	**10B-KL-1:** Design and Development of Heterogeneous Catalysts for Sustainable Chemical Industry. **Prof. M. Lakshmi Kantam,** Institute of Chemical Technology, India	**10C-ICPN-1:** From nanostructure to soil function: engineering resilient, lower-carbon cropping systems. **Prof. Ehsan Tavakkoli,** Institute for Future Farming Systems, CQUniversity, Australia	**10D-C-1:** Utilization of Carbon from Agricultural Waste for Sustainable Anti-Corrosion Coating: Lab to Industry. **Dr. Chandrasekar Tiwary,** Indian Institute of Technology Kharagpur, India	**(14.50 – 15.00)** **10E-OP-2:** Synergistic Effect of TiB_2 Nanoparticles and Intermetallic Phases on Mechanical Performance of TiB_2 Reinforced Mg–12.5Al–2Zn–1.5Ca Nanocomposite. **M.K. Jha,** National Institute of Technology Jalandhar, India **(15.00 – 15.10)** **10E-OP-3:** Ultrathin Functional Coatings Derived from Liquid-Metal Interfaces. **F. Nanzeeba,** Monash University, Australia **(15.10 – 15.20)** **10E-OP-4:** Understanding the	**10F-OP-1:** Multifunctional $SnS_2/Ti_3C_2T_x$ MXene Heterostructures for Sustainable Hydrogen Production and Water Purification. **Sweta Sharma,** Academy of Scientific and Innovative Research (AcSIR), India **(14.50 – 15.00)** **10F-OP-2:** Thermally Resilient MOF for Efficient CO_2 Capture from Flue Gas. **S. Mitra,** BITS Pilani, India **(15.00 – 15.10)** **10F-OP-3:** Sporadically Synchronous Localized Electroluminescence Blinking in Halide Perovskite LEDs **Shruti Singh,** Indian Institute of Technology Bombay, India **(15.10 – 15.20)**
15.20 – 15.45	**10A-IL-1:** Reading the Nanobiointerface: Aptamer-Functionalised InP/ZnS Quantum Dots for Bacterial and Outer Membrane Vesicle Recognition. **A/Prof. Renee Goreham,** University of Newcastle, Callaghan, Australia	**10B-IL-1:** Selective Adsorption and Separation Using Advanced Inorganic Materials: Insights from Hydration-Controlled Interfacial Chemistry. **A/Prof. Hayashi Fumitaka**, Shinshu University, Japan	**10C-ICPN-2:** Decoding Plant–Nano Interactions Across Scales: From Cellular Mechanisms to Field Performance. **Prof. Franklin Gregory,** Institute of Plant Genetics Polish Academy of Science, Poland	**10D-C-2:** Selective Thermal Microrecycling of Complex Wastes into Functional Nanomaterials for Energy Storage and Environmental Sensing. **Dr. Rumana Hossain,** University of New South Wales, Sydney, Australia		
15.45 – 16.10	**10A-IL-2:** Engineering of semiconductor heterojunctions for	**10B-IL-2:** Ion-selective membrane for critical rare-earth mineral recovery. **Dr.**	**10C-ICPN-3:** Effect of LIQUINA Nanofertilizer Treatment on			

