

Time = presentation + Q&A

Plenary/Themed (30 min)

Keynote (20 mins)

Invited (15 mins)

Oral (10 mins)

	Sunday, 10 November 2024
16:00-18:00	Registration and Reception
Venue	Amora Hotel Jamison Sydney, Level 2 Foyer (11 Jamison Street, Sydney, NSW, 2000)

Day 1	Monday, 11 November 2024				
8:00-9:00	Registration and tea and coffee (Foyer)				
9:00-9:20	Conference Opening (Chair: Prof. Liming Dai; Venue: Whiteley)				
9:20-9:50	PLENARY LECTURES 1-1 Chair: Prof. Rose Amal Venue: Whiteley	Plenary: Nanocarbon's Innovation toward Carbon Circular Economy Prof. Morinobu Endo , Shinshu University, Japan			
9:50-10:20		Plenary: Efficient catalytic conversion of carbon-based energy for carbon neutrality Prof. Xinhe Bao , University of Science and Technology of China, China			
10:20-10:50		Plenary: Sustainable Batteries and Electrocatalytic Processes Prof. Magda Titirici , Imperial College London, UK			
10:50-11:20	Morning Tea break (Foyer)				
Venue	Whiteley 1	Whiteley 2	Boyd	Lindsay	Hart Room (Level 1)
Sessions	Session 1-1 Carbon materials, characterisation and modelling Chair: Prof. Apparao Rao	Session 2-1 Carbon for catalysis Chair: Prof. Priyank Kumar	Session 3-1 Carbon for energy Chair: Prof. Yongsheng Chen	Session 4-1 Carbon for environment Chair: Prof. Hui Tong Chua	Session 5-1 Carbon for Biomedicine Chair: Prof. Megan Lord
11:20-11:40	Keynote: Graphene oxide membranes A/Prof. Rakesh Joshi , University of New South Wales, Australia	Keynote: Green carbocatalysis for energy and chemical conversion Prof. Shaobin Wang , The University of Adelaide, Australia	Keynote: Nanofluidic energy storage Prof. Da-Wei Wang , Shenzhen University of Advanced Technology, China	Keynote: 2D materials for electronic waste management A/Prof. Daria V. Andreeva , National University of Singapore, Singapore	Keynote: Photoluminescent properties of carbon materials: applications in photovoltaics and MRI Imaging Prof. Conchi O. Ania , Université d'Orléans, France
11:40-12:00	Keynote: 3D printing of liquid metal nanoparticle/polymer Composites Dr. Ruirui Qiao , The University of Queensland, Australia	Keynote: Heterogeneous molecular catalysts with carbon nanotube substrates Prof. Yuan Chen , The University of Sydney, Australia	Keynote: 2D metal oxide nanostructures for green hydrogen production Prof. Ziqi Sun , Queensland University of Technology, Australia	Keynote: Carbon photocatalysts for H ₂ production and environmental remediation Prof. Adam F. Lee , Griffith University, Australia	Keynote: Plasma bio-engineering: advancing biomimetic devices, biofabrication, and nanomedicine Dr. Behnam Akhavan , University of Newcastle, Australia

