

Mideast Materials Society Launched in United Arab Emirates

Due to much dedication and hard work, the Mideast now has a regional society to promote materials research and education. Headquartered in the United Arab Emirates at the American University of Sharjah Institute for Materials Systems (IMS), the new society aims to unite a diverse regional materials community, bridge gaps across sectors, and foster cooperation with other parts of the world.

Founding members of the Regional Society for Materials Research and Education met in Sharjah in January to finalize the Society's mission and goals, enact a constitution, and elect officers. Thematic working tracks were established in composite materials, polymer materials, metals, construction materials, and materials education and IMS director Adil Al-Tamimi was chosen to serve as founding president.

History

Tamimi has been leading efforts to develop the society since he attended a regional materials conference in Doha, Qatar in April 2005. The International Conference on Materials Research and Education: Future Trends and Opportunities was co-organized by the Northwestern University Materials Research Institute, the Texas A&M University at Qatar, and the University of Qatar and co-sponsored by the U.S. National Science Foundation (NSF) and the Qatar Foundation. "The idea of launching the society came up when the IMS was established in 2001," said Tamimi, "but it didn't become solid until we met with our colleagues in Doha. We were inspired, and from there, we really started to connect."

Additional leadership came from R.P.H. Chang, an organizer of the Doha conference who has helped establish similar societies in other regions and assemble them under the umbrella of the International Union of Materials Research Societies (IUMRS).¹ Chang has also worked closely with the National Science Foundation and international leaders since 1995 on a series of international workshops designed to establish a Materials World Network (MWN). The Doha conference was the seventh in this series.²

Planning at Doha

The Doha conference hosted 80 researchers and educators from Bahrain, Egypt, Iran, Jordan, Oman, Qatar, Saudi Arabia, Turkey, the United Arab Emirates, and the United States. The program focused on four cross-cutting areas that organizers hoped would appeal to



Official launch of the Regional Society for Materials Research and Education at the 3rd International Conference on Materials Applications for Harsh Environments in Sharjah, United Arab Emirates (January 2008) with (left) Founding president, Adil Al-Tamimi. Photo: Courtesy of IMS



Doha Conference organizing committee, March 2004 (left to right): Sherif Kandil, Arabian Gulf University, Bahrain; Amer Al-Rawas, Sultan Qaboos University, Oman; Raouf El-Mallawany, University of Qatar, Qatar; Hanaa Ghorab, Helwan University, Egypt; Jim Holste, Texas A&M University, Qatar; R.P.H. Chang, Northwestern University, United States; Nabil Kallas, University of Sharjah, United Arab Emirates; and Faleh Al-Sulaiman, King Fahd University, Saudi Arabia; (not shown: Wayne Goodman, Texas A&M University, United States). Photo: Jennifer Shanahan, Northwestern University

U.S. and regional researchers alike—Energy Materials, Advanced Materials, Infrastructure Materials, and Preservation of Cultural Heritage. Like the previous workshops in the MWN series, the Doha conference included working group sessions during which participants produced recommendations for building regional capacity and improving international cooperation.³

In planning the conference, organizers found that the region lacked interdisciplinary programs and an established materials community. To bridge gaps and offer participants a taste of interdisciplinary cooperation, working groups were formed in the four cross-cutting topics being addressed by the conference and members were assigned from diverse fields and backgrounds. Organizers opti-

mized their chances of finding common scientific ground by ensuring that group members had complementary interests and a good balance of core materials research capabilities such as theory, synthesis, and characterization. "The groupings mixed people in challenging ways and people were hesitant to leave their comfort zone to join an interdisciplinary discussion," said Chang, "but in the end, they were surprised at how much they found to talk about."

Among the key recommendations to emerge in Doha was the establishment of a regional materials society. "People were excited to learn what was being done in neighboring cities and countries," said Chang. "Once they started talking and thinking about the future, it became clear that some kind of mechanism was needed to support collaborations."