	sensors in challenging environments. **A/Prof. Toan Dinh,** University of Southern Queensland, Australia	**Gayathri Naidu,** University of Technology, Sydney	Vegetative Growth and Fruit Yield of Okra (Abelmoschus esculentus) **Prof. Samuel Gnana Prakash Vincent**, MS University, India		Role of Copper and Zinc Oxide in Electrochemical CO_2 and Nitrate to C-N Coupling. **T.D.T. Bao,** The University of New South Wales, Australia **(15.20 – 15.30)** **10E-OP-5:** Biomimetic Coordination Engineering of MOF-Derived Fe–N–C Single Atom Nanozymes for Selective Methane Oxidation. **S. Priya Samudrala,** Monash University, Australia **(15.30 – 15.40)** **10E-OP-6:** Cavity Mode Number Dependent Free Energy Landscape Reorganization and Photophysical Dynamics under Electronic Strong Coupling. **N. Umar Draz,** Tsukuba University, Japan **(15.40 – 15.50)** **10E-OP-7:** Optimised Functional Polyvinyl Alcohol-Based Hydrogel Bio-Carriers. **R. Arjmandi,** University of Auckland, New Zealand **(15.50 – 16.00)**	**10F-OP-4:** Geothermal Sludge-Derived Zeolite A for Methylene Blue Adsorption: Synthesis, Characterization, and Adsorption Performance. **Dr Wahyu Firmansyah,** Technology Innovation & Implementation, Indonesia **(15.20 – 15.30)** **10F-OP-5:** Wet-deposition of plasmonic ITO / TIPS-pentacene hybrid layers as self modulating NIR absorbing nanostructures. **Brian Dusolle,** Univ. Bordeaux, France **(15.30 – 15.40)** **10F-OP-6:** Sericin as an effective oxidation inhibitor for Niobium MXenes. **P. Varma Sagiraju,** Prayoga Institute of Education Research, India **(15.40 – 15.50)**
16.10 – 16.35	**10A-IL-3:** Engineering liquid metal-based catalysts in conversion systems. **Dr. Dorna Esrafilzadeh,** University of New South Wales, Sydney, Australia	**10B-IL-3:** Surfactant-Empowered Propulsion of Surface Microrollers. **Dr. Gungun Lin,** University of Technology Sydney, Australia **10B-OP-1:** Lewis Acid-Promoted Hydroalkoxylation Reduction/Cycloaddition of Cyclopropenes: A Unified Route to Synthesize THF, THP, Oxaspirolactones and Spiroketals, **Rakhi Yadav,** IIT Bombay, India **(16.35-16.45)**	**10C-ICPN-4: Dr. K. Ramadass,** The University of Newcastle	**10D-C-4: Dr. Gurwinder Singh,** The University of Newcastle		

					10E-OP-8: Beyond Nominal Space Velocity: Geometric Constraints and the Geometric Design Window for Fixed-Bed Catalysis. **M. Asif**, University of Tsukuba, Japan **(16.00 – 16.10)** **10E-OP-9:** Influence of thickness and silver incorporation on charge transport in copper iodide thin films for transparent flexible thermoelectric applications. **C. Kennedy,** The University of Auckland, New Zealand **(16.10 – 16.20)**	
16.35-16.50	**Coffee Break**					
	Chair: Dr. Gurwinder Singh	**Chair: A/Prof. Toan Dinh**	**Chair: Dr. Gungun Lin**	**Chair: Dr. Gayathri Naidu**	**Chair: Prof. Samuel Gnana Prakash Vincent**	**Chair: Prof. Michael Stöcker**
16.50 - 17.15	**10A-IL-4:** From Molecular Interactions to Molecular Fingerprints: Aptamer–Nanoparticle Sensing of α-Synuclein Conformers. **Prof. Rajesh Ramanathan,** RMIT University, Australia	**10B-IL-4:** Direct CO_2 capture from the air by nanomembranes. **Prof. Shigenori Fujikawa,** Kyushu University, Japan	**10C-OP-1:** Agricultural Waste-Derived Green Carbon as a Sustainable Functional Pigment for Water-Based Ink. **R. Bandyopadhyay**, Indian Institute of Technology Kharagpur, India **(16.50 - 17.00)** **10C-OP-2:** Contrasting Roles of Protein content of a Physiological Fluid in Electrochemical Degradation and the Fluid-assisted Fracture of an Extruded Zinc Alloy for Bioimplants. **S.**	**10D-OP-1:** B, N Co-doped Carbon Electrocatalyst for Synergistic CO_2 & Nitrate Co Reduction reaction. **V. Verma,** University of New South Wales, Sydney, Australia **(16.50 - 17.00)** **10D-OP-2:** Dimension-controlled Co-ZIFs: Linking Morphology to Activity	**10E-OP-12:** Interfacial Engineering by Metallic Ions and Organic Ammonium Ligand Passivation for Perovskite Solar Cells. **A. Adenle,** Griffith University, Australia **(17.00 - 17.10)** **10E-OP-13:** Intrinsic Defects in Earth-Abundant Zn-Based Nitrides for	**10F-OP-11:** Development of a Self-Maintenance Framework for Conformal Anomaly Detection under Changing Industrial Operating Conditions. **I. Choi,** Chosun University, Republic of Korea **(16.50 - 17.00)** **10F-OP-12:** Dopant Engineered Janus WSeTe for Pollutant Gas Sensing: A DFT Investigation. **B Paul, Birla**
17.15 - 17.40	**10A-IL-5:** Multiplexed Nanozyme-Aptasensor Array for Predictive Detection of Antibiotic	**10B-IL-5:** Tuning Porous Frameworks for CO_2 Capture. **Dr. Checkers**				

