



THE YOUNG LEADER INTERNATIONAL SCHOLAR PROGRAM: AN EXCHANGE OF KNOWLEDGE

Established four years ago, the Young Leader International Scholar Program is designed to promote the professional development of young materials scientists and engineers through an exchange program between TMS and the Japan Institute of Metals (JIM). The program enables TMS to host young professionals from JIM each year at the annual meeting, as well as select young professional TMS members to attend JIM's annual spring meeting. This month, TMS will welcome the 2009 JIM International Scholar to the TMS 2009 Annual Meeting that will be held February 15–19 in San Francisco, California.

TMS Names 2009 International Scholars

Donald Siegel is the TMS 2009 International Scholar. He will attend the JIM Annual Spring Meeting on the Ookayama Campus

of the Tokyo Institute of Technology in March. Siegel is a technical expert at Ford Motor Company in Dearborn, Michigan, where he leads the Hydrogen Storage and Nanoscale Modeling Group. His research aims to develop new materials and systems for high-density hydrogen storage for automotive applications and is part of a larger effort devoted to the development of fuel cell vehicles. The Japan Institute of Metals has arranged for Siegel to visit the National Institute of Advanced Industrial Science and Technology, the National Institute for Materials Science, and Toyota Central R&D.

Takeshi Nagase was chosen as the 2009 JIM International Scholar. He will attend the TMS 2009 Annual Meeting, where he will present the paper, "Electron Irradiation Induced Amorphization and Crystallization in Metallic Materials." Nagase is an assistant professor in the Ultra-High Voltage Microscope Center at Osaka University.

2009 YOUNG LEADERS TUTORIAL LUNCHEON LECTURE FOCUSES ON MATERIALS MODELING

The TMS 2009 Annual Meeting offers many opportunities for young professionals to not only network, but to also advance their careers. One of these opportunities is the TMS Young Leaders Tutorial Luncheon Lecture that will be presented by Alejandro Strachan, an assistant professor in the School of Materials Engineering and Birck Nanotechnology Center at Purdue University in West Lafayette, Indiana.

Strachan was named the 2008 TMS Early Career Faculty Fellow, and as a requirement of that award will present the 2009 TMS Young Leaders Tutorial Luncheon Lecture. He must also organize a technical symposium for the 2010 TMS Annual Meeting in Seattle, Washington. Strachan's 2009 talk, "Atomistic and Mesoscale Modeling of Materials: Towards Predictive Tools for Materials Design" covers some of the most powerful and widely used techniques for materials modeling, including first principles quantum mechanics, large scale molecular dynamics simulations, and mesoscale modeling and strategies to bridge between them. He focuses on the accurate prediction of materials behavior from first principles that require the characterization of a wide range of phenomena with disparate temporal and spatial scales from electrons and atoms to devices.

Last year's lecture was given by the 2007 TMS Early Career Faculty Fellow Katsuyo Thornton. Her talk, "Computational Materials Science & Engineering: What Is It and How Do We Take Advantage?" addressed why experimentalists and theorists should become familiar with and utilize many of the standard materials science and engineering computational tools. This year, Thornton, an assistant professor in the materials science department at the University of Michigan, organized the Synergies of Computation and Experimental Materials Science symposium. It is designed to highlight recent successes enabled by close collaboration of experimentalists and computational materials scientists in the areas of three-dimensional materials science, nanoscale science, and integrated computational materials engineering.

Ryan K. Roeder, an assistant professor at the University of Notre

Dame in Indiana, was named the first TMS Early Career Faculty Fellow in 2006. His lecture at the 2007 TMS Annual Meeting in Orlando, Florida, focused on materials research in multidisciplinary, application-driven technology. The following year, Roeder organized the Biological Materials Science (BMS) symposium for the TMS 2008 Annual Meeting in New Orleans, Louisiana. Although he has fulfilled his requirements as a TMS Early Career Faculty Fellow, Roeder will again chair the BMS symposia for the TMS 2009 Annual Meeting.

For more information on Strachan's talk or to register for the luncheon, visit the TMS 2009 Annual Meeting web site at www.tms.org/meetings/annual-09/AM09home.aspx. Advanced registration is required for the boxed lunch.

THE YOUNG LEADER

A Young Leader is any TMS professional member in good standing age 35 or under. The goals of the TMS Young Leaders Committee are to recognize young professionals, develop in them an appreciation and awareness for TMS activities, provide services specifically tailored to young members, and encourage networking with TMS leaders and prominent society members. For more on TMS Young Leader activities, visit www.tms.org/YoungLeaders/YoungLeaders.html.

