INTERNATIONAL REPORT

XX International Materials Research Conference

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The XX International Materials Research Conference (IMRC-XX) was held at the CasaMagna and J.W. Marriott Hotels in Cancun, Mexico, from August 14 to 19, 2011. This meeting was successfully organized by the Sociedad Mexicana de Materiales (SMM) and the Materials Research Society (MRS), and has become a popular materials research conference. More than 1500 scientists attended this meeting (Figure 1). The plenary speakers were Prof. Eduard Arzt (Leibniz Institute for New Materials, Saarbrücken, and Saarland University, Germany), Prof. Ivan Schuller (University of California-San Diego, U.S.A.), Prof. Sumio Iijima (Meijo University, Tenpaken, Nagoya, Japan), and Prof. Dan Shechtman (Technion, Israel). It is noteworthy that Prof. Shechtman received the 2011 Nobel Prize in

Chemistry a few months later. In his plenary talk "Quasi-periodic materials: crystal redefined," Prof. Shechtman described the process of changing the paradigm of the structure of crystals, and the debate between believers and non-believers in his discovery of the icosahedral phase. Six tutorial courses on Photovoltaics and Solar Energy Materials. **Biomaterials** for Tissue Engineering, Nanomaterials applied in Energy Storage Devices, and other interesting topics were conducted on Sunday, August 14, 2011. Twenty-three symposia, evening poster sessions, a science luncheon, and commercial exhibitions filled the following days. Despite the full schedule, attendants managed to find opportunities to relax and enjoy the wonderful beaches and other facilities that the conference venue offered, and go



Figure 1. (Color online) Scenes from XX International Materials Research Conference.

on excursions to interesting sites nearby. The Mayan archeological sites of Chichén-Itzá and Tulum and the theme parks Xcaret and Xel-Há were among the favorites.

Following participation in IMRC-XIX with a Workshop on the "ICDD Databases and Programs," the International Centre for Diffraction Data (ICDD) sponsored and participated this time in the Workshop on "Crystal Structure/ Properties and Phase Identification using X-ray Powder Diffraction Techniques," co-organized by the SMM and the Sociedad Mexicana de Cristalografía (SMCr). José Álvaro Chávez-Carvayar, Lauro Bucio-Galindo, and María Elena Villafuerte-Castrejón (Faculty members of Universidad Nacional Autónoma de México-UNAM, Mexico) organized this workshop, with Prof. Kenneth R. Poeppelmeier (Chemistry Department, Northwestern University, U.S.A.) as an invited speaker. Miguel Ángel Alario y Franco (Universidad Complutense de Madrid, Spain) talked about "Structure, defects and properties of non-molecular solids." Lauro Bucio (UNAM, Mexico) discussed "High-quality X-ray powder diffraction data collection." Miguel Delgado (Universidad de los Andes—ULA, Mérida, Venezuela) presented the lecture "The International Centre for Diffraction Data and its Powder Diffraction File." Dr. Cyrus Crowder (ICDD) gave a great overview of "Phase identification using X-ray powder diffraction techniques and the use of PDF-4+ for data mining."

Some of the most important manufacturers of equipment used in the characterization of materials participated in the commercial exhibition. Helen McDonnell and Cyrus Crowder (ICDD), with some help from Prof. Graciela Díaz de Delgado (ULA, Mérida, Venezuela), were at the ICDD booth answering questions about ICDD, its databases, academic programs, and other related activities. The use of PDF-4+ was demonstrated during the workshop and in the booth.

IMRC-XXI will take place from August 13 to 17, 2012 at the same venue. Meeting information will be available at http://www.mrs.org/imrc2012/.