12:00-12:15	Invited: Sustainable synthesis of carbon materials using molten salt electrolysis Dr. Jessica Allen , University of Newcastle, Australia	Invited: Atomically dispersed electrocatalysts for highly efficient energy conversion reactions Dr. Yufei Zhao , University of Technology Sydney, Australia	Invited: Engineered carbon catalysts for green hydrogen peroxide production and environmental application Dr. Xiangkang Zeng , The University of Queensland, Australia	Invited: Carbon nano hybrids for catalytic water purification A/Prof. Xiaoguang Duan , University of Adelaide, Australia	Invited: Mapping atomic scale electronic structures of carbon materials for energy and quantum sensing applications A/Prof. Shery L. Y. Chang , University of New South Wales, Australia
12:15-12:25	Oral: Improved graphene oxide reduction using bimetallic core-shell Ag-Pt nanoparticles Mani Mani , University of New South Wales, Australia	Oral: Synthesis and application research on conjugated polyphthalocyanine - based electrocatalytic materials Yajing Di , Beijing University of Chemical Technology, China	Oral: An interface-enhanced continuous 2D-carbon network enabling high-performance Si anodes for Li-ion batteries Jiaying Peng , Beijing University of Chemical Technology, China	Oral: Strategies for achieving carbon neutrality in the chemical industry Dr. Ladan Malehmirchegini , Kyushu University, Japan	Oral: Pentagon-rich caged carbon catalyst for the oxygen reduction reaction Guoping Chen , Kyushu University, Japan
12:25-13:30	Lunch break (Croft Restaurant, Amora Hotel Level 1)				
13:30-14:00	THEMED LECTURES 1-2 Chair: Prof. Zaiping Guo Venue: Whiteley	Themed: Development of advanced Li-ion batteries and beyond to reduce cost and ensure sustainability for electric vehicles Dr. Khalil Amine , Argonne National Laboratory, USA			
14:00-14:30		Themed: Advanced porous carbon electrodes for Li/Na-S batteries and beyond Prof. Changming Li , Suzhou University of Science and Technology,			
14:30-15:00		Themed: Exploring the potential of stipa tenacissima and other biomass resources for hard carbon production in Na-ion batteries Prof. Jones Alami , Mohammed VI Polytechnic University, Morocco			
15:00-15:30		Themed: Multiphysical coupled microdesign for sustainable zinc-based batteries Prof. Shun Wang , Wenzhou University, China			
15:30-16:00	Afternoon Tea break (Foyer)				
Venue	Whiteley 1	Whiteley 2	Boyd	Lindsay	Hart Room (Level 1)
Session	Session 1-2 Carbon materials, characterisation and modelling Chair: A/Prof. Ulf Garbe	Session 2-2 Carbon for Catalysis Chair: Dr. Wenxian Li	Session 3-2 Carbon for Energy Chair: Dr. Paolo Giusto	Session 4-2 Carbon for environment Chair: Prof. Rakesh Joshi	Session 5-2 Carbon for biomedicine Chair: A/Prof. Zi (Sophia) Gu
16:00-16:20	Keynote: Revolutionizing multifunctional subaquatic apparatus via advanced structural engineering of nanocarbon materials Prof. Ming Xu , Huazhong University of Science and Technology, China	Keynote: Pyrolysis-free covalent organic polymers directly for oxygen electrocatalysis Prof. Zhonghua Xiang , Beijing University of Chemical Technology, China	Keynote: Boron-based materials: energy conversion and storage Prof. Zhenguo Huang , University of Technology Sydney, Australia	Keynote: An electrochemical oscillator for harvesting near room temperature waste heat Prof. Apparao M. Rao , Clemson University, USA	Keynote: Bio-inspired Nanoionic Materials for Energy Harvesting Devices Prof. Dewei Chu , University of New South Wales, Australia
16:20-16:40	Keynote: Wiring proton gradients for energy conversion using light-switchable molecular switches Dr. Dong Jun Kim , University of New South Wales, Australia	Keynote: Carbon dot-based hybrid quantum materials for photocatalysis Prof. Qin Li , Griffith University, Australia	Keynote: 2D Bi-based nanomaterials for clean energy and catalytic applications Dr. Liang Jason Wang , Griffith University, Australia	Keynote: Liquid metal chemistry towards CO ₂ reduction and other catalytic reactions Prof. Torben Daeneke , RMIT University, Australia	Keynote: Micro- and nanoengineering of semiconductor materials for biosensing A/Prof. Toan Dinh , University of Southern Queensland, Australia

