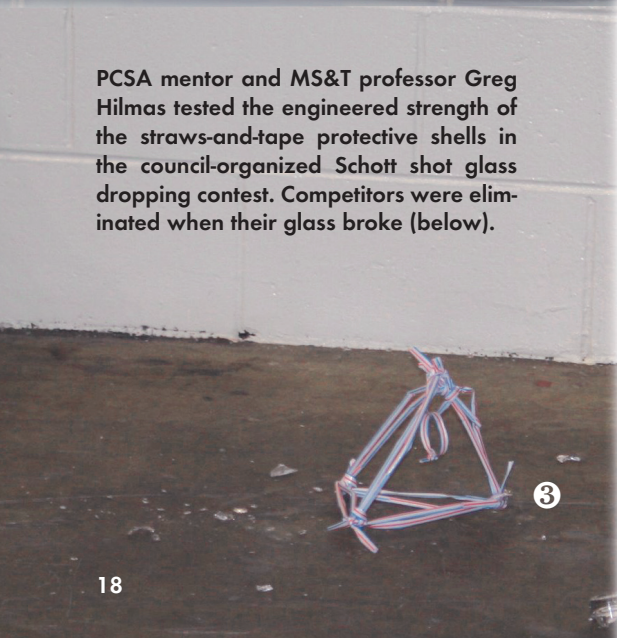


# DAY

## 2009 DAYTONA REPORT



PCSA mentor and MS&T professor Greg Hilmas tested the engineered strength of the straws-and-tape protective shells in the council-organized Schott shot glass dropping contest. Competitors were eliminated when their glass broke (below).



The winds blowing on the sands outside the 33rd International Conference on Advanced Ceramics and Composites were sharply colder than normal for Daytona Beach in January. Some attendees donned heavy coats and slacks for quick walks by the ocean, and a few brave ones tried to venture out for brief periods in shorts.

But, while the weather conditions made the outside uninviting, it seemed to have the opposite effect inside the six-day conference. Freed of the

beach distractions, it appeared that the discussions, debate and camaraderie going on before, during and after the symposia were livelier than ever. From the packed audience at the ICACC plenary, to the crowded hotel nooks in the evenings where mentor and mentee bent over their laptop screens to unravel questions, to the lively networking going on at student and alumni receptions, everyone seemed focused on getting the most out of the illustrious minds that were present at the Daytona meeting.

The Plenary Session set the bar high for the entire week. Introductory remarks consisted of an overview of the 2009 ICACC program, granting awards to last year's Best Paper and Best Poster Award Winners, and four special presentations.

General Electric Corporation's Curtis Johnson presented an overview of historical development of turbines, but then quickly focused on his research work in developing thermal barrier turbine coatings that are allowing temperature ranges and efficiencies to grow higher. Johnson was then presented the 2009 James I. Mueller Award.

# T N A



The mind of ACerS President John Kaniuk and those of other Society veterans were picked at a student networking reception.

Shanghai Institute of Ceramics' Donliang Jiang was scheduled to make a presentation on advanced ceramics in China and, as a lifelong advocate of cooperation among international ceramic societies, receive the 2009 Bridge Building Award. Unfortunately Jiang was a victim of a last-minute logistics problem and was unable to attend. In his place, Shaoming Dong delivered Jiang's talk and accepted the award on Jiang's behalf.

Suk Joon L. Kang from the Korean Institute of Science and Technology explained his discoveries related to sintering, grain growth and interface migration. He then was presented the first of the Session's two Plenary Speaker Awards.

Andreas Schönecker, an expert on piezoelectrics from the Fraunhofer Institute of Ceramic Technologies and Systems, discussed the role that embedded actuators, sensors and electronics can play in noise reduction, vibration and shape control, and health monitoring. Schönecker received the other Plenary Speaker Award.

"We received lots of positive feedback from the plenary audience," said Andy Wereszczak, Chair of ACerS Engineering Ceramics Division. "We again were



