

# ICEAN – 2022 – Poster Presentations

Poster Session I – 17<sup>th</sup> of October 2022 at 5.45 PM

Poster No	Name of the Presenter	Affiliation	Country	Title of the Presentation
1P-1	Sagar Dhananjay Jadhav	Queensland University of Technology	Australia	Transition of Charge Storage Mechanism in Supercapacitor Materials
1P-2	Vibin Permulsamy	The University of Newcastle	Australia	Metal oxide (MoO <sub>2</sub> )/bimetallic sulfides (NiS/MoS <sub>2</sub> ) nanocomposites supported N-doped carbon for the high-performance Li-ion battery
1P-3	Thi Kim Anh Tran	The University of Newcastle	Australia	Copper substituted ordered core-shell mesoporous silica and its excellent antimicrobial properties
1P-4	Mohannad N.H. Al-Malichi	University of South Australia	Australia	Extremely Low Temperature to Exfoliate Functionalized High Structural Integrity Yet Graphene Nanoplatelets
1P-5	Jiaxing Liang	The University of New South Wales	Australia	High volumetric capacity nanoparticle electrodes enabled by nanofluidic fillers
1P-6	Yitong Cao	The University of Newcastle	Australia	Magnetic Iron Oxide Nanoparticles for Microplastic Collection
1P-7	GuyDong Lee	Kyungpook National University	Korea	Metal-organic frameworks with protonated amines: Adsorbent for the removal of benzonitrile and carbazole from model green-diesel derived from microalgae
1P-8	Md. Mahmudul Hassan Mondol	Kyungpook National University	Korea	TiN@nitrogen-enriched porous carbon derived from metal-organic frameworks and melamine: a remarkable oxidative catalyst to remove indoles from fuel
1P-9	Shuo Chen	The University of Tokyo	Japan	Fluorous Nanochannels Enabling Both Ultrafast Water Permeation and High Salt Reflection
1P-10	Thomas Douglas Small	The University of Adelaide	Australia	Visible-Light Photocatalysis
1P-11	Aathira Mankuzhy Sadanandan	The University of Newcastle	Australia	Carbon moiety incorporated mesoporous C <sub>3</sub> N <sub>5</sub> with highly enhanced photocatalytic hydrogen evolution activity
1P-12	Jiwan Kim	Kyonggi University	Korea	Unconventional quantum dot-based electroluminescence

				devices employing TiO <sub>2</sub> nanoparticles
1P-13	Cheng Wang	University of Science and Technology of China	China	Enhancing CO <sub>2</sub> Electroreduction Selectivity toward Multicarbon Products via Tuning the Local H <sub>2</sub> O/CO <sub>2</sub> Molar Ratio
1P-14	Sharidya Rahman	The Australian National University	Australia	Giant Photoluminescence Enhancement and Resonant Charge Transfer in Atomically Thin Two dimensional Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> /WS <sub>2</sub>
1P-15	Xueqian Sun	The Australian National University	Australia	Modulated interlayer charge transfer dynamics in a monolayer TMD/metal junction
1P-16	Yogesh Kumar	RMIT University	Australia	Realization of $\pi$ Berry phase and SdH oscillations in Bi single crystal
1P-17	Prashant Kumar	RMIT University	Australia	Synthesis and investigation of structural, optical, magnetic and spin resonance properties of rGO @ Co <sub>0.8</sub> Zn <sub>0.2</sub> Fe <sub>2</sub> O <sub>4</sub> magnetic nanocomposites
1P-18	Syamak Farajikhah	The University of Sydney	Australia	Flexible sensors based on conductive tough hydrogels
1P-19	Prince Sharma	RMIT University	Australia	Flexible Narrowband Transmissive Terahertz Filter on COC
1P-20	Chechia Hu	National Taiwan University of Science and Technology	Taiwan	Modification of g-C <sub>3</sub> N <sub>4</sub> through hydroxylation and Na intercalation for photocatalytic formaldehyde removal
1P-21	Sujanya Maria Ruban	The University of Newcastle	Australia	Mesoporous Carbon Nitrides with Tunable Morphology, Nitrogen Contents and Structures for Base Catalysed Transformations
1P-22	Abdulrahman Alhaidar	Queensland University of Technology	Australia	High-throughput Computational Screening of Two-dimensional Materials for Photocatalytic Water Splitting under Visible Light
1P-23	Ashakiran Maibam	RMIT University,	Australia	Sustainable ammonia production on single site catalyst anchored 2D materials
1P-24	Lakshmi Daggubati	The University of Newcastle	Australia	Micronanoplastic release and leaching of toxic metal(loid)s from recycled plastic products
1P-25	Sania Afrose	The University of Newcastle	Australia	Uptake and Accumulation of Polystyrene Nanoplastics in Australian Seabass
1P-26	Satoshi Kuretani	Tokyo Institute of Technology	Japan	Particle Size Control of Polyimide Nano-Particles by Precipitation Polymerization and their Size Evaluation by Small Angle X-ray Scattering