16:40-17:00	<p>Keynote: Graphitic materials for energy applications Prof. Ji-Hyun Jang, Ulsan National Institute of Science and Technology, South Korea</p>	<p>Keynote: Design of microtubular gas diffusion electrodes for gas-phase electrolysis A/Prof. Lei Ge, University of Southern Queensland, Australia</p>	<p>Keynote: Carbon-based materials for metal-air batteries Dr. Bing Sun, University of Technology Sydney, Australia</p>	<p>Keynote: Carbon nitride-based materials for light-assisted energy and environmental applications Prof. Hongqi Sun, The University of Western Australia, Australia</p>	<p>Keynote: Temporal, spatial and thermal dynamics of intracellular organelles revealed by biophysical nanotools and advanced imaging Dr. Qian Peter Su, University of Technology Sydney, Australia</p>
17:00-17:15	<p>Invited: Revolutionizing activation technology for advanced hierarchically porous carbon materials Dr. Quanxiang Li, Deakin University, Australia</p>	<p>Invited: Phthalocyanine-based materials for electrocatalysis Prof. Zhengping Zhang, Beijing University of Chemical Technology, China</p>	<p>Invited: Refining structures of electrochemical catalysts for energy storage and conversion Dr. Jinqiang Zhang, University of Technology Sydney, Australia</p>	<p>Invited: Nanoengineered electroactive polymers: a new materials paradigm for neuromodulation A/Prof. Matthew J. Griffith, University of South Australia, Australia</p>	<p>Invited: Toward improved drug delivery via the bloodstream via tuning biomaterial affinity for the blood vessel wall Prof. Megan Lord, The University of New South Wales, Australia</p>
17:15-17:30	<p>Invited: Exploring photofunctional materials at the nanoscale Dr. Teng Lu, Australian National University, Australia</p>	<p>Invited: Stable anode for efficient zinc metal batteries Dr. Zengxia Pei, The University of Sydney, Australia</p>	<p>Invited: Sustainable energy storage within octahedral molecule sieves Prof. Yifei Yuan, Wenzhou University, China</p>	<p>Invited: Nano-structured porous carbon materials for enabling ultrafast gas hydrate formation for energy storage and carbon sequestration Dr. Ngoc N. Nguyen, The University of Queensland, Australia</p>	<p>Invited: From fundamental bio-nano interactions to translational nanomedicine Dr. Yi (David) Ju, RMIT University, Australia</p>
17:30-17:50	<p>Keynote: Amorphous and crystalline nanoporous carbon nitrides with tunable nitrogen contents for clean hydrogen production Prof. Ajayan Vinu, University of Newcastle, Australia</p>	<p>Oral: Sulfur containing organic molecular additives for zinc metal anode modification Weihao Song, Beijing University of Chemical Technology, China</p>	<p>Oral: Transforming undesired corrosion products into a nanoflake-array functional layer: a gelatin-assistant modification strategy for high performance zn battery anodes Bing Wu, Beijing University of Chemical Technology, China</p>	<p>Oral: Electrolysing CO₂ capture solution to CO on flame spray pyrolysis deposited silver Dr. Yuming Wu, Macquarie University, Australia</p>	<p>Oral: H₂O₂ generation from carbon catalysts for biomedical applications Quanbin Dai, University of New South Wales, Australia</p>
17:30-17:40					

