

Electrochemistry Northwest 2019 – 4th July 2019

Hosted by

Manchester Metropolitan University, John Dalton Building, Chester Street, Manchester, M1 5GD

Talk Programme

9.00 -10.00	Arrival Refreshments	
Session 1 – Early Career Researchers - chaired by Dr Dale Brownson – E.032		
10.00 – 11.00	Hany El-Shinawi	Development of electrode and solid-electrolyte materials for next-generation solid-state lithium-ion batteries
11.00 – 11.15	Balakrishna Ananthoju	Controlled electrodeposition of gold on graphene: Maximization of the defect-enhanced Raman scattering response.
11.20 – 11.35	Conor Byrne	The off-set droplet technique applied to electrochemical operando XPS
11.40 – 11.55	Madhumita Sahoo	Graphene-future membrane for proton exchange membrane fuel cells?
12.00 – 12.15	Tom Galloway	SHINing light on electrode interfaces
12.15 – 13.30	Lunch and Posters – John Dalton Refectory	
Session 2 – PhD Researchers - chaired by Dr Edward Randviir – E.032		
13.30 – 14.30	Craig Banks	The electrochemical journey from screen-printing to 3D printing
14.30 – 14.50	Aránzazu Carmona Orbezo	Performance optimization of capacitive deionization systems by potentiostatic analysis
14.55 – 15.15	Pawin lamprasertkun	Capacitance of graphite/electrolyte interface
15.20 – 15.40	Dhruv Trivedi	Back CO ₂ the future: Electrochemical reduction of CO ₂
15.45 – 16.00	Sponsor awards and closing remarks	
16.00	Drinks at the Lass O’Gowrie 36 Charles St, Manchester M1 7DB	

The Electrochemistry Northwest event this year has been sponsored by Alvatek and Metrohm, as well as the RSC Applied Materials Chemistry Group and Northwest Analytical Division

Poster Session

Name	Poster Number	Poster Title
Samuel Booth	1	Microwave synthesised $\text{H}_2\text{V}_3\text{O}_8$ nanowires: a study of lithium intercalation
Zhaoqi Ji	2	Platinum supported on green synthesis graphene oxide as the catalyst for the hydrogen fuel cell
Ed Randviir	3	Recycling textile fibres into carbon electrodes
Behnam Bastani	4	Flow reactor product analysis
Dale Brownson	5	Graphene electrochemistry: manipulating fundamentals for improved electroanalytical applications
Craig Armstrong	6	Employing organic redox mediators and energy boosters to improve redox flow batteries
Jessica Scremin	7	Novel architecture of sensing based on carbon black in biopolymer botryosphaeran film for analytical purposes
Jyoti Gupta	8	Computational Spectroscopic Calculations to Complement Experimental Electrochemical studies on Metal-oxygen batteries
Yaqi Li	9	Designing a simple and free-conditioning electrolyte for high performance rechargeable magnesium-sulfur batteries
Yi-Ting Lu	10	Enhanced oxygen evolution performance of spinel $\text{Fe}_{0.1}\text{Ni}_{0.9}\text{Co}_2\text{O}_4$ /activated carbon composites with superior stability
Khadisha Zahra	11	Intercalation, decomposition, entrapment - a new route to graphene nanobubbles
Innes McClelland	12	In situ diffusion measurements of an all solid state battery using muon spectroscopy
Bruna Baggio	13	Morphology and structure of electrodeposited Prussian Blue and Prussian White thin films
Hadil Mamdouh	14	Separation and quantification of heroin, fentanyl and its derivatives using high performance liquid chromatography-amperometric detection
Amirah Kamaruddin	15	Quantification of halide inhibition of O_2 reduction in multicopper oxidases using protein film electrochemistry
Jodie Charlton	16	Investigating electrode-electrolyte interfaces of Li-ion batteries
Abdul Al-Jumialy	17	One step carbon activation of seaweed for supercapacitor applications