## News & Update

### Emerging Leaders Alliance; TMS ICME Implementation Study Update

### TMS Members Develop Their Leadership Potential as ELA Participants

TMS was proud to send five promising members to the 2012 Emerging Leaders Alliance (ELA) Capstone Program, a leadership training opportunity for scientists and engineers working in management, technical, and academic positions. Attending the program were: Paul Ohodnicki, National Energy Technology Laboratory; Nima Rahbar, Worcester Polytechnic Institute; Pello Uranga, CEIT; Ed Herderick, Edison Welding Institute; and Dwayne Shirley, Texas Instruments.

ELA is a multi-society initiative that provides an interdisciplinary community of learning for engineering and scientific professionals. The intent of ELA is to prepare future engineering leaders for the challenges they will face in advancing their organizations within complex business and social environments. It accomplishes this by providing a comprehensive leadership development experience that culminates with the three-day Capstone Program. TMS and the TMS Foundation were Gold Level Sponsors for the 2012 ELA Capstone Program, which took place September 11–13 in Reston, Virginia.

Admission to the ELA is competitive. Applicants must be members of TMS, typically ages 25–40, and be individuals with rising or current technical staff leader positions, potential for upper-level management or professors with aspirations for university leadership roles. For additional information on ELA or how to apply for the 2013 program, visit the website at *emergingleadersalliance.org* or contact Deborah Price, TMS awards

and recognition specialist, at price@tms.org.

# TMS ICME Implementation Study Teams Begin Work



TMS announced in September that it has formed the teams that will study and identify key steps needed to extend and accelerate implementation of the emerging discipline of integrated computational materials engineering (ICME). TMS, which is leading the project on behalf of the U.S. Department of Defense, the U.S. Department of Energy, and the National Science Foundation, has recruited a cross section of more than 35 scientists, engineers, and technical experts to serve on a total of four ICME implementation study teams. Three of these teams will focus on specific industrial sectors-aerospace, automotive, and maritime—while a fourth team will study the "cross-cutting" issues across these sectors.

"We are pleased to be able to assemble and convene such a broad and rich talent base for this important project," said George Spanos, TMS technical director and the study's project leader. "Engaging experts from industry, academia, and government will not only provide a much more comprehensive and detailed approach than would be possible by any single organization; it will also facilitate the implementation of ICME across the entire materials design and development cycle—from discovery to deployment."

Providing leadership for each of the four ICME implementation study teams convened by TMS are:

• Tresa Pollock, Aerospace Team leader, is Alcoa Professor of Materials and chair, Materials Department, University of California at Santa Barbara.



(Left) The highly interactive 2012 ELA Capstone Program covered topics such social styles, global and virtual team leadership, change management, leading innovation, and making the transition from technical to management roles.



Attending the 2012 ELA Capstone Program were (left to right): Deborah Price, Paul Ohodnicki, Nima Rahbar, Pello Uranga, Ed Herderick, Dwayne Shirley, and Brajendra Mishra, 2006 TMS president and 2011 AIME president.

- John Allison, Automotive Team leader, is professor, Materials Science and Engineering, University of Michigan at Ann Arbor.
- Johnnie Deloach, Maritime Team leader, is manager, Welding, Processing and Non-destructive Evaluation Branch, Naval Surface Warfare Center; technology transition detailee, Office of Naval Research.
- Brad Cowles, Cross-Cutting Team leader, is with Cowles Consulting LLC and senior fellow and discipline lead (retired) for Materials and Processes, Pratt & Whitney.

"This new study will determine frameworks and pathways needed to implement ICME more rapidly and on a much broader scale, within the automotive, aerospace, and maritime industries, and will generate ideas and offer guidance that can aid integrated product development teams, ICME practitioners, and research and engineering groups seeking to implement ICME in these industries," said Spanos. "The intent is that the final report will, in essence, serve as a 'field manual' toward such ICME implementation."

#### **TMS Welcomes New Members**

At its September 2012 meeting, the TMS Board of Directors approved a slate of new members representing an array of materials science and engineering disciplines. Please join us in congratulating the following individuals as they begin to explore the many personal and professional growth opportunities offered to them as full members of TMS:

- **Adachi, Yoshitaka**, Kagoshima University, Japan
- **AlGrafi, Mubarak W.**, Taibah University, Saudi Arabia
- **Anderson, Ken R.**, Bechtel Marine Propulsion Corp., United States
- **Anwar, Shahriar**, Arizona State University, United States
- **Avishai, Nanthawan**, Case Western Reserve University, United States

- Barakat, Mohamed A., Central Metallurgical Research & Development Institute, Egypt
- Barton, Nathan, Lawrence Livermore National Laboratory, United States
- Ben Salah, Nihad, Heroux-Devtek, Canada
- **Bluhm, Madison M.,** Total
  Petrochemicals and Refining USA,
  United States
- Boller, Elodie, ESRF, France
- **Bouman, Charles A.**, Purdue University, United States
- Buffiere, Jean-Yves, INSA, France
- Case, Eldon Darrel, Michigan State University, United States
- Cashwell, William J., United States
- Chupin, Sylvain, CEA, France
- Ciccotti, Richard G., Magnesium Elektron North American Inc., United States
- **Colligan, Kevin J.**, Nova Tech Engineering, United States
- Crawford, Grant, South Dakota School of Mines & Technology, United States
- Croll, Alexander B., General Motors, United States
- Curtis-Rouse, Mike, Harwell Imaging Partnership, Great Britain
- **Dionne, Jean-Francois**, The Swatch Group R&D Division Asulab, Switzerland
- **Dogan, Gunay**, National Institute of Standards and Technology, United States
- **Downs, James J.**, Rhenium Alloys Inc., United States
- Draney, Cameron K., United States
- Drosback, Meredith, United States
- **Drummy, Larry**, UES Inc., United States
- **Ercius, Peter A.**, National Center for Electron Microscopy, United States