Day 2		Tuesday, 12 November, 2024				
8:30-9:00	Arrival tea and coffee (Foyer)					
9:00-9:30	PLENARY LECTURES 1-3 Chair: Prof. Shizhang Qiao Venue: Whiteley	Plenary: Graphene oxide: from preparation to applications Prof. Hui-Ming Cheng , Chinese Academy of Sciences, China				
9:30-10:00		Plenary: Mechanism and active sites of oxygen reduction reaction on nitrogen-doped carbon catalysts Prof. Junji Nakamura , Kyushu University, Japan				
10:00-10:30		Plenary: Green electrochemical transformation of carbon dioxide: challenges and solutions Prof. Huijun Zhao , Griffith University, Australia				
10:30-11:00		Plenary: MXenes from discovery to the modern day and beyond Prof. Yury Gogotsi , Drexel University, USA				
11:00-11:30	Morning Tea break (Foyer)					
Venue	Whiteley 1	Whiteley 2	Boyd	Lindsay	Hart Room (Level 1)	
Sessions	Session 1-3: Carbon materials, characterisation and modelling Chair: Prof. Zhenhai Xia	Session 2-3: Carbon for catalysis Chair: Prof. Yao Zheng	Session 3-3: Carbon for energy Chair: Prof. Chun Wang	Session 4-3: Carbon for environment Chair: Prof. Zhonghua Xian	Session 5-3: Carbon for biomedicine Chair: A/Prof. Kang Liang	
11:30-11:50	Keynote: Molecular modelling of electrocatalyst materials for clean energy conversion Prof. Yan Jiao , University of Adelaide, Australia	Keynote: Defective carbon-based materials for electrocatalysis Prof. Jun Chen , University of Wollongong, Australia	Keynote: The Promotion of emerging carbon energy materials for next-generation batteries through lithium bond chemistry Prof. Qiang Zhang , Tsinghua University, China	Keynote: Structural design of carbon-based electrodes and catalytic reduction mechanism of carbon dioxide Prof. Yang Hou , Zhejiang University, China	Keynote: Intelligent wearable resistive skins for monitoring human and organoids Prof. Wenlong Cheng , The University of Sydney, Australia	
11:50-12:10	Keynote: Computational design of sustainable 2d semiconductors, interfaces and devices Asst/Prof. Yee Sin Ang , Singapore University of Technology and Design, Singapore	Keynote: Metal organic framework derived carbon materials for carbon dioxide reduction reactions Prof. Akshat Tanksale , Monash University, Australia	Keynote: Our advances in rational design of perovskite materials for energy storage and conversion Prof. Zongping Shao , Curtin University, Australia	Keynote: Efficient magnetic capture and valorization of micro(nano)plastics from water systems Prof. Bing-Jie Ni , University of New South Wales, Australia	Keynote: Practical graphene oxide membranes for molecular separations Prof. Mainak Majumder , Monash University, Australia	
12:10-12:25	Invited: Methylammonium-free inks for upscalable fabrication of perovskite thin films and solar cells Dr. Meng Zhang , University of New South Wales, Australia	Invited: Atomically thin 2D organic semiconductors Prof. Yuerui Lu , Australian National University, Australia	Invited: Neutron imaging applications in carbon fiber, battery and cement research A/Prof. Ulf Garbe , ANSTO, Australia	Invited: Machine learning big dataset analysis-driven C2 catalysis Asst/Prof. Haobo Li , Nanyang Technological University, Singapore	Invited: Defect-engineered nanomaterials as in situ quantum sensors Dr. Jean-Philippe Tetienne , RMIT University, Australia	

12:25-12:40	Invited: Synthesis and applications of multinuclear metal complexes with controlled metal-metal distances Dr. Annie L. Colebatch , Australian National University, Australia	Invited: Exploring direct electrochemical Fischer-Tropsch synthesis of C1-C7 Hydrocarbons via perimeter engineering of Au-SrTiO ₃ catalyst Prof. Chang Woo Myung , Sungkyunkwan University, South Korea	Invited: The application of silicon anode materials in energy storage systems Dr. Lei Zhang , Griffith University, Australia	Invited: White graphene: thickness-related properties and applications Dr. Qiran Cai , Deakin University, Australia	Invited: Efficient ion separation by metal-organic framework membranes Dr. Jun Lu , Monash University, Australia
12:40-13:30	Lunch break (Croft Restaurant, Amora Hotel Level 1) and Poster session (Whiteley 1)				
13:30-14:00	THEMED LECTURES 1-4 Chair: Prof. Yun Liu Venue: Whiteley	Themed: Quantum ionics: ultra-low energy consumption of energy conversion/information transmission in biologic system Prof. Lei Jiang , Chinese Academy of Sciences, China			
14:00-14:30		Themed: Bottom-up hybrid materials design for multifunctionality Dr. Ajit K. Roy , Air Force Research Laboratory, USA			
14:30-15:00		Themed: Electrocatalysts design for high energy metal-carbon dioxide batteries Prof. Zaiping Guo , University of Adelaide, Australia			
15:00-15:30		Themed: Carbon-free ammonia combustion technologies for decarbonisation in high temperature manufacturing industries Prof. Yi-Bing Cheng , Foshan Xianhu Laboratory, and Wuhan University of Technology, China			
15:30-16:00	Afternoon Tea break (Foyer)				
Venue	Whiteley 1	Hart Room (Level 1)	Boyd	Lindsay	Whiteley 2
Sessions	Session 1-4: carbon materials, characterisation and modelling Chair: Prof. Klaus Regenauer-Lieb	Session 2-4: Carbon for catalysis Chair: Prof. Richard Tilley	Session 3-4: Carbon for energy Chair: Prof. Jun Chen	SESSION 4-4: Carbon for environment Chair: Prof. Mainak Majumder	Journal Editor forum Chair: Prof. Yan Jiao
16:00-16:20	Keynote: Computational design of new materials for electronics, energy and environmental applications Prof. Aijun Du , Queensland University of Technology, Australia	Keynote: Challenges and opportunities for single-atom electrocatalysts: from lab-scale research to potential industry-level applications Prof. Chuan Zhao , The University of New South Wales, Australia	Keynote: Perovskite quantum dots for solar cells and beyond Prof. Lianzhou Wang , The University of Queensland, Australia	Keynote: Development of carbon gas-diffusion electrodes for stable CO ₂ electrolysis Dr. Mengran Li , The University of Melbourne, Australia	Journal Editor forum
16:20-16:40	Keynote: High-quality atomically thin superconductors Dr. Zhi Li , University of New South Wales, Australia	Keynote: Hierarchical nanostructures for high performance electrocatalysis Dr. Lucy Gloag , Australian National University, Australia	Keynote: fully roll-to-roll fabricated high-efficiency thin film solar cells Dr. Mei Gao , CSIRO, Australia	Keynote: Catalyst design for optimal urea electrosynthesis A/Prof. Liangzhi Kou , Queensland University of Technology, Australia	
16:40-16:55	Invited: Design and optimization of a black plasmonic-au paper based solar water-evaporation	Invited: Atomic-level regulation on photocatalyst for energy-related reaction	Invited: Heterogeneous molecular catalysis for electrochemical CO ₂ reduction	Invited: Electrochemical Fischer-Tropsch chemistry for future sustainable fuels?	