## Poster Session II – 19th of October 2022 at 6.15 pm

Poster No	Name of the Presenter	Affiliation	Country	Title of the Presentation
2P-1	Gopa Sardar	Indian Institute of Technology	India	Reduced Singlet-Triplet Annihilation for Low Threshold Amplified Spontaneous Emission from Blue Polyfluorene Electroluminescent Organic Semiconductor
2P-2	Ajanya Maria Ruban	The University of Newcastle	Australia	High Surface Area Porous Activated Biocarbons from Almond Skin for Supercapacitor and Low- and High-pressure CO <sub>2</sub> Adsorption
2P-3	Rohan Bahadur	The University of Newcastle	Australia	Ordered mesoporous graphene-BCN hybrid with high surface area for energy storage applications
2P-4	Bhavya Jitendrabahi Mod	The University of Newcastle	Australia	Sugarcane waste-derived biochar functionalized with silica nanoparticles to mitigate nutritional and structural deficiencies in sugarcane cultivated soils
2P-5	Brody McDonald	RMIT University	Australia	Peptide self-assembled Nanostructures serving as templates for Noble Metal composite materials
2P-6	Marzia Cavallo	The University of New South Wales	Australia	Metal complexes as precursors for the controlled seeded growth of Co branched nanoparticles
2P-7	Muhammad Adeel Zafar	James Cook University	Australia	Synthesis of freestanding nitrogen-doped graphene oxide for environmental applications
2P-8	Shahrzad Rezvani-Baboli	Macquarie University	Australia	Controlling the Brightness of Ruby Nanoparticles for Biological Applications
2P-9	Anh Son Hoang	The University of Newcastle	Australia	Phosphate removal from influents by layered double hydroxide and its slow-release phosphate fertilizer potential
2P-10	Prince Sharma	RMIT	Australia	Low Temperature Charge Carrier and Phonon Dynamics Exploration of Topological Insulator
2P-11	Kamilla Sivunova	The University of Newcastle	Australia	Novel nanoparticles fabrication from photovoltaic materials (PDCBT:ITIC)
2P-12	Jolitta Sheri John Britto	The University of Newcastle	Australia	Synthesis, characterization, and antibacterial assessment of Cu-doped mesoporous N-rich Carbon Nitrides
2P-13	M.Fairuz B. Jamaluddin	The University of Newcastle	Australia	Proteomic characterization of acellular matrix of human uterine fibroids
2P-14	Makoto Yamazaki	Yokohama National University	Japan	Build-up Fabrication of Biomaterials from Polysaccharide Polyelectrolyte Complex Particles
2P-15	Priscila Cardoso	RMIT University, Melbourne	Australia	Rational design of potent ultrashort antimicrobial peptides with

				programmable assembly into nanostructured hydrogels
2P-16	Vaishwik Patel	The University of Newcastle	Australia	Biomedical Application of Nitrogen and Copper doped Mesoporous Carbon as a Peroxidase Mimetic
2P-17	Yen Hai Thi Tran	Chungnam National University	Korea	Toward improved low-temperature performance of High-Energy Lithium-ion Batteries via Stabilization of High-Voltage Interface
2P-18	Joshua Zheyuan Soo	The Australian National University	Australia	Novel Substrate-Agnostic Approach in Preparing High-Performance Regenerative Water Splitting (Photo)electrodes
2P-19	Kevin Mariandry	The University of New South Wales	Australia	Understanding the role of Ag on Ag-core Pt-partial shell nanoparticle for alkaline and acid hydrogen evolution reaction.
2P-20	Mohammed Fawaz Palakkat Alihassan	The University of Newcastle	Australia	Activated Graphene Nanoplatelets Decorated with Carbon Nitrides for Efficient Electrocatalytic Oxygen Reduction Reaction
2P-21	Zeno Rizqi Ramadhan	The University of New South Wales	Australia	Controlling Geometric Site of Branched Cobalt Phosphide for Highly Active Oxygen Evolution Reaction
2P-22	Zhipeng Ma	The University of Newcastle	Australia	Insights into the electrochemical reduction of CO <sub>2</sub> on vertical graphene-supported Cu catalysts
2P-23	Niall L. Malone	National Isotope Centre, GNS Science	New Zealand	Synthesis of transition metal carbide nano-catalytic surfaces for hydrogen evolution reaction by ion implantation
2P-24	Azrhy Nichol	The University of New South Wales	Australia	Heterogeneous Growth of Platinum Islands on Copper Nanoparticles to Understand the Hydrogen Evolution Reaction Mechanism
2P-25	Arun Vijay Baskar	The University of Newcastle	Australia	Facile synthesis of copper/copper oxide encapsulated 3D mesoporous C60 and their energy storage application
2P-26	Shan Mohanan	The University of Newcastle	Australia	Rod vs Sphere- A Comparative Study of Particle Shape Effect in Nano Drug Delivery
2P-27	Nithinraj Panangattu Dharmarajan	The University of Newcastle	Australia	Heteroatom doped supramolecular precursor derived carbon nitride for photocatalytic water splitting
2P-28	Guntae Lim	Chungnam National University	Korea	Electrochemical Studies of New Polymer-encapsulated Sulfur Cathode Active Material for a Lithium-Sulfur Battery
2P-29	Guntae Lim	Chungnam National University	Korea	Correlation between Interfacial Reaction Behavior and Performance of Silicon Anode Material for Lithium-ion Batteries