TMS YOUNG LEADER COMMITTEE OFFICERS

Subhadarshi Nayak, Chair
Gregory Thompson, Vice Chair
Alpesh Shulka, Secretary
Ellen K. Cerreta, Past Chair

THE 2009 YOUNG LEADER PROFESSIONAL DEVELOPMENT AWARD WINNERS

Through the Young Leader Professional Development Award, young TMS members are afforded the opportunity to attend technical conferences, learn about the inner workings of the society, and network with society leaders. TMS chose eight young professionals to receive the 2009 Young Leader Professional Development Award. The TMS Foundation provides funds to cover travel and registration costs for each of the award winners to attend two TMS conferences. The following award winners have been selected from four of the five TMS technical divisions. No applications were submitted for the Extraction & Processing Division.



Srikanth Bontha
*Materials Processing &
Manufacturing Division*

Srikanth Bontha is a milling systems engineer at Kennametal Inc. in Latrobe, Pennsylvania, where he leads product development projects in the area of cutting tool development. Before joining the Milling Group, Bontha worked as an advanced materials machining engineer in the breakthrough technology department.

He served as a member on the International Scientific Committee of the 11th International Academy for Production Engineering (CIRP) Conference on Modeling of Machining Operations. Bontha obtained his Ph.D. in engineering from Wright State University in Dayton, Ohio. Prior to that, he earned an M.S. degree in mechanical engineering from Jawaharlal Nehru Technological University in India. Bontha recently served as a member on the International Scientific Committee of the 11th CIRP Conference on Modeling of Machining Operations.



Brad Boyce
Structural Materials Division

Brad Boyce is a principal member of the technical staff at Sandia National Laboratories in Albuquerque, New Mexico. His primary research interests are in mechanical performances and reliability of structural materials and microelectromechanical system (MEMS) materials. Boyce received his Ph.D. and M.S.

degrees in materials science and engineering from the University of California at Berkeley, and holds a B.S. degree in metallurgical engineering from Michigan Technological University in Houghton, Michigan. A former Hertz Foundation Fellow, Boyce has published more than 40 peer reviewed journal articles and organized five international symposia related to mechanical behavior and micro-/nanomaterials. He served as a guest editor for the journals *Thin Solid Films* and *Experimental Mechanics*, and is a key reader for *Metallurgical Transactions*. Boyce previously served as vice chair of the ASM International/TMS Mechanical Behavior Committee.



Arjan Ciftja
Light Metals Division

Arjan Ciftja is a post-doctoral student at Norwegian University of Science and Technology. He is scheduled to receive his Ph.D. in early 2009. Ciftja plans to join a research team working in the field of process metallurgy, refining of metals and casting, at Sintef in Norway after completing his Ph.D. He holds B.S. and M.S. degrees in physics and

physical chemistry from the University of Tirana, Albania.



Michele Viola Manuel
Light Metals Division

Michele Viola Manuel is an assistant professor in the materials science and engineering department at the University of Florida in Gainesville. She has many research focuses, including the design of nanocrystalline-reinforced light metal alloys and smart/multifunctional structural materials, and materials design. Manuel holds a Ph.D. from Northwestern University in Illinois, and a B.S. degree in materials science and engineering from the University of Florida, Gainesville.



Dylan Morris
*Materials Processing &
Manufacturing Division*

Dylan Morris is a materials research engineer at the National Institute of Standards and Technology in Gaithersburg, Maryland. He works in the Nanomechanical Properties Group in the Materials Science and Engineering Laboratory where he focuses his research on measurement

science and technique for elastic, plastic, and fracture properties. Morris holds a post doctorate degree from Washington State University, a B.S. degree in chemical engineering from Colorado School of Mines, and a Ph.D. in materials science from the University of Minnesota.



Ben Poquette
*Electronic, Magnetic &
Photonic Materials Division*

Ben Poquette is president of Keystone Materials LLC in Radford, Virginia. His research focuses on metallization of specialty and high-performance materials. Poquette obtained his Ph.D. and M.S. degrees in materials science from Virginia Polytechnic Institute and State

University in Blacksburg, and a B.S. degree in materials science and engineering from Michigan Technological University.



Rajen Sidhu
*Electronic, Magnetic &
Photonic Materials Division*

Rajen Sidhu is a senior packaging engineer with Intel Corporation in Chandler, Arizona. His research is focused on second level interconnect materials pathfinding, where he is a development lead engineer delivering integrated metallurgical core competency solutions ranging from building block technologies through development

across central processing unit (CPU) and chipset platforms. Sidhu obtained his Ph.D. in materials science and engineering from Arizona State University and a B.S. degree in metals and materials engineering from the University of British Columbia.



Ying Yang
Structural Materials Division

Ying Yang is a materials scientist at CompuTherm LLC in Madison, Wisconsin. Her research focuses on the development and application of computational thermodynamic models to the understanding of phase equilibria and microstructure in the advanced multi-component refractory metal intermetallic composites (RMICs). Yang holds a Ph.D. in materials science and engineering from the University of Wisconsin.