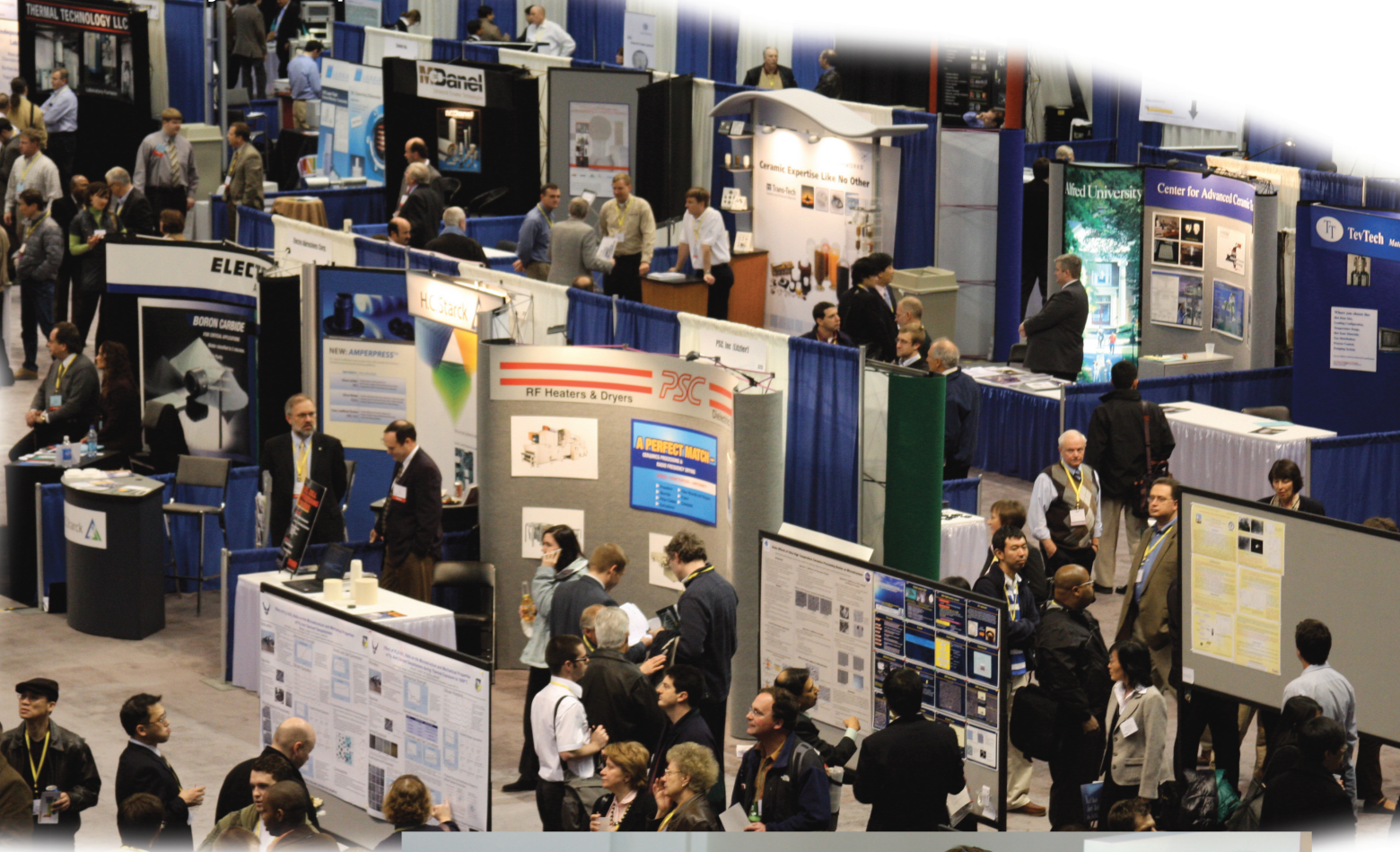
Raj Bordia, member of the ACerS Board of Directors and professor at the University of Washington, shares his insights with two other conference participants.

able to keep things interesting by providing good speakers that covered diverse engineering ceramics topics."

Jonathan Salem, Technical Program Chair of the 2009 ICACC, agreed with Wereszczak. "We had a good mix of applied technology and research in the plenary. People stayed for all the presentations, rather

going in and out of the meeting room, and that was our goal."

Salem, chair-elect of the ECD, also was pleased with the symposia. "The symposia turned out very well. And, looking back, the incorporation of the International Symposium on Silicon Carbide and Carbon-Based Materials for Fusion



and Advanced Nuclear Energy Applications was a good addition, because it addressed a major area of international importance, and brought attendees from Europe, Asia and the United States together. It also nicely complemented the other energy-related symposia on fuel cells and thermoelectrics.”

One new feature at this year’s conference was availability of a “short-course” offering – a one-day intensive training opportunity – on thermal analysis and thermophysical properties measurements, sponsored by Netzsch Instruments. “We had a great turnout and very strong feedback. It’s not often that one can receive hands-on training with such a variety of state-of-the-art equipment,” said Mark



**Plenary award speakers, from left: Shaoming Dong, Suk Joong L. Kang, Andreas Schönecker and Curtis Johnson.**

Mecklenborg, ACerS’s meeting director.

The Expo, poster session and student involvement in the conference also created a lot of goodwill and further broadened the discussions that were taking place.

“All of these events were great opportunities to rub elbows with international colleagues, suppliers and those just starting their careers,” said Salem. “I was particularly impressed with the students in the

Presidents Council of Student Advisors. They met for two days prior to the start of our conference and then stayed around. They really demonstrated their interest and commitment to the ceramic community.” ■