

Celebrating Professional Excellence:

The 2015 TMS Awards

Kaitlin McMahon



The professional awards and honors that TMS confers at every annual meeting represent much more than recognizing individual excellence. They also provide an opportunity to celebrate the many contributions that the minerals, metals, and materials professions have made to advancing society and improving quality of life. The luncheons and special lectures that feature many of the awards at the annual meeting present exceptional opportunities to interact with and learn from honorees at the height of their careers. The TMS-AIME Awards Ceremony—open to everyone who attends the annual meeting—shines a spotlight on some of the most notable, inspiring accomplishments in the profession.

Take a moment (or maybe a few) to read about the 2015 TMS awardees on the following pages. If you are attending the TMS 2015 Annual Meeting & Exhibition (TMS2015), March 15–19, in Orlando, Florida, make a point of cheering them on in person at the TMS-AIME Honors and Awards Ceremony on March 17 or any of the other special award

events taking place throughout the week. Visit www.tms.org/tms2015 for more information on how you can show your support and appreciation for mentors, colleagues, and friends who are being recognized for their professional excellence at TMS2015.

Receiving a TMS award is a prestigious professional milestone. A theme tying together the perspectives of the 2015 awardees presented in this article is the appreciation that without the respect and support of their peers, they would not be where they are today. Nominating a colleague for a TMS award is an important step in bestowing this honor.

Nominations for most 2016 TMS awards are being accepted until April 1, 2015. To begin the nomination process, visit the TMS Honors and Awards website at awards.tms.org for award information and criteria, as well as access to the nomination form for every TMS award. For additional information, contact Deborah Price, TMS Awards and Recognition Specialist, at price@tms.org.

SOCIETY AWARDS

2015 TMS Fellows

The class of Fellow is TMS's highest honor. To be inducted, a candidate must be recognized as a leading authority and contributor to the practice of metallurgy, materials science, and technology, with strong consideration given for outstanding service to the Society.



Iver Anderson
Senior Metallurgist, Iowa State University

Citation: *For his inventiveness that led to lead-free solder used in all electronic devices; for seminal contributions to: (1) gas atomization of metallic and polymeric materials, (2) powder metallurgy technology, and (3) rapid solidification processing of a wide variety of materials; for long time professional leadership as a member of the TMS Board of Directors and chair of numerous TMS technical committees; and for contributions to education.*

“Due to the high regard that I hold all of the current TMS Fellows, I consider this to be a very high distinction,” said Anderson. “I could not ask for a more prestigious award at this time and sincerely appreciate this recognition from the profession that I serve.”



Surya Kalidindi
Materials Science Professor, Georgia Institute of Technology

Citation: *For major scientific contributions in the fields of crystal plasticity and microstructure design, and leadership in materials education.*

“I am deeply humbled by this tremendous honor. Since I did not receive any formal education in the materials field, I have relied heavily on TMS to be my central resource for my materials education throughout my career,” said Kalidindi. “The conferences, journals, committees, and various other activities of TMS have given me many opportunities for my career growth. I am, and will remain, most proud of this award.”



David Matlock
Professor, Colorado School of Mines

Citation: *For exceptional and sustained leadership in materials education and research and for sustaining academic interest in the steel industry.*

“I joined TMS in 1968 while an undergraduate student at the University of Texas, at a time when I really did not appreciate the importance of professional societies. Over the years, I have been impressed by the contributions TMS has made, particularly

in the area of sponsored specialty conference sessions that have led to publications that remain valuable resources today,” said Matlock.



Michael Mills
Professor, Ohio State University

Citation: *For leadership and significant contributions in elucidating the deformation mechanisms of high-temperature structural materials using advanced characterization*

and modeling.

“I am deeply honored to join my mentors and role models in the ranks of TMS Fellows—colleagues who have so strongly and positively influenced me during my career,” said Mills. “This honor inspires me to encourage and support the future generations of professionals within the materials community.”



Christopher Schuh
Associate Professor of Metallurgy, Massachusetts Institute of Technology

Citation: *For path-breaking research on design of new structural materials through control of microstructural order/disorder over a wide range of length scales;*

for bringing newly designed materials to commercial application.

“Ever since I was a student I have looked up to the TMS Fellows as exemplars in our profession. It is humbling and overwhelming to be joining their ranks,” said Schuh. “Receiving this honor has inspired me to work harder and redouble my efforts to study, innovate, and create new knowledge about metals.”



