

2021 ACES Full Centre Meeting

Program

Monday 7th – Tuesday 8th June 2021

All Times Listed are Australian Eastern Standard Time (AEST)

Day 1: Monday 7 th June 2021	
Session 1 – Chair: Prof David Officer	
12:25pm	<i>Dial into Zoom - https://uow-au.zoom.us/j/98354545437 Password - 862497</i>
12:30pm – 1:30pm	<i>Panel Session – Positioning for Careers in Translation (Doug MacFarlane, Gordon Wallace, Maria Forsyth, Charlie Day, Paul Barrett)</i>
1:30pm	Break
1:45pm	Professor Gordon Wallace, ACES Director: <i>Opening Remarks</i>
1:55pm	Dr Anita Quigley , University of Melbourne, Australia <i>Brains and Brawn: Engineering Neural and Muscle Tissues</i>
2:10pm	Dr Vipul Gupta , University of Tasmania, Australia <i>3D Printing of PDMS, Glass and Silica-Based Ceramics</i>
2:25pm	Dr Eva Tomaskovic-Crook , University of Wollongong, Australia <i>Advanced Electrical Stimulation for Human Tissue Engineering and Regenerative Medicine</i>
2:40pm	Dr Andres Ruland , University of Wollongong, Australia <i>Ultrimage: A Versatile Platform for the Non-Invasive Imaging of Biomaterials and Cell Containing Structures</i>
2:55pm	Equity and Diversity Committee (Linda Hancock, Linda Wollersheim, Eliza Goddard and Jeremy Crook) <i>Contributions of the Equity and Diversity Committee</i>
3:25pm	Break
Session 2 – Chair: Prof Jenny Pringle	
3:40pm	Dr Cristina Pozo-Gonzalo , Deakin University, Australia <i>Sustainable Batteries Based on Sodium and Oxygen</i>

3:55pm	Dr Saimon Moraes Silva , Swinburne University of Technology, Australia <i><u>Lubricin (PRG4): A Versatile Protein for Electroactive Surfaces</u></i>
4:10pm	Dr Klaudia Wagner , University of Wollongong, Australia <i><u>Using Diluted Mixture of Hydrogen in Methane for Energy Application</u></i>
4:25pm	ACES Burster Session – 7 x 5 minute sessions <ul style="list-style-type: none"> • Chunyan Qin – <i><u>Bipolar Electroactive Conducting Polymers for Wireless Cell Stimulation</u></i> • Grishmi Rajbhandari – <i><u>Printed Antenna Coils for Cochlear Implants</u></i> • Jeremy Dinoro – <i><u>A Novel Sintering Approach for Generating Bone Substitutes</u></i> • Le Hong Quan – <i><u>Machine Learning Based Myoelectric Prosthetic Hand Control Interface</u></i> • Linda Wollersheim – <i><u>Marginalised by Big Grid Energy? The Impact of Policy Barriers on Mid-Scale Renewables Projects</u></i> • Alexandre Xavier Mendes – <i><u>A Soft Electroactive Bioink for 3D Printing Based on GelMA and Graphene Oxide</u></i> • Malachy Maher – <i><u>Collagen Hydrogels for Tissue Engineering: Sources, Processing and Applications</u></i>
5:00pm	Day 1 Finish
6:00pm	Full Centre Meeting Dinner – The Lagoon Restaurant

Day 2: Tuesday 8th June 2021

9:00am – 11:00am	Virtual Theme Meetings (Arranged and Hosted by Theme Leaders – INTERNAL TO ACES ONLY)
Session 3 – Chair: Prof Doug MacFarlane	
12:55pm	Dial into Zoom - https://uow-au.zoom.us/j/98354545437 Password - 862497
1:00pm	Sam Findlay , University of Wollongong, Australia <i><u>A Communications Conversation with Dr Cathal O’Connell</u></i>
1:15pm	Dr Andrew Nattestad , Monash University, Australia <i><u>Scale Up of Reactors for CO₂ Reduction</u></i>
1:30pm	Dr Arushi Manchanda , University of Tasmania, Australia <i><u>Direct Analysis of Swabbed Samples using Thread-Based Analytical Systems</u></i>
1:45pm	Dr Sepehr Talebian , University of Wollongong, Australia <i><u>Hydrogel Structures for Drug Delivery to Tumors</u></i>
2:00pm	Dr Holly Hunt , University of Wollongong, Australia <i><u>Hydrogel Materials Development</u></i>
2:15pm	Dr Faezeh Makhlooghiyazad , Deakin University, Australia <i><u>Development and Use of Novel Zwitterion-Based Electrolytes for Energy Storage Applications</u></i>
2:30pm	Dr Chong-Yong Lee , University of Wollongong, Australia <i><u>Perspective of Electrolyte Effects on the Electrochemical Reduction of CO₂</u></i>
2:45pm	Break
Session 4 - Chair: Prof Maria Forsyth	
3:00pm	ACES Burster Session – 7 x 5 minute sessions <ul style="list-style-type: none"> • <i><u>Fatimah Al-Ghazzawi – Reactive Printing ZIF-8 Interfaces</u></i> • <i><u>Mitchell St Clair-Glover – Development of an Innervated Full Thickness Human Skin Model by 3D Bioprinting</u></i> • <i><u>Inseong Cho – Substrate Dependent Electron Transfer Rate by Exploiting Selective Intermolecular Interactions between Mixed-Ligand Electron Donors and Surface-Bound Electron Acceptors</u></i> • <i><u>Sujani Abeywardena – Textile-Based Electrofluidic Platform for Cell Culture Analysis</u></i> • <i><u>Thomas Blesch – Studies of an Iron-Based, Symmetric, Non-Aqueous Redox Flow Battery</u></i> • <i><u>Carly Baker – Conducting Polymers Functionalised with Cholesterol for Applications as a Bioelectronic Probe</u></i> • <i><u>Lingzhi Kang – Biofabricated Platforms for Skin Repair and Regeneration</u></i>

3:35pm	Dr Alex Harris , The University of Melbourne, Australia <i>A Framework for Assessing the Emergence of Novel Behaviours in Complex Systems</i>
3:50pm	Dr Hao Zhou , University of Wollongong, Australia <i>A 3D Printed Soft Prosthetic Hand with Embedded Actuation and Soft Sensing Capabilities for Directly and Seamlessly Switching Between Various Hand Gestures</i>
4:05pm	A/Prof Caiyun Wang , University of Wollongong, Australia <i>Engineering the Materials for Multifunctional Batteries</i>
4:20pm	Professor Gordon Wallace, ACES Director: Closing Remarks
4:30pm	Day 2 Finish
5:00pm – 6:30pm	IAC Meeting