	Resistant Staphylococcus aureus. **Dr. Pabudi Weerathunge,** RMIT University, Australia	**Marshall,** Svante Incorporation, Canada	**Ansah,** Monash University, Australia **(17.00 - 17.10)** **10C-OP-3:** Differences in the synthesis of primary metabolites across cold acclimation, de-acclimation, and re-acclimation affect frost tolerance capacity in forage grasses from Lolium-Festuca complex. **J. Gorna,** Institute of Plant Genetics, Poland **(17.10 - 17.20)** **10C-OP-4:** Single-Atom embedded 2D ionic carbon nitride for Selective $^1O_2$-Mediated Degradation and Defluorination of Micropollutants in Real Waters. **M. Halanur,** University of Ostrava, Czech Republic **(17.20 - 17.40)** **10C-OP-5:** Tribological behavior of Friction Stir Processed Nano-Hydroxyapatite Reinforced AZ91D Mg Matrix Surface Composites for Bio-Implants. **S. Kundu,** Himalayan Institute of Engineering and Technology, Himachal Pardesh, India **(17.40 - 17.50)** **10C-OP-6:** Bio-Nanocomposite for Pb (II) adsorption from wastewater: Characterization and Optimization Study. **M. Ayyub,** University of Engineering and Technology, Lahore, Pakistan **10C-OP-7:** Curcumin quantum dots mediated detection of happy hormone. **D. Thiyagarajan,** Anna University, India **(17.50 – 18.00)**	in CO_2 Fixation to Cyclic Carbonates. **N. Nagarathinam,** Indian Institute of Technology, Madras, India **(17.00 - 17.10)** **10D-OP-3:** Relaxor-Engineered BNT-Based Lead-Free Ceramics with Enhanced Energy Storage Performance at Low/Moderate Electric Fields. **A. Mandal,** Indian Institute of Technology Roorkee, India **(17.10 - 17.20)** **10D-OP-4:** Scalable Light-Enabled Graphene Materials for Energy Storage, Smart Textiles and Solar Water Desalination. **M.H. Zhang,** RMIT University, Australia. **(17.20 - 17.40)** **10D-OP-5:** Computational Fluid Dynamics-Based Optimization of CVD Process for High-Quality Graphene Coatings on Metals. **T. Joshi,** Monash University, Australia **(17.40 - 17.50)** **10D-OP-6:** Adsorption Depletion in Nanospaces Formed by Atomically Thin Graphene Walls. **A.**	Photovoltaics and Photoelectrochemical Water Splitting. **M. Al-Farsi,** University of New South Wales, Sydney, Australia **(17.10 - 17.20)** **10E-OP-14:** Sustainability in Organic Photovoltaics. **Kristofer L,** The University of Newcastle, Australia **(17.20 - 17.40)** **10E-OP-15:** Development of Temperature-Distribution Imaging Device by Guest-Intercalated Polydiacetylene and Matrix Polymers. **Kohei Saito,** Keio University, Japan **(17.40 - 17.50)** **10E-OP-16:** Self-Assembled Chiral π-Conjugated Polymer Microspheres as Light-Driven, Chirality-Addressable Microrotors. **Makoto Okumura,** University of Tsukuba, Japan **(17.50 – 18.00)** **10E-OP-17:** Interfacial Charge Dynamics in Polymer-$FAPbI_3$ Perovskites for Self-Powered Broadband UV-NIR Photodetection. **Ashna K. Pramod,**
17.40 - 18.05	**10A-IL-6:** Europium metal-organic framework polymer composites with enhanced luminescence and selective ferric ion sensing. **Prof. David Beattie,** Future Industries Institute, Adelaide University, Australia	**10B-IL-6: Dr. Cl Sathish,** The University of Newcastle, Australia				Institute of Technology and Science-Pilani, Telangana, India **(17.00 - 17.10)** **10F-OP-13:** Flame Spray Pyrolysis-Functionalized MOX Sensor Array with Integrated Microheater Control for VOC Detection. **F.S. Garay-Rairan,** The University of Sydney, Australia **(17.10 - 17.20)** **10F-OP-14:** Ion Track-Etched Silicon Dioxide Nanopores: A Swift Heavy Ion Route to Single-Molecule Biosensing. **S. Dutt,** Australian National University, Australia **(17.20 - 17.40)** **10F-OP-15:** Label-Free Raman Spectroscopic Detection of Respiratory Coronavirus Infection Using Extracellular Vesicles. **H. Kaur,** The University of Newcastle, Australia **(17.40 - 17.50)** **10F-OP-16:** Machine Learning-Assisted-Design and Optimization of Performance of a Surface Plasmon Resonance Based Fiber-Optic Sensor. **B. Kaur,** University of Ostrava, Czech Republic **(17.50 – 18.00)** **10F-OP-17:** Molecularly Imprinted NiHeXF Core-Shell Nanointerface for Electrochemical Detection