Barry Welch
Emeritus Professor, University of Auckland, and Director, Welbank Consulting Ltd.

Citation: *For significant contributions to the advancement of aluminum smelting technology through pioneering research in aluminum electrolysis cell reactions and fundamental processes followed by outstanding teaching to students and engineering practitioners.*

“As a long-term international member, I am naturally thrilled to be elected a Fellow,” said Welch. “As with all research and developments awards, the outcomes are a consequence of team efforts, and I have been blessed with having many outstanding research students and colleagues. So, at a time like this, I want to record my gratitude for their support and contributions.”

SOCIETY AWARDS

2015 Brimacombe Medalists

This mid-career award recognizes individuals with sustained excellence and achievement in business, technology, education, public policy or science related to minerals, metals or materials science and engineering and a record of continuing service to the profession.



Michael Brady
Senior Research and Development Staff, Oak Ridge National Laboratory

Citation: *Development of groundbreaking new concepts establishing novel alloy design principles for the control of surface chemistry with widespread applied scientific and engineering impact.*

“My membership in TMS has played a significant role throughout my career,” said Brady. “To be recognized by TMS with the Brimacombe Medalist Award is a great honor, quite humbling, and really a reflection of the mentoring, guidance, and collaboration I have received over the years from my colleagues at NASA Glenn and Oak Ridge National Laboratory, virtually all of whom are also active in TMS.”



W. Jud Ready
Principal Research Engineer, Georgia Institute of Technology

Citation: *For contributions in electronics reliability, applied nanotechnology research, and service to TMS.*

“I joined TMS as a student in 1992, and cannot imagine how my career would have evolved without it,” said Ready. “The benefits range from tangible (professional/peer-reviewed journals) to the intangible (networking/friendships), with numerous more examples of each and everything in between. Thank you, TMS, for aiding and improving my career.”



Michael Uchic
Materials Research Engineer, Air Force Research Laboratory

Citation: *In recognition of his outstanding and meritorious contributions at the frontiers of size-affected plasticity and three-dimensional materials science.*

“I have been a member of TMS since joining the Air Force Research Laboratory 16 years ago, and my participation in TMS meetings and specialty conferences has been extremely beneficial to me both professionally and personally,” said Uchic. “I hope to participate in TMS for many more years to come.”



Matthew Willard
Associate Professor, Case Western Reserve University

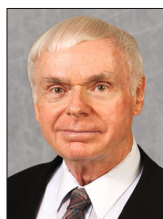
Citation: *For sustained excellence in the fields of physical metallurgy and magnetic materials, reviving the TMS Magnetic Materials Committee, and an outstanding*

record of continuing service.

Said Willard, “For me, TMS has been an organization of colleagues and friends with the highest standards and excellence in research. It is from this group that I was selected to receive this high honor and I am very thankful to be recognized in this way.”

Bruce Chalmers Award

Honors outstanding contributions to the science and/or technology of materials processing by an individual.



Carl Koch
Professor, North Carolina State University

Citation: *For pioneering contributions in nonequilibrium processing and characterization of nanostructured materials.*

“While most of the previous awardees made their contributions in solidification processing theory or experiment, the recent expansion of this award to other areas of materials processing to include my research of mechanical attrition of powders has allowed me to receive this high honor,” said Koch. “I have always considered TMS to be my main professional society and I am very grateful for this recognition.”

Cyril Stanley Smith Award

Outstanding contributions to the science and/or technology of materials structure is the focus of this award.



Michael Loretto
Emeritus Professor of Materials, University of Birmingham

Citation: *For the use of electron microscopy to further our understanding of the internal structure of metals and the application of this understanding to metal*

processing.

“This totally unexpected award means that the fun I have had for more than 50 years, which is its own reward, apparently merits recognition. The recognition should be shared with the numerous colleagues and students with whom I’ve had the pleasure to work. My acceptance is a thank you to them,” said Loretto.

SOCIETY AWARDS

Early Career Faculty Fellow Award

Funded by the TMS Foundation, this award honors two assistant professors each year for accomplishments that have advanced their academic institution, while also recognizing their potential to broaden the technological profile of TMS.



