

The 7th International Conference on Nanomaterials by Severe Plastic deformation (NanoSPD7) was held successfully in the University of Sydney, Australia on 2–7 July 2017. There were over 200 conference delegates from 24 countries, including Australia, Austria, China, France, Germany, India, Iran, Japan, Russia, South Korea, UK, and USA. During the conference, 8 keynote presentations, 158 invited and contributed oral presentations, and 21 poster presentations were offered covering the areas of processing, microstructures and deformation mechanisms, mechanical properties, modelling, and innovations in SPD processes.

The Pro Vice-Chancellor (Strategic Collaborations & Partnerships) in the University of Sydney provided the opening remarks for the conference. This was followed by the traditional introductory lecture given by Prof. Ruslan Valiev and Prof. Terence Langdon, including the report of the International NanoSPD Steering Committee on the related activities over the past three years (please, see <http://iopscience.iop.org/article/10.1088/1757-899X/194/1/012001> for more details).

To encourage excellent young NanoSPD researchers, the conference ran four dedicated Young Researcher sessions on Tuesday for 21 postdocs and research students. Four oral presentations (one from each session) were selected for the best oral presentation awards. Two best posters were also chosen from ~ 20 posters during the poster reception on Tuesday night. All presenters were commended for their high standard of work. The four oral and two poster winners are listed below:

Best Oral presentations:

- (1) Takahiro Masuda, *Kyushu University, Japan*
- (2) Marat Latypov, *Labex DAMAS, Metz, France*
- (3) Seung Mi Baek, *Pohang University of Science and Technology, Republic of Korea*
- (4) Pedro Henrique Pereira, *University of Southampton, UK*

Best Poster Presentations:

- (5) Cai Chen, *Lorraine University, France*
- (6) Zheng Li, *Nanjing University of Science and Technology, China*

The International Steering Committee selected Prof. Zenji Horita of Kyushu University, Japan for the NanoSPD Achievement Award, and Megumi Kawasaki of Hanyang University, South Korea, and Anton Hohenwarter of University of Leoben, Austria, for the NanoSPD Young Researcher Awards. The awards were presented during the conference dinner.

The conference ended with a general discussion session led by Prof. Ruslan Valiev and Prof. Terry Lowe. It was concluded that recent years have witnessed considerable progress in

fundamental and applied research in nanoSPD areas. In terms of fundamental studies, much interest and importance are related to demonstrations of unique mechanical and functional properties in nanomaterials produced by severe plastic deformation techniques. In terms of applied studies, it is quite meaningful to address the development of new SPD techniques aimed at upscaling and better efficiency.

Prof. Wilde made a point that commercialization of nanoSPD materials becomes similar to that of amorphous materials. In both cases, despite the lack of mass production, there is a critical need for unique properties in such materials concerning their applications in certain fast-emerging areas of engineering and medicine.

The high popularity of nanoSPD was also noted, as reflected in a large number of symposia, conferences and sessions that were dedicated to this subject in 2017 (7 events) and are planned for 2018.

The call for NanoSPD8 bids is open and the venue will be announced by the end of this year.