	system with enhanced efficiency and stability A/Prof. Ilsun Yoon , Chungnam National University, South Korea	Dr. Jingrun Ran , the University of Adelaide, Australia	Prof. Yijiao Jiang , Macquarie University, Australia	Prof. Youngku Sohn , Chungnam National University, South Korea	
16:55-17:10	Invited: Correlative approach for analyzing porosity in nuclear graphite Dr. Bernd Schulz , ZEISS Group, Australia	Invited: Effects of substrate materials on the electrochemical properties of boron-doped diamond electrodes Prof. Atsushi Otake , Keio University, Japan	Invited: A platform to make and un-make polymers: a step toward a circular carbon economy Prof. Justin Chalker , Flinders University, Australia	Invited: EPR applied to materials science Prof. Nick Cox , Australian National University, Australia	
17:10-17:20	Oral: Nucleation rate of carbon black nanoparticles via molecular dynamics simulations Arash Fakharneshad , University of Melbourne, Australia	Oral: Carbon catalysts for urea synthesis Vandana Verma , University of New South Wales, Australia	Oral: Mechanistic insights into small molecule electrocatalytic conversion and rational catalyst design Dr. Xin Mao , University of Adelaide, Australia	Oral: Chiral catalyst effect of twisted nanowire bundles for photoelectrochemical water splitting Prof. Jaebeom Lee , Chungnam National University, South Korea	
17:20-17:30	Oral: Metallated graphynes: synthesis, characterization, and optical and catalytic properties Asst/Prof. Linli Xu , The Hong Kong Polytechnic University, China	Oral: The interface design of graphdiyne for electrochemical energy storage Prof. Changshui Huang , Chinese Academy of Sciences, China	Oral: Tailored production of bio-based hard carbon from agricultural biomass for sodium-ion battery anode application Nethmi Kulanika Dayarathne , Queensland University of Technology, Australia	Oral: Sustainable, highly porous carbon microspheres and their hydrogen storage performance Dr. Ana Fernández-Lera González , Institute of Carbon Science and Technology (INCAR-CSIC), Spain	

18:30-21:30	Conference cruise dinner 18:30 embarking for a strict 19:00 departure 21:30 return				
Venue	Starship Sydney <i>Departure and return from:</i> No 4, King Street Wharf, Darling Harbour				