Antoine Allanore
Professor, Massachusetts Institute of Technology

“A TMS membership is an essential part of professional life,” said Allanore. “It helps maintain a connection with the industries that support materials research.

It also allows us to share our passions for specific research topics or societal issues with the younger generation of professionals and scholars who will lead us forward.”



Peter Hosemann
Professor, University of California

“I always found that TMS was a very inclusive society for all areas of material science and engineering with a strong emphasis on fostering young members and early career scientists,” said Hosemann.

“Nothing excites young scientists more than being ‘part of the team,’ and TMS really makes them want to contribute because of its open structure.”

Institute of Metals Lecturer & Robert Franklin Mehl Award

In receiving this pinnacle award, honorees present a lecture at the TMS annual meeting, which is also published in *Metallurgical and Materials Transactions A*.



Subhash Mahajan
Distinguished Professor and Special Advisor to the Chancellor, University of California

Lecture: “The Role of Materials Science in Microelectronics: Past, Present and Future”

Citation: *For seminal and sustained contributions to the science and technology of materials, and pioneering efforts in the education of materials students for the 21st century.*

“I have been a member of TMS since I was a graduate student,” said Mahajan. “TMS provided forums for the presentation of my work and the technical dialogues with the community were very fruitful.”

Educator Award

This award recognizes an individual who has made outstanding contributions to education in metallurgical engineering and/or materials science and engineering.



Guenter Gottstein
Director of Institute, RWTH Aachen

Citation: *For his sustained contributions to the education of physical metallurgy and materials science in the last 35 years through teaching, advising, and book writing.*

“TMS is definitely one of the most important international professional societies in materials science and engineering,” said Gottstein. “I truly appreciate the large variety of topics offered at TMS conferences and the excellent opportunities to interact with colleagues.”

Leadership Award

This award recognizes an individual who has demonstrated outstanding leadership in the national and international materials community.



Yuntian Zhu
Distinguished Professor, North Carolina State University

Citation: *For outstanding leadership in the area of deformation physics and properties of nanostructured materials.*

“This award is important to me by recognizing my contribution to the field of nanomaterials,” said Zhu.

William Hume-Rothery Award

The scientific leader who receives this award for exceptional scholarly contributions to the science of alloys presents a lecture at the TMS annual meeting.



William Boettinger
Metallurgist-NIST Fellow, National Institutes of Standards & Technology (NIST)

Citation: *For outstanding contributions to thermodynamics and kinetics of metallurgical systems and their application to the understanding of alloy microstructures and the relationship to processing conditions.*

“TMS is the best materials society that combines the engineering and science of metallurgy,” said Boettinger. “Hume-Rothery embodied the transformation of metallurgy from an empirical practice to one embracing the increasing knowledge of materials from all fields of science. I am humbled to be added to the list of awardees.”

SOCIETY AWARDS

Morris Cohen Award

This award recognizes an individual who has made outstanding contributions to the science and/or technology of materials properties.



Marc André Meyers

Professor, University of California

Citation: *For pioneering work on the dynamic behavior of materials that has led to an enhanced understanding of phase transformations including the kinetics of martensitic transformations and the mechanisms of exothermic chemical reactions, high-velocity dislocations, and thermoplastic instabilities.*

Ellen Swallow Richards Diversity Award

This award honors the contributions of an individual who reflects the pioneering spirit of Ellen Swallow Richards in overcoming personal, professional, educational, cultural, or institutional adversity to pursue a career in the minerals, metals, and/or materials professions or in helping others in the field to overcome similar challenges.



Julia Weertman

Walter P. Murphy Professor Emerita of Materials Science and Engineering, Northwestern University

AIME AWARDS

AIME Honorary Membership

Conferred on an individual for outstanding service to or distinguished scientific or engineering achievement in the fields embracing the activities of the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME) and its member societies.



Thaddeus Massalski

Professor Emeritus, Carnegie Mellon University

Citation: *For global leadership in the field of materials and sustained seminal contributions to phase equilibria spanning over one half of a century.*

AIME Champion H. Matthewson Award

Awarded to the author(s) of a paper or series of closely related papers, representing the most notable contribution to metallurgical science during the period under review.



Jian-Feng Nie

Professor, Monash University

Paper: "Precipitation and Hardening in Magnesium Alloys," *Metallurgical and Materials Transactions A*, Vol. 43A, Nov. 2012.

