GOMD Chalks Up Another Spring Meeting Success

More than 200 glass professionals gathered in May for ACerS' 2008 Glass & Optical Materials Division Meeting in Tucson, Az.

The meeting's program chair, Kelly Simmons-Potter, an associate professor in the Department of Electrical and Computer Engineering and the Department of Optical Sciences at the University of Arizona, credited session organizers for an outstanding program focused on the rich range of physical phenomena critical to the design, formation and utilization of glass and optical materials.

One of the meeting's special features was a tutorial entitled, Non-Linear Optics in Glass, presented by Denise Krol.

◀Kelly Simmons-Potter, program chair of the 2008 Glass & Optical Materials Division's Spring Meeting, gets a congratulatory hug from her husband, Barrett G. Potter, Jr., a professor in the University of Arizona's Materials Science and Engineering Department.

Students Take Center Stage

The meeting also featured a special panel discussion planned specifically for students considering careers in glass. Sparked by give-and-take, the session offered students the perspectives of representatives from the glass industry, start-up businesses, national labs and academia.

The Student Poster Competition also put tomorrow's glass professionals at center stage. Jonathan Massera of Clemson University captured the competition's first place award. Second place went to Mark Durante of Creighton University, and Jennifer Byer of Iowa State took home the third place student poster award.

Posters acknowledge the recipients of this year's Stookey, Kreidl and Morey Awards: Larry Hench, Allison Wilhelm and Steve Martin, respectively.

Stookey Award

GOMD's three-day technical program kicked off with the Stookey Lecture of Discovery, sponsored by Corning and Coe College. Named in honor of materials pioneer S. Donald Stookey, the award is presented annually by the division. The award recognizes individuals who have demonstrated a lifetime of innovative exploratory work or noteworthy research on new materials that have current or potential commercial significance.

The winner of this year's Stookey Award was Larry Hench, Emeritus Professor, Department of Materials

◀GOMD's Poster Competition sparked lively interest among meeting attendees.

Science and Engineering, University of Florida, and Imperial College London Director, Special Projects, University of Central Florida Visiting Professor, University of Arizona.

Morey Award

The division's 2008 George W. Morey Award, sponsored by PPG Industries, was also presented at GOMD's Spring Meeting. The award recognizes achievement in the field of glass science and technology. This year's award was presented to Steve W. Martin, University Professor, Department of Materials Science Engineering at Iowa State University of Science and Technology.

Kreidl Award

GOMD's Norbert J. Kreidl Award for Young Scholars recognizes excellence in research by students in the fields of glass and optical materials. Allison Wilhelm of the University of Arizona was presented with this year's Kreidl Award.

Networking and Fun

Hardly "all work and no play," the GOMD meeting kicked off with a welcome reception at the Arizona Historical Society. Against a background of the Old West, attendees networked while perusing the world's largest collection of Arizona historical artifacts.

At Tuesday's banquet, attendees also enjoyed guest speaker, Nancy Odegaard, the conservator and head of the Arizona State Museum's Preservation Division. Odegaard's presentation introduced attendees to more than 2000 years of pottery-making traditions in the Southwest and featured vessels from the Museum's 20,000 piece collection.

Yet another highlight of this year's GOMD meeting was a tour of the University of Arizona's Steward Observatory Mirror Laboratory. The Mirror Lab team gave attendees an inside look at a facility where scientists and engineers make giant, lightweight mirrors of unprecedented power for optical and infrared telescopes. ■

ACerS Member Named DOD Fellow

ACerS' Member Susan Trolier-McKinstry, professor of ceramic science and engineering in the Department of Materials Science and Engineering at Penn State, has been selected by the Department of Defense as one of six scientists from U.S. universities to participate in the inaugural class of DOD's new National Security Science and Engineering Faculty Fellows Program.

DOD's program provides each of the six fellows with grants of up to $3 million over a five-year period. The award is for long-term funding of open and unclassified research deemed of crucial importance to DOD.

Trolier-McKinstry said her defense-related research will encompass low voltage, high energy density actuators for radio frequency switches used in radar systems and electronically steered antennae; self-powered sensors for persistent surveillance; ultrasonic ranging systems for autonomous robots; miniaturized high frequency ultrasound systems for casualty care, potentially under battlefield conditions; and miniaturized adaptive optics systems for targeting.

The professor is the director of Penn State's W.M. Keck Smart Materials Integration Laboratory and leads the Center of Excellence in Piezoelectric Materials and Devices within the Center for Dielectric Studies at Penn State.

Trolier-McKinstry said her proposal to DOD entailed developing thin film piezoelectric actuators in the field of advanced electroceramic materials. She said she considered ceramic materials to be vital components in many emerging communications, electronics and energy technologies.

More specifically, Trolier-McKinstry's proposal to DOD outlined a three-part program:

1) To develop the next-generation of high strain piezoelectric films, increasing the piezoelectric response by a factor of 2 – 10.

2) To simplify the patterning of complex multicomponent oxides for microelectromechanical systems using microcontact printing.

3) To lower the required processing temperature for crystallizing piezoelectric materials to the point where they can be combined with integrated circuits on the same substrate, thereby allowing for much more functional miniaturized devices.

AcerS' Member Susan Trolier-McKinstry, professor of ceramic science and engineering at Penn State.

"This award gives us tremendous flexibility to pursue the key science and engineering challenges in piezoelectrics for microelectromechanical systems. This kind of sustained funding allows us to explore deeper, fundamental problems," Trolier-McKinstry said.

In addition to her American Ceramic Society membership, Trolier-McKinstry is the recipient of ACerS' Coble and Fulrath awards. She is also Academician in the World Academy of Ceramics and currently serves as president of the IEEE Ultrasonics, Ferroelectrics and Frequency Control Society. ■