Day 3		Wednesday, 13 November, 2024			
8:30-9:00	Arrival tea and coffee (Foyer)				
9:00-9:30	PLENARY LECTURES 1-5 Chair: Prof. Liming Dai Venue: Whiteley	Plenary: Actuation, mechanical energy harvesting, and refrigeration using coiled or plied polymer or carbon nanotube yarns Prof. Ray H. Baughman , University of Texas at Dallas, USA			
9:30-10:00		Plenary: Controllable synthesis, aggregation structure and application of Graphdiyne Prof. Yuliang Li , Chinese Academy of Science, China			
10:00-10:30		Plenary: Mechanochemistry for materials synthesis Prof. Jong-Beom Baek , Ulsan National Institute of Science and Technology, South Korea			
10:30-11:00		Plenary: Chemical and physical sensing with low-dimensional nanostructures: the disruptive power of supramolecular chemistry Prof. Paolo Samorì , University of Strasbourg & CNRS, France			
11:00-11:30	Morning Tea break (Foyer)				
Venue	Whiteley 1	Whiteley 2	Boyd	Lindsay	Hart Room (Level 1)
Session	Session 1-5: Carbon materials, characterisation and modelling Chair: Prof. Ming Xu	Session 2-5: Carbon for catalysis Chair: Prof. Yang Hou	Session 3-5: Carbon for energy Chair: Prof. Akshat Tanksale	Session 4-5 Carbon for environment Chair: Dr. Emma Lovell	Session 5-5; Carbon for biomedicine Chair: Dr. Simon Corrie
11:30-11:50	Keynote: Carbon fibre-based structural battery with dual-phase solid electrolytes Prof. Chun H. Wang , University of New South Wales, Australia	Keynote: Carbon-based electrodes for alternative battery chemistries Prof. Ashok Kumar Nanjundan , University of Southern Queensland, Australia	Keynote: Microdesign of heteroatom-doped carbon-based energy storage Prof. Huile Jin , Wenzhou University, China	Keynote: Basic research on key technology and materials of off-grid produced green hydrogen Prof. Chunxian Guo , Suzhou University of Science and Technology, China	Keynote: Engineering nanobiohybrids for environmental sustainability A/Prof. Kang Liang , The University of New South Wales, Australia
11:50-12:10	Keynote: Improving the thermal stability and oxidation resistance of high temperature carbon fibre composites A/Prof. Jin Zhang , University of New South Wales, Australia	Keynote: Dipole moment tuning in semiconductor photoelectrodes Dr. Zhiliang Wang , University of Queensland, Australia	Keynote: Covalent thin films for energy applications and beyond Dr. Paolo Giusto , Max Planck Institute of Colloids and Interfaces, Germany	Keynote: Strategies for hydrogen production Prof. Jiabao Yi , University of Newcastle, Australia	Keynote: Biorefining of agricultural biomass into sustainable functional materials Prof. Zhanying Zhang , Queensland University of Technology, Australia
12:10-12:25	Invited: True surface SEM imaging of carbon materials at ultra-low acceleration voltages below 1 kV Dr. Kashmira Raghu , ZEISS Group, Australia	Invited: Regulation of electrochemical active sites via carbon microstructure Dr. Linjie Zhao , Beijing University of Chemical Technology, China	Invited: The role of electrocatalytic materials in metal sulfur batteries Dr. Chao Ye , The University of Adelaide, Australia	Invited: Phase stabilization strategies for efficient perovskite solar cells, Dr. Peng Chen , The University of Queensland, Australia	Invited: Metal-free carbon catalysts for catalytic cancer therapy A /Prof. Sophia Gu , University of New South Wales, Australia