"It is a great honor to receive this prestigious award, and a pleasure to have this paper recognized in this way," said Nie.

AIME Robert Lansing Hardy Award

For more than half a century, this award has recognized professionals under the age of 35 in the broad fields of metallurgy and materials science for exceptional promise of a successful career.



Peter Hosemann

Professor, University of California

Citation: *For seminal contributions to our understanding of materials behavior in extreme environments, particularly related to small-scale mechanical testing of materials for nuclear applications.*

"This award is especially important to me due to its long history and the large group of outstanding researchers who have received it before me, many of whom shaped my scientific path," said Hosemann.

AIME James Douglas Gold Medal

Honors distinguished achievement in nonferrous metallurgy, including both the beneficiation of ores and the alloying and utilization of nonferrous metals.



Uday B. Pal

Professor, Boston University

Citation: *For pioneering work in the new field of green metallurgy and materials as applied to primary production and recycling of metals.*

AIME Presidential Citation

This recognition highlights extraordinary and dedicated service in advancing AIME's goals, purposes and traditions.



Brajendra Mishra

Professor, Colorado School of Mines

Citation: *For being the champion of cross-disciplinary efforts in the areas of sustainability and carbon management and his work in establishing the AIME Collaborative Grants Program that provides financial assistance to AIME member societies.*

DIVISION AWARDS

Extraction & Processing Division (EPD) Distinguished Service Award

Award recipients are individuals who have demonstrated outstanding long-term service to the industries supported by the EPD by consistently providing technical and/or operating knowledge that has enhanced the competitiveness of the industry.



Adrian Deney
Business Development Manager, Praxair Inc.

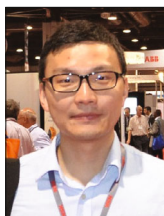
Citation: *For his extensive involvement with EPD and TMS at large, strong leadership in EPD, immeasurable professional impact on EPD members,*

and fostering communications among TMS committees.

“This award represents to me the privilege of serving the TMS community through my various roles in the Extraction & Processing Division,” said Deney. “I am humbled by the nomination and acknowledge that the opportunity to serve followed the foundations set by others.”

EPD Science Award

This award recognizes a paper, or a series of closely related papers with at least one common author, which represent a notable contribution to the scientific understanding of extraction and processing metallurgy, with an emphasis on nonferrous metals.



Tai Xi Zhu



Kenneth S. Coley



Gordon A. Irons

Tai Xi Zhu, McMaster University; Kenneth S. Coley, Professor and Associate Dean, McMaster University; Gordon A. Irons, Dofasco Professor, McMaster University; Matthew Peter King, ArcelorMittal Dofasco
Paper: “Progress in Slag Foaming in Metallurgical Processes,” *Metallurgical and Materials Transactions B*, Vol. 43B, Aug. 2012.

“I believe this is a great opportunity to communicate our work within TMS, and receive valuable feedback,” said Zhu. Coley added, “The paper is based on several years of what I judge to be an extremely fruitful collaboration. I am proud of my association with my co-authors and pleased that our collaboration should be recognized by this award.” Irons also noted, “I am very pleased that two of our former students are being recognized for their worth at an early stage of their professional career.”

EPD Distinguished Lecture Award

An outstanding scientific leader in the field of nonferrous extraction and processing metallurgy is invited to present a comprehensive lecture at the TMS annual meeting to recognize his or her contributions.



Uday B. Pal
Professor, Boston University

Lecture: “Green Technology for Metals Production”

“TMS helps me remain in touch with my profession and colleagues in the field. I find the TMS meetings to be of very high quality where the exchange of good ideas leads to new collaborations,” said Pal. “It is an honor to have been selected by my peers for this award.”

EPD Technology Award

Conferred on a paper that represents a notable contribution to the advancement of the technology of extraction and processing metallurgy, with emphasis on nonferrous metals.



Shafiq Alam

Katsutoshi Inoue, Professor, Saga University; Shafiq Alam, Associate Professor, University of Saskatchewan

Paper: “Mutual Separation of Rare Earths using Chemically Modified Chitosan Immobilized with Functional Groups of Chelating Agents,” *Rare Metal Technology*, 2014.

“I am pleased to receive this award. I feel that our work is officially recognized by a wider audience and academic peers,” said Alam.

