Advanced Materials Workshop and Networking Event 2022: Research, and Applications of Nanomaterials and Chemical Engineering Processes

PRESENTER PROFILES

Assoc Prof Yan Jiao

Assoc Prof Jiao received her PhD from the School of Chemical Engineering at The University of Queensland (UQ) in 2012. After graduation, She joined the University of Adelaide as a Research Fellow in the School of Chemical Engineering and Advanced Materials (CEAM), became a Senior Lecturer in 2019, and was promoted to Associate Professor in 2021. She is now the Deputy Head of School (CEAM), Associate Director of the Centre for Materials in Energy and Catalysis (CMEC), and ECMS Theme Leader for Functional Materials. She has been recognised as a Rising Star by The Australian and received a Young Tall Poppy Award in 2020. Assoc Prof Jiao's research expertise is in molecular modelling, the development of computational electrochemistry, and the design of energy materials by computation methods. She has published 80+ papers in prestigious journals and received over 20,000 citations, for which she has been recognised as a Highly Cited Researcher by Clarivate Analytics. Assoc Prof Jiao has received more than $1M funding, including an Australian Research Council supported Future Fellowship to develop catalyst materials for future fuels by advanced computation techniques.

Prof Dusan Losic

Prof Losic is a professor at the School of Chemical Engineering and Advanced Materials, the University of Adelaide, and Director of the ARC Graphene Research Hub. He completed PhD (2003) in Nanoscience and Nanotechnology (Flinders University, Australia) as one of the first PhD in Australia in this field. After 3 years postdoctoral work at Flinders in 2007 he received ARC Research Fellowship (5 years) starting his independent research at University of South Australia (Ian Wark Research Institute). In 2012 he received ARC Future Fellowship, and join the University of Adelaide with his research group. He has published >450 publications in leading journals and conference publications. He received ~ $20 M in research funding over the past 10 years, completed over 40 research projects, half involving industry, and has an outstanding track record in research translation (7 licensing technologies).

Dr Tran Tung

Dr Tran Tung is currently a research fellow at School of CEAM, the University of Adelaide. He received his BSc and MSc degree at Hanoi University of Science and Technology, Vietnam, in 2001 and 2005 respectively, and PhD at Korea University (KU), South Korea, in 2010, all in Materials Science and Engineering. He was a postdoc at KU (2011), LIMATB at University of South Brittany (UBS, 2011-2013) and ICPEES at CNRS-Strasbourg University (2013-2014), France. Since 2015 he has been working at the University of Adelaide. His research interests include carbon nanomaterials, conducting polymers and nanocomposites for sensors and electronic applications.

Dr Md Julker Nine

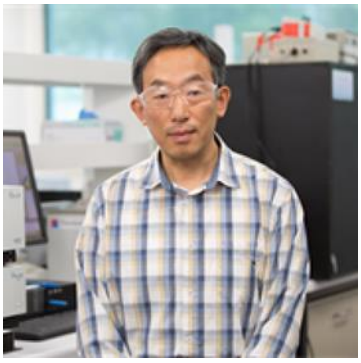
Dr Nine is an early-career research fellow based in ARC Research Hub for Graphene Enabled Industry Transformation, University of Adelaide, Australia. After finishing Bachelor's degree from Khulna University of Engineering & Technology, Bangladesh in 2009, he joined in Second Phase of Brain Korea21 (BK21) and received Master of Engineering degree from Gyeongsang National University, South Korea in 2012. In 2017 He was conferred his PhD degree on "Graphene based multifunctional coatings" from University of Adelaide, under supervision of Prof D. Losic. He was awarded Doctoral Research Medal, Postgraduate Alumni University Medal and Carbon Journal prize-2018 for outstanding research at PhD level. His PhD work generated over 40 peer-reviewed papers as well as 3 patents on graphene technology that are licenced to Industry partners.

Prof Volker Hessel

Prof. Dr. Volker Hessel studied chemistry at Mainz University (PhD in organic chemistry, 1993). In 1994 he entered the Institut für Mikrotechnik Mainz GmbH (1996: group leader microreaction technology). In 2002, Prof. Hessel was appointed Vice Director R&D at IMM and in 2007 as Director R&D. In 2005 and 2011, Prof. Hessel was appointed as part-time and full professor at Eindhoven University of Technology, respectively, for the chair of "Micro Flow Chemistry and Process Technology". He is honorary professor at TU Darmstadt, Germany, and guest professor at Kunming University of Science and Technology, China. Prof. Dr. Hessel is (co-)author of more than 380 peer-reviewed publications and 10 books. He received the AIChE Award "Excellence in Process Development Research" in 2007, the ERC Advanced Grant "Novel Process Windows" in 2010, and the IUPAC ThalesNano Prize in Flow Chemistry in 2017. In the same year, he got granted as coordinator the FET OPEN project ONE-FLOW. He is Editor-in-Chief of the journal "Green Processing and Synthesis". He was authority in the 35-man teamed Enquete Commission "Future of the Chemical Industry" of the parliament of Germany's state Nordrhein-Westfalia and is advisor for GSK for the Green Chemical Manufacturing Programme in Singapore.

Prof Peter Ashman

Professor Peter Ashman is Director (People & Infrastructure) of the Faculty of Engineering, Computer and Mathematical Sciences and also a Professor in the School of Chemical Engineering and Advanced Materials. He is a senior member of the University of Adelaide's Centre for Energy Technology (CET), co-leader of the end-user working group for the Future Fuels CRC and was recently appointed as the Program Leader for the Cross-Cutting Technologies program within the newly established HILT CRC. As part of the Future Fuels CRC his team undertook a detailed technical and economic assessment of existing and emerging processes for the production of both blue and green hydrogen. He is also currently investigating changes in performance when existing domestic and industrial combustion appliances and systems are fuelled using mixtures of hydrogen and natural gas. This work is vital to underpin the safe roll out of hydrogen blending projects across Australia and also considers the impact of various impurities associated with the production of biomethane from biogas.



Prof Shaobin Wang

Prof. Wang obtained his PhD in Chemical Engineering from University of Queensland, Australia. He is now a Professor at School of Chemical Engineering, The University of Adelaide, Australia. His research interests focus on nanomaterial synthesis and application for adsorption and catalysis, fuel and energy conversion and environmental remediation. He has published more than 500 refereed journal papers with citation over 41,000 and H-index of 115. He was awarded 2012 Thomson Reuters Citation & Innovation Awards in Australia. He is also the Clarivate Analytics Highly Cited Researcher In Engineering for 2016-2020.

Assoc Prof Philip Kwong

Associate Professor Philip Kwong is the Director of Internationalisation within the School of CEAM at the University of Adelaide, Australia. He has made significant contributions in the field of sustainable waste management and resource recovery from waste biomass to support the growth of future industries around circular economy goals. He has published more than 60 articles in high-impact journals, peer reviewed conferences, and technical reports and over 90% of the publications are in the top journals in his field. He was also awarded a prestigious invitation fellowship by the Japan Society for Promotion of Science for recovering valuable resources from sewage sludge. Philip's world-leading expertise in resource recovery from biomass has been transferred into international patents and this has led to his establishment of a technology start-up company that has attracted more than $1.5M investment since 2018. Philip's pioneered technology has been utilised around Australia in different industries to produce low-cost carbon materials from various waste agricultural resources. His technology has been named as one of the "10 Australian inventions equipping us for the future" by The Brilliant.