- **Fahey, Kevin P.**, Xradia, United States
- Ferro, Patrick D., Gonzaga University, United States
- **Fife, Julie L.**, Paul Scherrer Institute, Switzerland
- **Fineman, Kenneth**, Fovia Inc., United States
- **Fleurkens, Hans**, FEI Company, Netherlands
- Fredrickson, Guy L., United States
- Fuentes, Antonio F., Cinvestav Unidad Saltillo, Mexico
- **Ganeshan, Swetha**, Baker Hughes, United States
- Gee, Mark, NPL, Great Britain
- **Gholinia, Ali**, University of Manchester, Great Britain
- **Grandhi, Ramana V.**, Wright State University, United States
- **Green, Daniel E.**, University of Windsor, Canada
- **Grummon, David S.**, Michigan State University, United States
- **GVK, Srikanth Sai**, Heraeus Materials Singapore Pte. Ltd., Singapore
- **Harder, Ross J.**, Argonne National Laboratory, United States
- Henke, Daniel M., United States
- **Herzing, Andrew A.**, National Institute of Standards and Technology, United States
- **Ibarretxe, Julen**, University of Basque Country, Spain
- **Jafari, Meisam**, Carnegie Mellon University, United States
- Jang, Jae-il, Hanyang University, Korea South
- Janz, Eric, Chemineer, United States
- Kamal, Kafeel, Canada

- **Khan, Athar Said**, PSFCL Pakistan Steel Mills, Oman
- Kim, Woo Sik, LS-Nikko Copper, Korea South
- King, Andrew, ESRF, France
- **Kutbay, Cihat**, American Ceramic Society, United States
- **LaFollette, James**, GeoCorp Inc., United States
- **Langer, Stephen**, National Institute of Standards and Technology, United States
- **Laundal, Karl Magnus**, Teknova AS, Norway
- Lawson, James R., Nalco, United States
- **Lazar, Emanuel A.**, Institute for Advanced Study, United States
- **Lhuissier, Pierre**, SIMaP CNRS Grenoble University, France
- Lian, Kuo Lung, Taiwan
- **Llorens, Manel G.**, Weimac Europa Ltd., Spain
- Mason, Jeremy, Lawrence Livermore National Laboratory, United States
- Merkle, Arno, Xradia, United States
- **Midgley, Paul A.**, University of Cambridge, Great Britain
- **Momeni, Amir**, Hamedan University of Technology, Iran
- **Morgan, Jason**, Freeport McMoran Copper & Gold, United States
- Nekuda Malik, Jennifer A., United States
- **Ng, Tse Nga**, Palo Alto Research Center, United States
- **Paciornik, Sidnei**, DEMa PUC-Rio, Brazil
- Palmer, David E., United States
- **Pang, Hon T.**, University of Cambridge, Great Britain

- Paramguru, Raja Kishore,
- Bhubaneswar Institute of Industrial Technology, India
- Parvanian, Amir M., Iran
- **Podany, Pavel**, COMTES FHT A S, Czech Republic
- Quinones, David, NORDAM Group, United States
- Rano, Alfi, University of Sultan Ageng Tirtayasa, Indonesia
- Safriet, Sirina, United States
- **Schmidt, Soren**, Technical University of Denmark, Denmark
- Shah, Megna N., UES Inc., United States
- **Shamamian, Vasgen A.**, Dow Corning Corporation, United States
- **Shevock, Bradley T.**, Virginia Polytechnic Institute & State University, United States
- Shuto, Hiroshi, Nippon Steel, Japan
- **Sinclair, Ian**, University of Southampton, Great Britain
- **Singh, Chandra Veer**, University of Toronto, Canada
- **Sitzman, Scott D.**, Oxford Instruments, United States
- **Song, Jun**, McGill University, Canada
- Stansbury, Kevin L., Jacobs, United States
- Steigerwald, Andrew, United States
- Stockinger, Martin, Bohler Schmiedetechnik GmbH & Co. KG, Austria
- **Sumi, Toshinari**, Kohsei Co. Ltd., Japan
- Sundararaghavan, Veera,
  - University of Michigan, United States
- Sydnor, James W., United States

- **Tayon, Wesley A.**, NASA-LARC, United States
- Thierry, Auger, CNRS/ECP, France
- **Thomas, Arnie**, A Thomas Group, United States
- **Tripathi, Nagendra**, Xstrata Nickel, Canada
- **Tripathy, Prabhat K.**, Battelle Energy Alliance (Idaho National Laboratory), United States
- **Tu, Wen J.**, Exponet Inc., United States
- **Turner, Todd J.**, Air Force Research Laboratory, United States
- Umantsev, Alexander R., Fayetteville State University, United States
- Umasankar, V., VIT University, India
- Vakanas, George, IMEC Intel Assignee, Belgium
- **Van Boxel, Steven**, University of Manchester, Great Britain
- **Wang, Guofeng**, University of Pittsburgh, United States
- Wang, Song, University of South Carolina, United States
- Wang, Yan, Worcester Polytechnic Institute, United States
- Wei, Yajun, L 3 Communications Cincinnati Electronics, United States
- Wentworth, Adam J., University of Connecticut, United States
- West, Geoff, Loughborough University, Great Britain
- Yamamoto, Satoshi, Kohsei Co. Ltd., Japan
- Yang, Xingbo, Kohsei Co. Ltd., Japan
- **Yerdon, Elizabeth**, Wyman-Gordon, United States
- Zhang, Yubin, Denmark