USYD – Yonsei Virtual Research Roundtable on "Functional Energy Materials"

27 November 2020
9:00am-11:35am Seoul, 11:00am-1:35pm Sydney
Connected via Zoom

Purpose:

1. To showcase research strength of both universities in the area Functional Energy Materials in tackling challenges of SDGs, particularly SDG 7: Affordable and Clean Energy, SDG 9: Industry, Innovation and Infrastructure and SDG 12: Responsible Consumption and Production
2. To develop and strengthen academic links in relevant areas and explore potential research and teaching collaborations

Co-Chairs:

- Chair, Professor Philip Gale, Head of School of Chemistry, Faculty of Science, University of Sydney
- Chair, Professor Jinsung Tae, Chair, Department of Chemistry, College of Science, Yonsei University

Draft program

Seoul Time	Sydney Time	Activities
9:00-9:05 (5 min)	11:00 – 11:05 (5 min)	**Welcome and Acknowledgement of Country** • Professor Jinsung Tae, Chair, Department of Chemistry, Yonsei University • Professor Philip Gale, Head of School of Chemistry, Faculty of Science, University of Sydney
9:05-11:00 (115 min) Each speaker gives a ten-minute presentation followed by three- minute Q&A	11:05 – 13:00 (115 min) Each speaker gives a ten-minute presentation followed by three-minute Q&A	**Research Presentations** * Speakers will be introduced by the Chair of respective university. 1. **Functional MOF materials for hydrocarbon separations for hydrogen delivery applications** Dr Lauren Macreadie, School of Chemistry at Faculty of Science, University of Sydney 2. **Hybrid Metal-Organic Frameworks and Efficient Catalysts for Oxygen Reduction Reaction** Professor Moonhyun Oh, Department of Chemistry, College of Science, Yonsei University 3. **Harnessing Electroactivity in Coordination Frameworks** A/Professor Deanna D'Alessandro, School of Chemistry at Faculty of Science, University of Sydney 4. **Electrocatalytic CO2 Conversion on Metal Nanoclusters** Professor Dongil Lee, Department of Chemistry, College of Science, Yonsei University 5. **In situ/operando X-ray and neutron scattering studies of high-voltage solid-state battery materials at high voltage.** Professor Chris Ling, Associate Head of School (Research), School of Chemistry at Faculty of Science, University of Sydney 6. **Ruthenium-based Trimetallic μ–oxo Cluster Compounds and Their Application in Redox Flow Batteries** Assistant Professor Hyun S. Ahn, Department of Chemistry, College of Science, Yonsei University

		7. Beyond Batteries. Uncoupling local and long-range structures in complex oxides. Professor Brendan Kennedy, School of Chemistry at Faculty of Science Professor of Chemistry, University of Sydney **8. Designer Carbon Nanodots: Synthesis and Applications in Energy** Associate Professor Byeong-Su Kim, Department of Chemistry, College of Science, Yonsei University
11:00-11:10 (10min)	13:00-13:10 (10 min)	**Funding opportunities** • **Funding programs for Yonsei researchers to apply** Professor Won-hyoung Ryu, the Chairman of the YFL selection committee, Yonsei University • **Funding programs for Sydney researchers to apply** Xiaohui Fu, Partnership Officer, Office of Global Engagement, University of Sydney
11:10-11:35 (25 min)	13:10-13:35 (25 min)	**Discussion of future collaboration plans** • Professor Philip Gale, Head of School of Chemistry, University of Sydney