12:25-12:40	Invited: Multiscale design of carbon-based catalysts: a maximum entropy production approach using reaction-diffusion dynamics Prof. Klaus Regenauer-Lieb , Curtin University, Australia	Invited: Advanced design of vanadium-based cathode materials for high-performance aqueous zinc-ion batteries Prof. Jun Li , Wenzhou University, China	Invited: Cross-scale modelling for dynamic ionic systems in graphene membrane energy storage devices Prof. Zhe Liu , The University of Melbourne, Australia	Invited: Anomalous ion transport in electrified graphene membranes Dr. Wen-Jie Jiang , The University of Melbourne, Australia	Invited: catalytic reevaluation of carbon-based molecules Prof. Zongyou Yin , Australian National University, Australia
12:40-12:50	Oral: Carbon-based hybrid energy materials Prof. Zhihong Tian , Henan University, China	Oral: Scalable Ni-based electrocatalysts for hydrogen electrolyser Dr. Doudou Zhang , Macquarie University, Australia	Oral: Multilayered graphene membrane for ammonium-ion storage Dr. Syam G. Krishnan , The University of Melbourne, Australia	Oral: Data-driven design of carbon-based single-atom catalysts for electrochemical ammonia synthesis from nitrate Jinyang Guo , University of New South Wales, Australia	Oral: Fine tuning the oxygen electroreduction under different scales for H ₂ O ₂ synthesis A/Prof. Qingran Zhang , Tongji University, China
12:50-13:40	Lunch break (Croft Restaurant, Amora Hotel Level 1)				
Venue	Whiteley 1	Whiteley 2	Boyd	Lindsay	
Sessions	Session 1-6: Carbon materials, characterisation and modelling Chair: Prof. Guan Yeoh	Session 2-6: Carbon for catalysis Chair: Prof. Shaobin Wang	Session 3-6 Carbon for Energy Chair: Dr. Chi David Cheng	Session 4-6 Carbon for Environment Chair: Prof. Ji-Hyun Jang	
13:40-14:00	Keynote: Advancing carbon-neutral and negative construction materials through nanotechnology and carbon sequestration A/Prof. Wengui Li , University of New South Wales, Australia	Keynote: Enhanced carbon dioxide conversion using graphene-based catalysts A/Prof. Zhaojun Han , Queensland University of Technology, Australia	Keynote: Nanocarbon and polymeric materials for green energy conversion and storage Prof. Yongsheng Chen , Nankai University, China	Keynote: Carbon capture for improving sustainability of urban water management A/Prof. Min Zheng , University of New South Wales, Australia	
14:00-14:20	Keynote: Computational Insight into ionic liquids electrolytes for lithium and sodium metal batteries Dr. Fangfang Chen , Deakin University, Australia	Keynote: Atomically dispersed electrocatalysts for low temperature fuel cells, water electrolysis and Li-S battery Prof. Jinwoo Lee , KAIST, South Korea	Keynote: Carbon based functional materials for multivalent metal batteries A/Prof. Bin Luo , The University of Queensland, Australia.	Keynote: Designing and probing metal based electrocatalysts for energy conversion applications A/Prof. Porun Liu , Griffith University, Australia	
14:20-14:35	Invited: Organic multi exciton generation augmented silicon (OMEGA) Dr. Michael P. Nielsen , University of New South Wales, Australia	Invited: Illuminating Gold(II): The Thermal and photochemical reactivity of bridged gold(II) dimers Dr. Benjamin Noble , RMIT University, Australia	Invited: Mayenite electrified: A conductive cements' application in future renewable energy Dr. Karim Khan , University of Technology Sydney, Australia	Invited: Understanding and designing additives for durable aqueous zinc batteries Dr. Priyank Kumar , The University of New South Wales, Australia	

14:35-14:45	<p>Oral: Electrocatalytic mechanism exploration of chirality-tuned cluster-encapsulated carbon nanotubes Yuanhong Shan, University of New South Wales, Australia</p>	<p>Oral: Dual-carbon battery with a nonflammable solventless electrolyte: A safe, low-cost, eco-environmental energy storage Dr. Minh Canh Vu, University of Newcastle, Australia</p>	<p>Oral: Synthesis of polymer/GO nanocomposite foams via miniemulsion polymerization and freeze-casting techniques Siti Humairah Harun, The University of New South Wales, Australia</p>	<p>Oral: Unveiling catalyst engineering strategies in steering urea electrooxidation selectivity Dr. Yuwei Yang, University of New South Wales, Australia</p>	
14:45-15:15	Afternoon Tea break (Foyer)				
15:15-15:45	<p>THEMED LECTURES 1-6 Chair: Prof. Lianzhou Wang Venue: Whiteley</p>	<p>Themed: Defect formation, characterisation and design in functional materials Prof. Yun Liu, Australian National University, Australia</p>			
15:45-16:15		<p>Themed: Carbon structure, chemical bonding, and reaction processes probed by soft X-ray spectroscopy Dr. Jinghua Guo, Lawrence Berkeley National Laboratory, USA</p>			
16:15-16:45	<p>Presentation of Awards (Prof. Shizhang Qiao, Venue: Whiteley)</p>				
16:45 – 17:00	<p>Closing Remarks (Prof. Rose Amal, Venue: Whiteley)</p>				