



## new and noteworthy at TMS

### Meet the New TMS/MRS Congressional Science and Engineering Fellow



Adria Wilson

*“I have seen firsthand how impactful educating people on the technical details of an issue can be, and my involvement as a non-scientist has catalyzed my desire to promote such education as it applies to policy decisions with my professional expertise.”*

**—Adria Wilson,  
2014–2015 TMS/  
MRS Congressional  
Science and  
Engineering Fellow**

With a keen policy interest in renewable energy technology implementation, environmental conservation, and STEM (science, technology, engineering, and mathematics) education, Adria Wilson will try her hand at “deciphering science for policymakers” when she starts her one-year appointment as the 2014–2015 TMS/MRS (Materials Research Society) Congressional Science and Engineering Fellow on September 1.

Wilson earned her Ph.D. in chemistry from Duke University, North Carolina, and her B.S. in chemistry from Drexel University, Pennsylvania, where she also minored in political science. As a graduate research assistant at Duke, her work has focused on investigating the structural basis of synergistic catalytic behavior observed for gold-palladium bimetallic nanoparticle catalysts. Her academic and research achievements include selection as a 2013 Lindau Meeting of Nobel Laureates Young Researcher, being funded by the National Science Foundation (NSF) through the Graduate Researcher Fellowship Program, and serving as co-president of the Duke chapter of the Phi Lambda Upsilon national chemistry honor society. She also helped establish the Duke student chapter of MRS and served as chapter treasurer. Wilson’s professional experience includes serving as a research associate for RL Associates and a bioanalytical scientist for GlaxoSmithKline.

Outside the laboratory and classroom, “I’ve spent much of my spare time learning how to influence policy as a citizen,” noted Wilson in her application for the fellowship. This included playing an active role on Duke’s Graduate and Professional Student Council to improve public transit, recycling, and other aspects of sustainability at the university. She

has also been heavily involved in science mentoring and outreach, volunteering at numerous community events and demonstrations, serving as a Girl Scout Troop Leader, and mentoring a summer high school student in the development of a public education project in chemistry. “I have seen firsthand how impactful educating people on the technical details of an issue can be, and my involvement as a non-scientist has catalyzed my desire to promote such education as it applies to policy decisions with my professional expertise,” said Wilson.

“From the congressional fellowship experience, I hope to get a taste of what it is like to advocate for science as the legislative process occurs,” Wilson continued. “I firmly believe that science is most useful when it is applied in a societal context, and I am looking for a chance to facilitate that process by educating others about the technical aspects of policy issues. I’m also eager to learn from the other talented people I’ll meet and work with in a congressional office. Their professional expertise is drastically different than mine and working with them will hopefully instill in me an acumen for tailoring scientific research to the needs of society throughout my career.”

The American Association for the Advancement of Science Congressional Science and Engineering Fellows Program is operated as a cooperative effort of approximately 30 national scientific and engineering societies that provide an opportunity for accomplished scientists and engineers with public policy interests to learn about and engage in the policy-making processes of the U.S. Congress. For additional information about the TMS/MRS Congressional Fellowship, contact Mary Samsa, TMS Foundation and Public Affairs Manager, at [msamsa@tms.org](mailto:msamsa@tms.org).

## MMTA Article Wins Hatchett Award

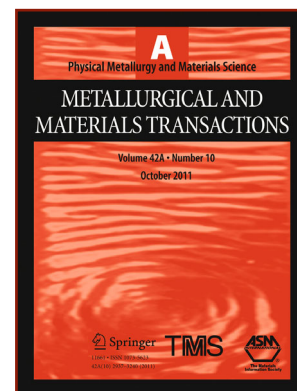
For the second year in a row, an article published in *Metallurgical and Materials Transactions A (MMTA)* received the Charles Hatchett Medal, an international prize awarded annually in association with the Institute of Materials, Minerals and Mining (IOM3) for published work on the science and technology of niobium. The winning article was published in two parts:

