

CAMS 2018

Advancing Materials and Manufacturing



The 6th Conference of the Combined Australian Materials Societies; incorporating Materials Australia and the Australian Ceramic Society.

27-29 November 2018
University of Wollongong

The Combined Australian Materials Societies (CAMS) 2018 conference was Australia's largest interdisciplinary technical meeting of the year. With attendees from around the globe, and top calibre keynote and invited speakers, it was an exciting, engaging and fruitful conference.

Held at the University of Wollongong from 27 to 29 November, the theme of this year's conference was 'Advancing Materials and Manufacturing'.

Symposia themes for the CAMS 2018 Conference included exciting presentations on advanced manufacturing and advances in materials characterisation. There were also talks on corrosion and degradation, as well as the selection of durable materials for demanding environments, and much more.

Each symposia was presented by leaders in the industry, with attendance proving to be a valuable chance to glean a range of ideas from experts and leaders in the materials science and engineering fields.

This year, the Plenary Speakers included Professor Emily Hilder, the Director of the University of South Australia's Future Industries Institute (FII). Professor Hilder is also Deputy Director of the ARC Training Centre for Portable Analytical Separation Technologies (ASTech) and Deputy Director of the ARC Research Hub for Integrated Device for End-user Analysis at Low-levels (IDEAL).

Professor Hilder is an analytical chemist and her research focuses on the design and application of new polymeric materials that can be used to improve analytical

measurements including the application of these new technologies for separations, bio-analysis and disease diagnosis.

Professor Shi Xue Dou is from the University of Wollongong and was also a Plenary Speaker. He received his PhD in chemistry in 1984 at Dalhousie University, Canada and DSc at the University of New South Wales in 1998. He was elected as a Fellow of the Australian Academy of Technological Science and Engineering in 1994. He was awarded the Australian Government's Centenary Medal in 2003 and multiple Australian Professorial Fellowships from 1993 to 2007.

Professor Dou's research is focused on energy and electronic materials with more than 900 publications that have attracted 32,000 citations with a h-index of 79. He has supervised 90 PhD students and more than 60 postdoctoral and visiting fellows. He is program leader for Auto CRC 2020 on electrification program and ARENA 2016-2020 on smart sodium storage system program.

The keynote speakers included Professor Professor Graham Schaffer (University of Melbourne), Professor Baohua Jia (Swinburne University's Centre for Micro-Photonics), Distinguished Professor Dietmar Hutmacher (Queensland University of Technology), Dr Martin Leary (RMIT), Professor Sally McArthur (CSIRO), Dr Wyman Zhang (DTS), Associate Professor Gwenaelle Proust (University of Sydney), Dr Ross Marceau (Deakin University), Associate Professor Philip Nakashima (Monash University), Dr Ruth Knibbe (University of Queensland), Professor Xinhua Wu (Monash University), Professor Koji Kakehi (Tokyo Metropolitan University), Dr Matthew Barnett (Deakin University),

Professor Dmitri Goldberg (Queensland University of Technology), Professor Simon Ringer (University of Sydney), Professor Setsuo Takaki (Kyushu University), Professor Gangadhara Prusty (University of New South Wales), Professor Geoffrey Evans (University of Newcastle), Emeritus Professor David StJohn, and Professor Mingxing Zhang (University of Queensland).

There was also a short course held on Monday 26 November, entitled '*Use of Metallography in Failure Analysis*'. Materials Australia would like to thank the course presenter George Vander Voort, Andrew Ang who helped to organise the course, and our course sponsors Struers.

The Conference Co-Chairs namely Professor Huijun Li (University of Wollongong) and Dr Dan Gregg (ANSTO) did a fantastic job in developing a full and engaging program with all three days running five parallel symposia. Materials Australia would like to thank both Conference Co-Chairs, as well as the other members of the organising committee, including Tanya Smith (Materials Australia), Andrew Ang (Swinburne University), Sophie Primig (University of New South Wales), Yue Zhao (University of Wollongong), Judy Hart (University of New South Wales), and Andrew Kostryzhev (University of Wollongong).

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