			10C-OP-8: Multimodal magneto–active hydrogel–liquid interfacial sensor for electrochemical detection of food pollutants. **V. Pereira**, Nanyang Technological University, Singapore **(18.00 – 18.10)**	**Mori**, Tohoku University, Japan **(17.50 – 18.00)** **10D-OP-7:** Mixed-Phase TiO_x Nanotube Array Electrodes for PFOA Defluorination: Mechanistic Insights and Fluoride-induced Degradation of TiO_x. **M. Wang,** Monash University, Australia **(18.00 – 18.10)**	Indian Institute of Technology Bombay, India **(18.00 – 18.10)**	of Estradiol. **N. Pari,** SASTRA Deemed to be University, Tamil Nadu, India **(18.00 – 18.10)**
18.15 - 18.30	**Closing Ceremony**					

Sessions	Topics	Sessions	Topics	
	16th of November 2026 - Plenary Lectures 1 and Themed Lecture 1-4			
	Opening Ceremony **Plenary and Themed lectures**	**2A**	Energy Storage and Conversion I	**Poster Session I**
		2B	Nanostructured Materials I	
		2C	Nanodevices	
		2D	Heterogeneous Catalysis I	
		2E	Biomaterials I	
		2F	Magnetic Materials/Photovoltaics	
	17th of November 2026 – Nobel Laureate Lecture 1			
3A	Energy Storage and Conversion II	**4A**	Electrocatalysis I	
3B	Nanostructured Materials II	**4B**	Nanostructured Materials III	
3C	Editor/Exhibitor/Keynote Presentation	**4C**	Keynote Lectures	
3D	Heterogeneous Catalysis II	**4D**	Heterogeneous Catalysis III	
3E	Biomedical Devices	**4E**	Biomaterials	
3F	Symposium on Thermoelectric Materials	**4F**	Symposium on Thermoelectric Materials	
	18th of November 2026 – Poster Session II and Plenary Lecture 7			
5A	Electrocatalysis II	**6A**	Electrocatalysis III	
5B	Nanostructured Materials IV	**6B**	Nanoporous Materials	
5C	Environmental and Energy Applications I	**6C**	Environmental and Energy Applications II	
5D	IIT-Bombay-UON Symposium	**6D**	IIT-Bombay-UON Symposium	
5E	Drug Delivery I	**6E**	Drug Delivery II	
5F	Soft Materials I	**6F**	Soft Materials II	
	19th of November 2026			
7A	ARC Laureate Symposium I	**8A**	ARC Laureate Symposium II	
7B	Layered Materials I	**8B**	Layered Materials II	
7C	Nanodevices I	**8C**	Photovoltaics/Magnetic Materials	
7D	Optoelectronics and Photochromic Materials I	**8D**	Organic Materials	
7E	Theoretical and Computational Chemistry I	**8E**	Theoretical and Computational Chemistry II	
7F	SACSEM Symposium	**8F**	SACSEM Symposium	
	20th of November 2026 and Themed Lecture 5			
9A	Sensors I	**10A**	Sensors II	
9B	Layered Materials III	**10B**	Adsorption/Separation	
9C	International Conference on Plant Nanotechnology	**10C**	International Conference on Plant Nanotechnology	
9D	Symposium on Carbon with Carbon Journal Editors	**10D**	Symposium on Carbon with Carbon Journal Editors	
9E	Oral Presentation I	**10E**	Oral Presentation III	
9F	Oral Presentation II	**10F**	Oral Presentation IV	

Note: All Nobel Laureate, Plenary and Themed Lectures and the Banquet will be held at the Arena Hall. Poster session I and II will be held on November 16th and 18th 2026, respectively.

PL- Plenary Talk (45 Minutes); TL- Themed Lecture (40 Minutes); **AL** – ARC Laureate Lecture (30 Minutes); **KL -** Keynote Lecture (30 minutes); **IL-** Invited Lecture and Symposium (25 Minutes); **OP -** Oral Presentation (10 Minutes).

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