

## Braun, Fan, Haenen, Stanciu, and Theil to chair 2015 MRS Spring Meeting

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Research Society (MRS) Spring Meeting are Artur Braun (Empa—Swiss Federal Laboratories for Materials Science and Technology, Switzerland), Hongyou Fan (Sandia National Laboratories, USA), Ken Haenen (Hasselt University and IMEC vzw, Belgium), Lia Stanciu (Purdue University, USA), and Jeremy A. Theil (Quantumscape, Inc., USA). The Meeting will be held April 6–10, 2015, in San Francisco, Calif.

Artur Braun is research group leader and principal investigator at Empa—Swiss Federal Laboratories for Materials Science and Technology. He is a physicist from RWTH Aachen in Germany. He holds a doctoral degree in electrochemistry from ETH Zürich.

In his early career, he worked on ultrathin magnetic films at KFA Jülich, and had brief appointments with Philips Research Laboratories on electroceramics and Mitsubishi Semiconductors Europe on dynamic random-access memory (DRAM) quality assurance. His PhD studies on supercapacitors at ETH

Zürich and the Paul Scherrer Institut led to his first MRS Meeting: the 1999 MRS Spring Meeting in San Francisco. Soon after, he moved to Lawrence Berkeley National Laboratory (LBNL) as a post-doctoral fellow researching lithium batteries and protein spectroscopy. With his expertise on carbon and synchrotron radiation, he later joined the University of Kentucky, where he worked on fossil fuel liquefaction and on carbonaceous air pollutants.

In addition to research projects in Switzerland and Europe, he is principal investigator for energy materials projects with Hawaii, India, Korea, and South Africa. He is a Marie Curie Fellow, JUSAP Board Member for the Swiss Light Source, and Advanced Light Source User Executive Committee Member at LBNL. He is Energy Materials Editor for Elsevier's *Current Applied Physics* and has served as an expert on renewables for the Intergovernmental Panel on Climate Change. Braun's focus is now on materials and bio-hybrids for artificial photosynthesis.

Hongyou Fan is a principal member of the technical staff at Sandia National Laboratories and a joint professor in the Department of Chemical and Biological Engineering and Center for Micro Engineered Materials at the University of New Mexico. He received a BS degree in chemistry at Jilin University, a MS degree in polymer chemistry and physics in 1995 from the Chinese Academy of Sciences, and a PhD degree in nanoporous materials and composites in 2000 from the University of New Mexico.

His research focuses on the development of new synthesis methods and self-assembly processes to fabricate multifunctional nanomaterials, fundamentally understanding self-assembly mechanism, structural evolution from molecular level to nano- and microscale, and structure–property relationships.

Fan's awards include the Sandia National Laboratories' Laboratory Directed Research and Development Award for Excellence in 2007, the *R&D Magazine*'s R&D 100 Award in 2007 and 2010, the Federal Laboratory Consortium's Outstanding Technology Development Award in 2008 and 2013, the University of New Mexico Outstanding Faculty Mentor Award in 2005, and the Asian American Engineer of the Year Award in 2012.

**Ken Haenen** is a professor, vice dean of the Faculty of Sciences, and vice director of the Doctoral School for Sciences & Technology at Hasselt





University, where he also obtained his BSc degree in physics in 1995. He received a MSc degree in physics from the University of Leuven in 1997, and a Doctor in Science: Physics degree from Hasselt University in 2002.

After a postdoctoral period at NIMS in Japan, Haenen joined Hasselt University and became Group Leader of the Wide Band Gap Materials research group of the Institute for Materials Research and a member of the Institute for Materials Research in Microelectronics (IMOMEC, an associated laboratory of IMEC) in 2004. In 2008, he was appointed professor of experimental physics.

Haenen's research interests include thin-film deposition, optoelectronic characterization techniques, surface functionalization, and diamond-based devices, with a broader scope on carbon materials for energy harvesting and conversion. He has published over 150 peer-reviewed articles and is involved in organizing or chairing several international diamond and nanocarbons conferences, including the International Conference on Diamond and Carbon Materials (DCM). He is Editor of Diamond and Related Materials, was recently invited to join the Editorial Board of Physica Status Solidi, for which he is an annual guest editor for diamond and nanocarbons special issues in Physica Status Solidi, and was co-editor of the June 2014 issue of MRS Bulletin on chemical vapor deposition diamond.

Lia Stanciu is an associate professor of materials engineering and of biomedical engineering at Purdue University. She received BS and MS degrees in chemistry and a PhD degree in materials science and engineering from the University of California-Davis, in 2003. After a postdoctoral position focused on biomolecular imaging through transmission electron microscopy, she joined Purdue in 2005.

Her research interests are in the area of biomaterials: bioresorbable metals for implantation, materials for biosensing, functionalization of biological molecules, and structural investigations of proteins and other soft materials. Through cryo-electron microscopy methods, her research group has proposed a mechanism for the aggregation of an amyloidogenic protein (alphasynuclein), which illuminates some of the lesser known structural aspects of neurodegenerative disorders. They have also developed a variety of high sensitivity biosensors with applications in the environmental and human health areas. Her research programs have received significant federal financial support from the National Science Foundation, National Institutes of Health, and Air Force Office of Research. Stanciu has published over 60 peer-reviewed articles.

Jeremy A. Theil is the director of materials development at Quantumscape, an energy storage company. He has a BS degree from Carnegie Mellon University, a MS degree from the University of Illinois at Urbana-Champaign, and a PhD degree from North Carolina State University, all in materials science.

He spent 10 years working on complementary metal oxide semiconductor (CMOS) process development at Hewlett-Packard Laboratories and Agilent Technologies, working on low-k materials, image sensors, and organic light-emitting devices (LEDs). While at Hewlett-Packard, he pioneered low-noise a-Si:H sensor arrays for three-dimensional integration into CMOS imagers, and monolithically integrated sensor research. He then spent nine years in leadership roles at various alternative energy firms including photovoltaic firms First Solar, Optisolar, and Alta Devices; and Lumileds, a highbrightness LED firm. During this time, he spearheaded efforts to scale thin-film photovoltaic technologies.

Theil has published 35 articles, including two review articles, and was awarded 46 patents. He also serves as an adjunct faculty member at San Jose State University, where he lectures on the materials science for photovoltaics and other renewable materials. He is a member of MRS and a senior member of the Institute of Electrical and Electronics Engineers. He was on the Editorial Board of the Journal of Vacuum Science and Technology A, and has chaired two symposia on monolithic instruments at MRS Meetings.