- “Precipitation of Nb in Ferrite After Austenite Conditioning. Part I: Microstructural Characterization” by A. Iza-Mendia, M. A. Altuna, B. Pereda, I. Gutiérrez (December 2012, Volume 43, pp 4553–4570)
- “Precipitation of Nb in Ferrite After Austenite Conditioning. Part II: Strengthening Contribution in High-Strength Low-Alloy (HSLA) Steels” by M. A. Altuna, Amaia Iza-Mendia,

I. Gutiérrez (December 2012, Volume 43, pp 4571–4586)

Last year, the *MMTA* paper, “Strengthening Mechanisms and Their Relative Contributions to the Yield Strength of Microalloyed Steels by Steels” by Junfang Lu, Oladipo Omotoso, J. Barry Wiskel, Douglas G. Ivey, and Hani Henein (September 2012, Volume 43, Issue 9, pp 3043–3061), won the Hatchett Award.

Published 13 times a year by TMS and ASM International, *MMTA* publishes critically reviewed, original research of archival significance on all aspects of physical metallurgy and materials science. Volume years 1975 to the present are available at <http://link.springer.com/journal/11661>. TMS members have free access to all articles.



## TMS Library Expands Content

Check out the TMS Member Library today to access the more than 200 new articles—many of them exploring topics related to magnesium—that have recently been added. This expands the library’s total inventory to more than 1300 technical articles sourced from various TMS publications that are not available anywhere else. Enter article title keywords, author names, or publication dates

to quickly search the library’s resources, or browse through an alphabetical listing of articles. All papers can be downloaded at no charge by TMS members.

To take advantage of this exclusive TMS member benefit, log in to the TMS Members Only website at [members.tms.org](http://members.tms.org), select Online Libraries from the left menu, and navigate to the TMS Member Library.

**TMS2015**  
144<sup>th</sup> Annual Meeting & Exhibition

**Time Is Running Out . . .**  
**Submit Your TMS2015 Abstract Today**

Just a few more days remain to submit your abstract for the TMS 2015 Annual Meeting & Exhibition (TMS2015), slated for March 15–19 in Orlando, Florida. Visit the meeting website today at [www.tms.org/tms2015](http://www.tms.org/tms2015) to determine the best fit for your presentation by reviewing the complete online listing of symposia, organized within the following technical tracks:

- Additive Manufacturing and Joining Processes
- Advanced Characterization of Materials
- Advances in Processing and Fabrication
- Extraction and Processing
- Functional Materials and Nanomaterials
- ICME and Computational Modeling
- Light Metals
- Materials for Energy and Sustainability
- Advanced Materials, Properties and Performance
- Nuclear Reactor Materials and Fuels



Don’t wonder what you missed as a presenter at TMS2015. Submit your abstract online without delay at [www.tms.org/tms2015](http://www.tms.org/tms2015).

## TMS Welcomes New Members

Please join us in congratulating the following new TMS members, approved by the TMS Board of Directors at its May meeting:

