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Following the success of the meeting it is hoped to take the conference to other venues in South East Asia in future years.

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MACRO 2018

by Melissa Chan Chin Han and Chris Fellows

The World Polymer Congress, MACRO 2018, latest in the series of biannual conferences that are the most important meeting of the global polymer community, was held in Cairns, Australia from 1-5 July 2018. Over 800 attendees from 44 countries participated in this extravaganza of polymer science, which featured a stellar array of plenary speakers: Prof. Steven Armes (Sheffield), Prof. Zhenan Bao (Stanford), Prof. Michelle

Coote (Australian National University), Prof. Paula Hammond (Massachusetts Institute of Technology), Prof. Ian Manners (Bristol), Prof Christopher Ober (Cornell), and Prof Ben Zhong Tang (Hong Kong University of Science and Technology). Cairns put on unseasonably cold weather for the occasion, with anecdotal

IUPAC on the Trade Floor

"IUPAC Polymer Division – Collaborate and Educate Grab your chance to have unique insight into IUPAC Polymer Division!"

The short description above was our aim for having an IUPAC trade booth at MACRO2018 for the conference participants and as the *"Treffpunkt"* (meeting point) for Polymer Division members and friends. Almost all division members volunteered to man the booth at different times. We had Prof. Qifeng Zhou, President of IUPAC, offering his assistance on setting up the booth. A session "Meet the President and Vice President of IUPAC Polymer Division" (Greg Russell and Christine Luscombe) was well received, as they invited visitors to the booth to: *"Know who we are, what we do, how we do it, and what the future might hold."* During the "Meet the Course Instructor" sessions, participants in the Educational Workshop were able to have further discussions with the three instructors. Roger Hiorns (Chair of the Subcommittee of Polymer Terminology) happily shared the publications of his subcommittee, especially the popular "A Brief Guide to Polymer Nomenclature." Chris Fellows and Patrick Théato (Chair and Secretary of the Subcommittee of Polymer Education) recruited academics from around the world to join the projects of their subcommittee. We had Doo Sung Lee (Korea) and Lena Horne (Canada), organisers of MACRO2020 and 2022, respectively, promote these upcoming MACRO conferences. And we were sure to

promote IUPAC2019 in Paris as well!

While the IUPAC secretariat does not typically have booth materials nor the resources to support a trade booth, the support of the MACRO2018 organising committee made the IUPAC trade booth experiment possible. With encouragement from Greg Russell, strong support from Fabienne Meyers, Lynn Soby and De Gruyter publishing house, self-initiative in providing their own exhibition materials from the members of the Polymer Division, we had a wealth of material to offer to our many visitors. In summary, we had a successful experiment, with a dynamic and interactive IUPAC booth in Cairns.

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evidence from locals that it was the coldest winter since 1937; the 25 °C days were a welcome relief for delegates escaping the Northern Hemisphere summer.

MACRO 2018 had 165 invited speakers, nearly 200 poster presentations, and almost 500 oral presentations given over four days in sixteen symposia that reflected Australia's historic strength in Polymer Chemistry. World-renowned master of ATRP (atom transfer radical polymerisation) Prof. Krysztof Matyjaszewski spoke in the "Recent Developments in Polymer Design" symposia along with 21 other high-profile invited speakers. An excellent symposium on "Kinetics of Polymerization" surpassed any meeting on that theme that the authors have attended in the last twenty years. There were also excellent symposia on "Polymers in Biotechnology, Medicine, and Health," "Polymers and Nanotechnology," "Energy, Optics and Optoelectronics," "Smart and Functional Polymers," and "Renewable Resources and Biopolymers."

Polymer science has traditionally straddled chemistry, physics, and engineering; and non-chemical aspects of polymer science were well represented with symposia on "Polymer Engineering and Modelling," with speakers including Prof. Anna Balazs who is renowned for her biomimetic mechanical polymer structures, "Polymer Characterization and Polymer Physics" and "Porous Polymers." A symposium on "Polymer Education" brought together teaching innovations from every inhabited continent, while the "Industry and Innovation" symposium highlighted innovative practices for the future and reminded us of the rich history of the polymer industry. Last but not least, three sessions were devoted to the strong and growing bilateral links between Australian polymer science and polymer science in other nations: an Australian-Korean

At top: Christine Luscombe (left), Vice President of the IUPAC Polymer Division acknowledging the work of the local organizers, here represented by Martina Stenzel, co-chair of MACRO 2018 program committee. Above: Christopher Ober, recipient of the 2nd Bob Stepto Award.

symposium, Australian-German symposium, and a session organised by the Royal Society of Chemistry.

Awards presented at the conference included the 2018 Hanwha-Total-IUPAC Young Scientists Award, awarded to Prof. Andreas Walther (Albert-Ludwigs-Universität Freiburg) for his work defining the emerging new field of "Adaptive, Active and Autonomous Bioinspired Material Systems." The 2016 Hanwha-Total-IUPAC award was also presented formally at Cairns to Prof. Brent Sumerlin (University of Florida); the presentation of this award having been disrupted by the Turkish coup attempt of 2016. The 2018 Polymer International Award was presented to Prof. Richard Hoogenboom (Ghent), while the similarly affected 2016 Polymer International Award went to Prof. Cyrille

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Boyer (University of New South Wales) and the 2016 DSM Materials Award to Prof. Steven Armes.

From a very competitive field of excellent work, IUPAC poster prizes were awarded to Eeseul Chin (Ulsan National Institute of Science and Technology), Chloe Cho (Auckland), Tobias Johann (Mainz) and Tuan Nguyen (University of Queensland).

The conference closed with the presentation of the 2nd Bob Stepto award to Prof Christopher Ober: this

IUPAC award recognises a polymer scientist who is not only a true world leader in their research field, but—in the spirit of Prof Stepto, a tireless contributor to IUPAC activities—should also have made an indelible contribution to the polymer science community beyond the research domain.

Special acknowledgement to Volker Abetz, Andrij Pich, Peter Halley, Roger Hiorns, and Greg Russell for their contributions to the preparation of this report.

Educational Workshop in Polymer Sciences

Themed *Polymer Processing*, this interactive educational workshop was structured for roughly 200 post-graduates or researchers from all countries to update their knowledge through interactive lectures. It was the third in a projected series of four workshops, respectively covering synthesis, characterisation, processing, and applications of polymers—the final one of the series is planned for MACRO2020 on Jeju island, Korea.

All three lectures in the workshop covered the understanding of the basic science, terms and concepts that are critical to polymer processing from the laboratory scale to the pilot scale and beyond. Thought-provoking insights into experimental design, process optimization and counter-intuitive research results were presented. The lecturers were:

- **Prof. Volker Abetz**, University of Hamburg and Helmholtz-Zentrum Geesthacht Centre for Materials and Coastal Research, Germany
- **Prof. Andrij Pich**, RWTH Aachen University, Germany

- **Prof. Peter Halley**, University of Queensland, Australia

Before the workshop, the instructors shared their power point slides on the IUPAC and conference websites accessible to the general public—see the link below! After the workshop, “Meet the Course Instructor” sessions for further discussion at the IUPAC trade booth were well received by the workshop participants.

This activity is part of IUPAC 2017-029-2-400. For detailed program and lecture notes, see <https://iupac.org/project/2017-029-2-400>