

# ICSM 2000 and the *Advanced Materials* Innovation Prize

By *Esther G. Levy\**

Solar cells, light-emitting diodes, photonic crystals, and electrically driven lasers are just some of the applications of synthetic metals that have been developed since the first serious investigations on these materials began over 25 years ago. Stimulated by the discovery of metallic conductivity in organic charge-transfer salts and metal chain compounds in the early 1970s, research in this field has flourished since then, particularly with the addition of doped conjugated polymers in the late 1970s—for which Alan MacDiarmid, Hideki Shirakawa, and Alan Heeger have just been awarded the 2000 Nobel Prize in Chemistry—and  $C_{60}$  and carbon nanotubes in the 1990s. Its growth and success is reflected in that of the biennial International Conference on the Science and Technology of Synthetic Metals (ICSM), a conference devoted to the synthesis, chemical and physical properties, and applications of organic semiconductors, conjugated polymers, organic charge-transfer salts, and organic metals and superconductors. As highlighted in the Essay on page 1565, this conference, which was established in 1976 and was attended by around 100 people, has expanded significantly over the years both in terms of size (over 1000 participants in 1998 and 2000) and range of topics covered.

This year's ICSM took place in Bad Gastein, Austria from July 15–21 and addressed topics ranging from conjugated polymers and supramolecular architectures to molecular magnets, carbon nanotubes, and organic photovoltaic devices. The conference comprised two daily plenary lectures, three parallel microsymbosia, and daily poster sessions, as well as social events. Despite its size, the organizers very successfully maintained an intimate atmosphere for the exchange of ideas, particularly at the coffee breaks and poster sessions.

Two independent prizes were presented for the first time at ICSM 2000—the Industrial Award and the *Advanced Materials* Innovation Prize. The Industrial Award is an ICSM Organizing Committee initiative, sponsored by industry. The award is presented to the scientists who contribute the most innovative scientific work at the meeting. This year Dr. Bertram Batlogg, Dr. J. Hendrik Schön, and Dr. Christian Kloc were selected for their work on electrically pumped organic lasers and superconductivity in pentacene. See this issue's Materials Forum section on page 1562 for further details.

The *Advanced Materials* Innovation Prize, which also had its debut at ICSM 2000, was sponsored by *Advanced Materials*. Its purpose is to encourage and reward young scientists who are carrying out research in the field of synthetic metals. The prize, consisting of first, second, and third place, is awarded to the young scientists who present the most innovative research at the ICSM. Three young scientists were selected this year from what proved to be an impressive number of young participants with excellent contributions. First place went to Dr. Elena Mena-Osteritz of the University of Ulm, Germany (see Fig. 1) for her work on imaging the self-assembly of oligo-, cyclo-, and polythiophenes using scanning tunneling microscopy.

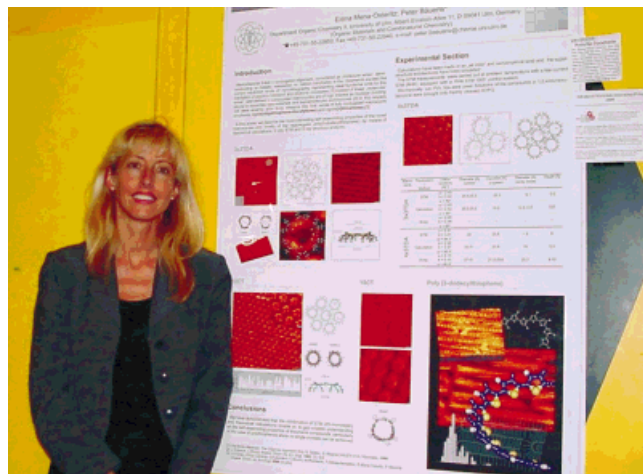


Fig. 1. Elena Mena-Osteritz, winner of the *Advanced Materials* Innovation Prize.

She received € 1000 worth of Wiley-VCH books of her choice plus a free subscription to *Advanced Materials*. Thuc-Quyen Nguyen received € 500 worth of Wiley-VCH books plus a free subscription to *Advanced Materials* for her research on the control of energy transfer in oriented conjugated polymer-mesoporous silica composites. Meera Chandrasekhar was awarded a free subscription to *Advanced Materials* for her investigations on electronic transitions in *p*-phenylenes under pressure. Look out for Research News articles by these prize winners in an upcoming issue of *Advanced Materials*.

The next ICSM is set to take place in Shanghai in 2002. Judging from the explosion of research activity in this field over the past few years and the significance of the results presented at this year's conference, ICSM 2002 is certain to be a success.

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