Altuner, Hatice; Assan Aluminyum, Turkey	Chen, Chih; National Chiao Tung University, Taiwan	Guo, Shuqiang; Shanghai University, China	Lacroix, Marcel; University De Sherbrooke Dep Genie Mecanique, Canada
Bennett, Christopher; University of Nottingham, Great Britain	Cobo, Esteban; Aluar Aluminio Argentino S.A.I.C., Argentina	Gupta, Manoj; National University of Singapore, Singapore	Leduc, Marc; BASF New Business Gmbh, Germany
Berends, William; Hatch, Canada	Cross, Mark; Swansea University, Great Britain	Harris, Cameron; Accenture, Canada	Lee, Sunghak; Pohang University of Science & Technology, South Korea
Bird, Keith; NASA Langley Research Center, United States	Debroy, Tarasankar; Pennsylvania State University, United States	Holland, Troy; Colorado State University, United States	Levesque, Hugo; Aluminum Bahrain B.S.C., Bahrain
Black, Jennifer; Oak Ridge National Laboratory, United States	Deillon, Lea; Institute Jean Lamour, France	Hu, Henry; University of Windsor, Canada	Li, Yanxiang; Tsinghua University, China
Bond, Leonard; Iowa State University, United States	Delph, Terry; Lehigh University, United States	Inostroza, Cesar; Hatch, Canada	Li, Mao; Central South University, China
Borgesén, Peter; Binghamton University, United States	Dickerson, Robert; Los Alamos National Laboratory, United States	Javaid, Amjad; Canmet Materials Natural Resources Canada, Canada	Li, Dajian; Karlsruhe Institute of Technology, Germany
Bringa, Eduardo; Conicet & Instituto De Ciencias Basicas, Argentina	Dillon, Robert; Jet Propulsion Laboratory, United States	Jingtao, Wang; Nanjing University of Science & Technology, China	Li, Zhong; Aleris International, United States
Brons, Justin; Seagate Technology, United States	Dispinar, Derya; Istanbul University, Turkey	Jung, Sung-Mo; Pohang University of Science & Technology, South Korea	Liu, Yuan; Tsinghua University, China
Brooks, Dennis; Alcoa, United States	Dorreen, Mark; University of Auckland, New Zealand	Kim, Sung-Joon; Postech, Korea South	Maier, Verena; University of Leoben, Austria
Buchholz, Andreas; Hydro Aluminium Rolled Products Gmbh, Germany	Duan, Dongping; Chinese Academy of Sciences, China	Kim, Hyoung; Rio Tinto Iron and Titanium, Canada	Maitre, Adeline; University of Alberta, Canada
Byczynski, Glenn; Nemak Canada, Canada	Duque, Ramon; Selee Corporation, United States	Kim, Seung Eon; Korea Institute of Materials Science, South Korea	Mao, Xiaodong; Korea Atomic Energy Research Institute, South Korea
Caissy, Jacques; Bechtel, Canada	Eivani, Bob; Canomac Consulting Inc., Canada	Kim, Young Sub; Research Institute of Industrial Science & Technology, South Korea	Marceau, Ross; Deakin University, Australia
Cantor, Brian; University of Bradford, Great Britain	Eng, Thovald Abel; Norwegian University of Science and Technology, Norway	Kolaya, Lynne; Bechtel Marine Propulsion Corporation, United States	Mariyappan, Arul Kumar; Los Alamos National Laboratory, United States
Cao, Guoping; University of Wisconsin-Madison, United States	Fan, Cang; Nanjing University of Science & Technology, China	Kotula, Paul; Sandia National Laboratory, United States	Martorano, Marcelo; University of Sao Paulo, Brazil
Chai, Lihua; Beijing University of Technology, China	Fevre, Mathieu; Onera, France	Kuhn, Timothy; Alcoa, United States	Menzer, Sophie; Alcoa, United States
Chen, Yongjun; North Carolina A&T State University, United States	Foster, Yvan; Rio Tinto Alcan, Canada	Kumar, Dhananjay; North Carolina A&T State University, United States	Midson, Stephen; The Midson Group, United States
	Gerhardt, Rosario; Georgia Institute of Technology, United States	Kumar, Manoj; Austrian Institute of Technology, Austria	
	Groeber, Michael; Air Force Research Laboratory, United States		

