

MRS celebrates 40 years in Boston at 2015 MRS Fall Meeting

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The Materials Research Society (MRS) marked its 40th year in Boston at the 2015 Fall Meeting and Exhibit held in Boston from November 29 through December 4. The year also marked the 40th anniversary of *MRS Bulletin*. The Meeting Chairs, **T. John Balk** (University of Kentucky), **Ram Devanathan** (Pacific Northwest National Laboratory), **George G. Malliaras** (Ecole des Mines de St. Etienne), **Larry A. Nagahara** (Johns Hopkins University), and **Luisa Torsi** (University of Bari A. Moro), compiled 55 technical symposia organized into six topical areas: Biomaterials and Soft Materials; Electronics and Photonics; Energy and Sustainability; Nanomaterials and Synthesis; Theory, Characterization, and Modeling; and Mechanical Behavior and Failure of Materials.

To complement these sessions, tutorials were offered in several technical areas, and poster sessions were held during the evenings. A separate symposium was held on engaged learning of materials science and engineering, which was complemented by tutorials and workshops focused on education, diversity, and the use of social media. An international exhibit showcased products and services of interest to the materials community.

MRS Bulletin unveiled its Special Issue titled “Materials & Engineering: Propelling Innovation” during a special session, which was comprised of talks and an expert panel discussion. The focus of the discussion was on the translation of materials research into real applications, and how the applications themselves push materials research forward.

As part of MRS Innovation ConneXions, MRS and the Chemical Angel Network (CAN) introduced an angel investing program. This collaboration was geared toward scientists and engineers who have entrepreneurial ambitions. CAN is comprised of a group of angel investors that pool knowledge and resources in order to invest in companies. CAN is one of the first virtual angel networks with a national scope and a sector focus.

A rump session on Perovskite-Based Photovoltaic and Optoelectronic Devices consisted of short oral presentations on topics including semi-transparent planar perovskite solar cells, calorimetric-guided perovskite crystallization, and photo-induced halide redistribution in hybrid perovskite films.

Meeting attendees gathered Monday evening for a “Data Management Plan—Insights from Program Managers” session to hear updates and opportunities regarding the ongoing development of US federal agencies’ public access policies, including data management plans. The discussions included an outline of what “data”

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means in different contexts (e.g., raw data, data sets), National Science Foundation's public access plan, US Department of Defense's data management policies, and topics including flexibility, community, consensus, and evolution.

The life and work of Harry C. Gatos was honored during a special session that recognized him as one of the founding scientists to create the vision for MRS, his contributions to the field of materials science, and his passion for music. The session included a special music performance.

Symposium X—Frontiers of Materials Research featured lunchtime lectures aimed at a broad audience that provided attendees with an overview of leading-edge topics. Presenters included Arumugam Manthiram, The University of Texas at Austin, "Electrical Energy Storage: Materials Challenges and Prospects"; Zhenan Bao, Stanford University, "Skin-Inspired Organic Electronic Materials and Devices"; Joanna Aizenberg, Harvard University, "Biologically Inspired Engineering: From Discovery to Technological Innovation"; and Christopher Ober, Cornell University, "Fifty Years of Moore's Law."

The Ninth Technology Innovation Forum, "Entrepreneurship and Innovation in the International Year of Light—Approaches in Europe and America," featured innovation and investor topics around materials for light emission and instrumentation using light and other spectroscopies for materials characterization. Sir Colin Humphreys, University of Cambridge, presented the keynote address: "Bridging the Gap between Science and a Real Product: A Case Study on LED Lighting."

The Career Fair included on-site interviews, mentoring, resume critiques, mock interviews, and networking opportunities. Related workshops included science writing, professional development, industrial careers, a technical poster design seminar, and a public speaking and communications seminar.

Government agency presentations featured information on funding opportunities for materials research, congressional fellowships, and overviews



of materials research topics of current interest to various agencies.

The Public Outreach Center offered exciting hands-on activities, demonstrations, and information areas and seminars to engage future materials scientists and engineers. A representative from the Museum of Science, Boston, was on-site to discuss "Dazzling Diamonds and the Quantum Revolution." New to the 2015 MRS Fall Meeting was the Focus

on Sustainability Booth, which featured MRS sustainability leaders to share information and explain the role of sustainable materials practices for a sustainable world.

These presentations and more from the 2015 MRS Fall Meeting are available through the MRS OnDemand[®] video capture as well as news coverage of the Meeting in *Meeting Scene*[®] and on MRS TV. Further information can be accessed at www.mrs.org/fall2015.