EPD Pyrometallurgy Best Paper Award

Recognizes individual excellence of a paper published in the proceedings volume of the EPD pyrometallurgy symposium from the previous year.



Lloyd Robert Nelson
Head, Smelting and Refining Technology, Anglo American Platinum

Paper: “Evolution of the Mega-Scale in Ferro-Alloy Electric Furnace Smelting”

“It was already my great pleasure to have been invited to make a keynote address at ‘Celebrating the Megascale,’ arranged in honor of David Robertson,” said Nelson. “The opportunity to meet with TMS colleagues and friends in such an inspiring environment was enjoyable and professionally rewarding.”

DIVISION AWARDS

Functional Materials Division (formerly EMPMD) Distinguished Service Award

This award recognizes an individual whose continuous service to the FMD has facilitated TMS's capability to serve its FMD members and their supporting organizations.



Sungho Jin

*Professor of Materials Science,
University of California*

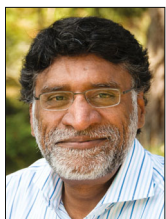
Citation: *For dedicated leadership in the Functional Materials Division (FMD) as division council chair, committee chair, and committee member, and for organizing*

numerous symposia and creating two successful technical committees—Nanomaterials and Biomaterials.

"I have served this division for some years and it is a good feeling to know that it is functioning very well, with excellent programming activities and good membership," said Jin.

FMD Distinguished Scientist/Engineer Award

Honors research excellence in one or more areas related to electronic, magnetic, and photonic materials science.



Kannan Krishnan

Professor, University of Washington

Citation: *For seminal contributions to science, technology, and biomedical applications of magnetic materials.*

"I am honored to receive this award and am pleased to see myself in the august company of the past awardees, many of whose work I have followed and admired over the years," said Krishnan. "I also share this recognition with my current and former students, postdocs, and researchers whose creativity and hard work are reflected in my own accomplishments. I look forward to many more years of involvement with TMS."

FMD John Bardeen Award

This award is presented to an individual who has made outstanding contributions to and is a leader in the field of electronic materials.



Chris Van de Walle

Professor of Materials and Herbert Kroemer Endowed Chair in Materials Science, University of California

Citation: *For seminal contributions to the theory and understanding of semiconductor band offsets, doping, defects, and loss mechanisms, and the role of hydrogen in*

electronic materials.

"I am thrilled to receive this award, and very grateful to TMS for naming it after John Bardeen, a giant of science who made numerous contributions to electronic materials," said Van de Walle. "My hope is to continue to make TMS proud."

Light Metals Division (LMD) Distinguished Service Award

Award recipients are individuals whose continuous service to the LMD activities has facilitated TMS's capability to serve its light metals-oriented members and their supporting organizations.



Geoff Bearne

General Manager, Rio Tinto

Citation: *For his service to LMD as: author; co-author; session chair; subject chair; Light Metals 2009 editor; aluminum committee member; and member of other various committees.*

"For 26 years, I have benefitted from membership in TMS. I am happy to have contributed to the success of the LMD and the annual meeting through my work with the Aluminum Committee," said Bearne. "I am honored to receive this award and would like to thank the TMS staff and volunteers, without whose tireless efforts I could have achieved nothing."

LMD Technology Award

This award honors an individual who has demonstrated outstanding long-term service to the light metals industry by consistently providing technical and/or operating knowledge that has enhanced the competitiveness of the industry.



Jomar Thonstad

Professor Emeritus, Norwegian University of Science and Technology

Citation: *For his long-standing excellence in aluminum electrolysis, both fundamental and applied with a broad international impact, as well as his active*

participation in the TMS annual meetings with numerous papers in the aluminum field.

"It is a great honor for me to receive this award toward the end of a long career. I regard it as a testimony that hard and dedicated work through all these years has born some fruit by making a contribution to the science and engineering in my field," said Thonstad. "It has been a privilege to work with many talented students and colleagues in trying to solve problems we felt were important and challenging."

DIVISION AWARDS

Light Metals Award

Awarded to the author(s) of a paper presented in the preceding year in an LMD-sponsored session at the annual meeting, which notably exemplifies the solution of a practical problem.



