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The Newsletter of the TMS Young Leaders Committee

RESEARCH, EXCHANGE, AND EXPLORATION: THE YOUNG LEADER INTERNATIONAL SCHOLAR PROGRAM

Now entering its third year, the Young Leader International Scholar Program encourages the professional development of young materials scientists and engineers through an exchange program between TMS and the Japan Institute of Metals (JIM). Through the program, TMS hosts young professionals from JIM at its TMS Annual Meeting and selects young professionals from the TMS membership to attend JIM's annual spring meeting. TMS recently announced the selection of its 2008 International Scholars and now prepares to welcome the 2008 JIM International Scholar to the TMS 2008 Annual Meeting, which will be held March 9–13 in New Orleans, Louisiana.

TMS Welcomes Masakazu Tane

At the TMS 2008 Annual Meeting, the society will host the JIM International Scholar Masakazu Tane, an assistant professor from the Institute of Scientific and Industrial Research at Osaka University in Japan. Tane's research work is with mechanical properties and fabrication processes of porous metals and micromechanics modeling of porous metals. His trip will begin with a stop in Chicago, where he will tour the advanced research facilities at local researchers' laboratories

and meet with other researchers in his field. Tane will then travel on to the TMS 2008 Annual Meeting, where he plans to present a paper on his research during the General Abstracts session of the TMS Structural Materials Division.

TMS Selects Dallas R. Trinkle and Gregory Thompson to Attend March JIM Meeting

In March, TMS members Dallas R. Trinkle and Gregory Thompson will attend the JIM Annual Spring Meeting in Tokyo. Trinkle is an assistant professor in materials science and engineering at the University of Illinois at Urbana-Champaign. His research uses first-principles and atomistic methods to study mechanical behavior and defect properties. Thompson is an assistant professor in the Department of Metallurgical & Materials Engineering at the University of Alabama in Tuscaloosa. His research interests lie in phase transformations and advanced analytical microscopy techniques. The Japan Institute of Metals is currently arranging for both Trinkle and Thompson to visit local facilities in their areas of interest during their stay in Japan. The TMS Foundation provides funding to offset travel costs for these two scholars.

YOUNG LEADERS AT THE TMS 2008 ANNUAL MEETING

The TMS Annual Meeting is the primary meeting place for TMS Young Leaders, providing a number of activities designed specifically for early-career professionals. Any materials professional under the age of 35 is welcome to participate in these activities, which will take place throughout the week at the TMS 2008 Annual Meeting in New Orleans, Louisiana, in March. Activities of interest to young professionals at the meeting will include:

- **Young Leaders Business Meeting:** Bring your big ideas and share them with the members of the TMS Young Leaders Committee. The committee will hold its annual business meeting on Sunday, March 9, at 12:30 p.m. to discuss upcoming plans for the Young Leaders program.
- **Young Leaders Reception:** At 5 p.m. on Sunday, join other young professionals from industry, academia, and government at the Young Leaders Reception to meet and talk in a relaxed atmosphere prior to the start of the conference's technical programming.
- **Student Networking Mixer:** While not specifically designed for young leaders, the Sunday-night student networking mixer, beginning at 9 p.m., offers young professionals the opportunity to support and encourage student members and to meet high-level society leaders who typically attend the event.
- **Young Leaders Tutorial Luncheon:** Advance registration is required for the boxed lunch, but anyone is free to attend this talk, delivered by the TMS 2008 Early Career Faculty Fellow, Katsuyo Thornton. Thornton, an assistant professor of materials science and engineering, Massachusetts Institute of Technology, will discuss the topic, "Computational Materials Science & Engineering: What Is It and How Do We Take Advantage?" The luncheon will be held at noon on Monday, March 10.
- **International Scholar Presentation:** Masakazu Tane, the visiting International Scholar from the Japan Institute of Metals, will present a talk on elastic, plastic, and electrical properties of lotus-type porous metals during the Structural Materials General Abstracts session on Monday, March 10, at 4 p.m.

Attending a meeting, luncheon, or reception is a good way to begin involvement in the TMS Young Leaders Committee, which can open doors to a number of travel, networking, and leadership opportunities both within TMS and in the broader materials community. Those who can not attend the TMS Annual Meeting but wish to be a part of the TMS Young Leaders Committee can fill out the on-line Young Leader participation form at www.tms.org/YoungLeaders/yl-participation.form.html.

To sign up for the TMS Annual Meeting, visit the meeting home page at www.tms.org/annualmeeting.html. Advance registration is preferred, but on-site registration is also available beginning Sunday, March 9. These Young Leader events can be added to your meeting schedule through the on-line TMS Personal Conference Scheduler (pcs.tms.org), which provides dates, times, and locations for all the events taking place at the TMS Annual Meeting.