The New Society

In March 2006, Tamimi convened an implementation meeting with 60 of his colleagues and asked Chang to join the discussions by phone. "Adil's persistence has been inspiring," Chang said. "He has stepped up to serve his community and is reaching out to regional and international partners for advice and support." Tamimi credits a core group of leaders that includes the IMS executive committee;⁴ Mufeed Al Sammerai and Nabil Kallas from Sharjah University; Mohamed Gadalla, American University of Sharjah; Mariam A. Al-Maadeed from Qatar University; Wolfgang Hiller, retired, from Germany; Hussein M. Zbib from Washington State University; Riadh Al-Mahaidi from Monash University in Australia; and Chang at Northwestern.

The new society will foster interdisciplinary materials research, education, industry, and policy that will enhance the social

and economic development of the region. "Our climate is high-temperature, high-humidity, and close to the sea," Tamimi said, "so we need materials research for what we call harsh environments. This includes construction materials, composites, silicon, and materials for renewable energies like wind and solar." Regional partners also hope to use materials to improve interdisciplinary education, especially at the pre-college level. Tamimi said, "Our society will serve as a platform where industry, government, and scientists can get together to exchange information and plans."

Despite its regional focus, the society is already an international body with members in 25 countries, most outside the region.⁵ Plans are underway to seek membership in IUMRS and join international events organized by its adhering bodies. Chang encourages these connections and stresses the importance of developing government and research infrastructures in parallel. "Membership in the IUMRS can help the region build research connections, and membership in the MWN can strengthen cooperation among the governments. Acting on both fronts will foster global cooperation and help the region begin sharing its vast resources more effectively."

For now, Tamimi and his colleagues are busy with the nuts and bolts of starting a new society. They have a Web site⁶ and plan to publish their first newsletter this summer. "Communication has been the most important challenge," said Tamimi. "At first we didn't have a database so it was difficult to get together. Over the past few years, we have built a solid database with more than 150 names." Priorities include expanding this database, building partnerships, and promoting interaction across the thematic

working tracks to produce cross-cutting research initiatives. Tamimi said, "This is not easy, but we're trying to build on what we have already done. There's a lot of excitement here and we want to achieve a lot, but we want to go step-by-step so we can build something solid. We appreciate all the support we have gotten so far."

JENNIFER SHANAHAN
Northwestern University

Notes

1. Organizations similar to the nature of Materials Research Societies now exist in Africa, Argentina, Australia, Brazil, China, Europe, India, Japan, South Korea, Mexico, the Mideast, Russia, Singapore, Taiwan, and the United States. For details, see the IUMRS Web site www.iumrs.org.

2. Previous workshops were held in North America (1995), Europe (1996), Pan America (1998), Asia (1998), Africa (2000), and India (2004).

3. This process has resulted in numerous collaborations between U.S. researchers and their colleagues from around the world and a framework of joint funding agreements between the NSF and many of its counterpart agencies outside the United States. For more information, see the NSF Web site www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06590.

4. For more information about members of the Executive Committee, see Web site www.aus.edu/engr/ims/e_members.php.

5. Member countries include Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Syria, Saudi Arabia, Turkey, United Arab Emirates (Region), Sudan, Morocco (Africa); France, Greece, Poland, Ukraine, United Kingdom (Europe); Australia, Malaysia, Pakistan, Singapore, South Korea (Asia/Pacific); and Canada and the United States (Americas).

6. See Web site www.aus.edu/engr/ims/ims_soc.php.

IUMRS-ICEM-08 to Be Held in Australia in July

www.aumrs.com.au/ICEM-08

The International Conference on Electronic Materials (ICEM-08) of the International Union of Materials Research Societies (IUMRS) will be held in Sydney, Australia on July 28–August 1, organized by the Australian Materials Research Society (A-MRS) and chaired by Jim Williams of the Australian National University. This major interdisciplinary materials conference is expected to attract around 1500 participants and is organized around 20 topical symposia within

the following thematic areas:

- Semiconductor Processing and Devices;
- Nanomaterials, Nanostructures, Nanophotonics, and Nanoelectronics;
- Energy;
- Properties and Characterization;
- Thin Films, Surface, and Functional Materials for Specific Applications; and
- Education and Networks.

The conference will include plenary

lectures from Nobel laureates and internationally renowned scientists, as well as about 150 invited oral presentations from international experts in materials areas covered by the individual symposia. For more information, access Web site www.aumrs.com.au/ICEM-08.