- Miller, Herbert; Bechtel Marine Propulsion Corporation, United States
- Mishra, Raja; General Motors R&D Center, United States
- Monfared, Shabnam; Los Alamos National Laboratory, United States
- Mortensen, Dag; Institute for Energy Technology, Norway
- Nadendla, Hari Babu; Brunel University, Great Britain
- Nagao, Shijo; ISIR Osaka University, Japan
- Nam, Ho-Seok; Kookmin University, United States
- Nesterenko, Vitali; University of California, San Diego, United States
- Nouranian, Sasan; Mississippi State University, United States
- Oder, Tom; Youngstown State University, United States
- Oh, Myung-Hoon; Kumoh National Institute of Technology, South Korea
- Ohtani, Hiroshi; Tohoku University IMRAM, Japan
- Osei Akoto, Mark; Volta Aluminum Co Ltd, Ghana
- Pang, Judy; Oak Ridge National Laboratory, United States
- Park, Jin Seong; Chosun University Department of Materials Engineering, South Korea
- Park, Young-Bin; Ulsan National Institute of Science and Technology, South Korea
- Pathak, Siddhartha; Los Alamos National Laboratory, United States
- Pati, Soobhankar; Metal Oxygen Separation Technologies, United States
- Patterson, Brian; Los Alamos National Laboratory, United States
- Pecharsky, Vitalij; Iowa State University, United States
- Perron, Aurelien; Lawrence Livermore National Laboratory, United States
- Persson, Kristin; Lawrence Berkeley National Laboratory, United States
- Pinis, Spyridon; ELVAL, Greece
- Prasad, Somuri; Sandia National Laboratory, United States
- Preuss, Michael; University of Manchester, Great Britain
- Rand, Sally; US Environmental Protection Agency, United States
- Rao, Sunil; United States
- Ribeiro, Tiago; Institute for Technological Research, Brazil
- Riman, Richard; Rutgers University, United States
- Ruben, David; Medtronic, United States
- Seshadri, Varadarajan; Federal University of Minas Gerais, Brazil
- Shao, Yuyan; Pacific Northwest National Laboratory, United States
- Sharma, Sudesh; University of Petroleum & Energy Studies, India
- Shen, Yinzong; Shanghai Jiao Tong University, China
- Shepherd, Nigel; University of North Texas, United States
- Shiflet, Gary; University of Virginia, United States
- Shollock, Barbara; Imperial College, Great Britain
- Skripnyak, Vladimir; Tomsk State University, Russia
- Smarsly, Wilfried; MTU Aero Engines, Germany
- Smith, Anthony; Global Tungsten and Powders Corporation, United States
- Sonnentag, Nicholas; ATI Ladish Forging, United States
- Tathgar, Harsharn; Clean Silicon As, Norway
- Terekhov, Dmitri; Canada
- Tiedje, Niels Skat; Technical University of Denmark, Denmark
- Toby, Brian; Argonne National Laboratory, United States
- Trelewicz, Jason; Stony Brook University, United States
- Unnikrishnan, Vinu; University of Alabama, United States
- Upadhyaya, Sarala; University Visvesvaraya College of Engineering, India
- Vaidyanathan, Rajan; University of Central Florida, United States
- Verma, Vivek; Indian Institute of Technology Kanpur, India
- Viswanathan, Srinath; Honeywell Turbo Technologies, United States
- Vivek, Anupam; The Ohio State University, United States
- Walther, Glen; W L Gore & Associates Inc, United States
- Wang, Qudong; Shanghai Jiaotong University, China
- Wang, Yingchun; Beijing Institute of Technology, China
- Wei, Kuixian; Kunming University of Science and Technology, China
- Wilson, Shawn; SINTEF Materials and Chemistry, Norway
- Woodfield, Andy; GE Aviation, United States
- Wu, Xinhua; Monash University, Australia
- Xu, Baoqiang; Kunming University of Science and Technology, China
- Yang, Barry; Velocys, United States
- Yang, Rui; Chinese Academy of Sciences, China
- Yeddu, Hemantha; Los Alamos National Laboratory, United States
- Yeh, Jien-Wei; National Tsing Hua University, Taiwan
- You, Zesheng; Institute of Metal Research, China
- Youssef, Khaled; North Carolina State University, United States
- Yuan, Huajun; Superior Graphite, United States
- Yuen, Hang Yan; Hewlett-Packard, United States
- Zapolsky, Helena; University of Rouen, France
- Zhang, Ji; China Iron and Steel Research Institute, China
- Zhang, Hailong; University of Science and Technology Beijing, China
- Zhang, Lei; University of Alaska Fairbanks, United States
- Zhang, Laiqi; University of Science & Technology Beijing, China
- Zhang, Jiaming; Stanford University, United States
- Zimm, Carl; Astronautics Corporation of America, United States