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

Ellen K. Cerreta, Chair
Subhadarshi Nayak, Vice Chair
Gregory Thompson, Secretary
Aladar A. Csontos, Past Chair

MEET THE 2008 YOUNG LEADER PROFESSIONAL DEVELOPMENT AWARD WINNERS

TMS has selected eight young professionals to receive the 2008 Young Leader Professional Development Award, which offers young TMS members the opportunity to travel, attend technical conferences, learn about the inner workings of the society, and network with society leaders. 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 each of the five TMS technical divisions.



Amy Clarke
Materials Processing & Manufacturing Division

Amy Clarke is a G.T. Seaborg Institute postdoctoral research fellow in the Materials Science and Technology Division at Los Alamos National Laboratory, where she studies uranium-alloy aging and shape-memory effect deformation structures using electron microscopy. She received her B.S. degree in metallurgical and materials engineering from

Michigan Technological University in Houghton, Michigan, and her M.S. and Ph.D. degrees in metallurgical and materials engineering from the Colorado School of Mines in Golden, Colorado, where she studied ferrous physical metallurgy at the Advanced Steel Processing and Products Research Center. Clarke's research interests also include examining the influence of material processing and microstructure on mechanical properties.



Manish Kamal
Structural Materials Division

Manish Kamal is a product modeler with Titanium Metals Corporation (TIMET) in Toronto, Ohio. He joined the company in 2006 and provides process modeling for the primary conversion of titanium alloys. Manish holds a bachelor degree in metallurgical engineering from the Indian Institute of Technology, Roorkee, India, and M.S. and Ph.D. degrees in materials science

and engineering from the Ohio State University in Columbus, Ohio.



Molly Kennedy
Structural Materials Division

Molly Kennedy is an assistant professor in the School of Materials Science and Engineering at Clemson University in Clemson, South Carolina. Her research is focused on the mechanical deformation of flexible systems, environmental testing of nanoscale composites, and mechanical failure in corrosive or aggressive environments. She is also the advisor for the Clemson

University Material Advantage Chapter. As a Sandia Excellence in Engineering Fellow, she earned her Ph.D. in materials science from Washington State University in Pullman, Washington, in 2007.



Navin Manjooran
Electronic, Magnetic & Photonic Materials Division

Navin Manjooran works for Siemens AG and contributes to their advanced technology (nanotechnology) and power generation research and management. He obtained his Ph.D. in materials science and engineering from Virginia Polytechnic Institute and State University in Blacksburg, Virginia. Prior to that, he earned an

M.S. degree from the University of Florida in Gainesville, Florida, and a B.Tech. degree from the National Institute of Technology, Warangal, India.



Alpesh Khushalchand Shukla
Light Metals Division

Alpesh Khushalchand Shukla is employed with Edison Welding Institute, where he applies various materials characterization techniques to solve welding metallurgy-related problems. In 2007, he received his Ph.D. in materials engineering from Rensselaer Polytechnic Institute in Troy, New York, where he studied structure-property-process relationships in friction stir welded age-hardenable aluminum alloys. He holds a bachelor's degree in metallurgical engineering from Maharaja Sayajirao University of Baroda, India, and a master's degree in materials science from Michigan State University in East Lansing, Michigan. Shukla's research interests include friction stir welding, aluminum alloys, shape-memory alloys, transmission-electron microscopy, and joining of carbon nanotubes.



Donald J. Siegel
Light Metals Division

Donald J. Siegel is a technical expert and leader of the Hydrogen Storage and Nanoscale Modeling group at Ford Motor Company. His research focuses on the application of first-principles atomic-scale modeling to the prediction of novel hydrogen storage compounds and the mechanical properties of lightweight automotive alloys. Siegel holds a Ph.D. in physics from the University of Illinois at Urbana-Champaign.



Melissa Trapani
Extraction & Processing Division

Melissa Trapani is a project metallurgist at BHP Billiton's Olympic Dam Copper Smelter in South Australia where, since 2004, she has supported furnace development by modeling, testing, and commissioning new taphole and cooling element designs. Her current focus is the development of an automated system for tapping blister copper. Trapani holds a bachelor degree with honors and a Ph.D. in engineering from the University of Melbourne, Australia.



Pello Uranga
Materials Processing & Manufacturing Division

Pello Uranga is a researcher in the Thermomechanical Treatments Group at Centro de Estudios e Investigaciones Técnicas de Gipuzkoa (CEIT) and Phase Transformations lecturer at Tecnun, the Technological Campus of the University of Navarra in Donostia, Basque Country, Spain. He received his B.S. and Ph.D. degrees in materials engineering from the University of Navarra. Currently, his research activity is focused on microstructural modeling during hot working processes of different steel grades.

A NEW OPPORTUNITY FOR YOUNG LEADERS

TMS, in partnership with the Materials Research Society and the American Ceramic Society, has recently established the Materials Societies Fellow Award, a one-year fellowship beginning September 1, 2008, that provides participants with an invaluable public policy learning experience in Washington, D.C. The fellowship includes a \$55,000 stipend, plus money for health insurance, travel, and relocation expenses.

Applications for the fellowship must be submitted by February 15, 2008. For more information, see the ad in the Materials Resource Center, beginning on page 68 of this issue of *JOM*.