Jean-Marie Drezet



Pierre Celle



Olivier Ribaud

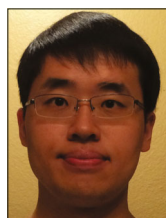
Jean-Marie Drezet, Senior Scientist, EPF-Lausanne; Pierre Celle, R&D Process Engineer, Constellium, Centre de Recherches de Voreppe (CRV); Olivier Ribaud, Projects Manager, Constellium, CRV; Thilo Pirling, Institut Laue Langevin

Paper: “Neutron Diffraction Measurement of As-Cast Residual Stresses in AA7050 Rolling Plate Ingots: Influence of a Wiper,” *Light Metals 2014*.

“This award is clear recognition of the quality of scientific investigations through collaboration with our industrial partner, Constellium,” said Drezet. Celle added, “This recognition will help us to keep promoting innovative modelling and ambitious research approaches for efficient aluminum alloy processing.” Ribaud also said, “I am very proud to receive this award from TMS and proud to be on the team that won this prize.” **Note:** This paper also earned the Warren Peterson Cast Shop for Aluminum Production Light Metals Subject Award.

LMD Energy Best Paper-Student

Recognizes excellence of a paper published in the preceding year’s volume of the energy proceedings or *JOM*.



Yiling Zhang

Yiling Zhang, Student, Carnegie Mellon University; Paul A. Salvador, Professor, Carnegie Mellon University; Gregory S. Rohrer, Professor and Department Head, Department of Materials Science & Engineering, Carnegie Mellon University
Paper: “Ferroelectric-Enhanced Photocatalysis with $\text{TiO}_2/\text{BiFeO}_3$,” *Energy Technology 2014*.

“I chose this field of study because I believe photocatalysis holds the key to solve several important problems such as renewable energy and environmental pollution,” said Zhang. “I consider this award to be quite the recognition of my research.”

Light Metals Subject Awards

The following recognize individual excellence of papers presented at the previous year’s TMS annual meeting in an LMD-sponsored session.

Aluminum Reduction Technology

Lukas Dion, Student, University of Quebec; Laszlo Kiss, University of Quebec; Dany Lavoie, Technical Superintendent-Reduction, Aluminerie Alouette Inc.; Jean-Paul Arvisais, Aluminerie Alouette Inc.
Paper: “Developing a New Process Indicator Based on the Relationship Between an Electrolysis Cell Impurity Balance and Its Incidents,” *Light Metals 2014*.

Electrode Technology for Aluminum Production

Rebecca Jayne Thorne, Norwegian University of Science and Technology; Camilla Sommereth, Ph.D. Fellow, Norwegian University of Science and Technology; Ann Mari Svensson, Norwegian University of Science and Technology; Espen Sandnes, Hydro Aluminium a.s. Ardal; Lorentz Petter Lossius, Principal Engineer, Hydro Aluminium a.s. Ardal; Hogne Linga, Manager Carbon R&D, Hydro Aluminium a.s. Ardal; Arne Petter Ratvik, Senior Scientist, SINTEF
Paper: “Understanding Anode Overpotential,” *Light Metals 2014*.

Aluminum Alloys

Werner Fragner, Head of Corporate Technology, Austria Metall GmbH; Helmut Suppan, Managing Director, AMAG Casting GmbH; Marc Hummel, Audi AG; Dominik Bosch, Friedrich-Alexander-Universität Erlangen-Nürnberg; Peter Uggowitzer, ETH Zurich
Paper: “Using Scrap in Recycling Alloys for Structural Applications in the Automotive Industry,” *Light Metals 2014*.

Recycling

Amund Nordli Lovik, Student, Norwegian University of Science and Technology; Daniel B. Müller, Norwegian University of Science and Technology
Paper: “A Material Flow Model for Impurity Accumulation in Beverage Can Recycling Systems,” *Light Metals 2014*.

DIVISION AWARDS

LMD Magnesium Technology Awards

The following recognize individual excellence of papers published in the previous year's volume of Magnesium Technology on specific topics.

Application

Felix Gensch, René Nitschke, Sven Gall, Sören Müller—TU Berlin, Extrusion R&D Center

Paper: "Extrusion of Hollow Magnesium Profiles and Investigation of Extrusion Seams"

"My co-authors and I all consider this award as motivation for keeping up the work on our ongoing projects," said Gensch.

Fundamental Research

Hyun Kyu Lim, Principal Researcher, Korea Institute of Industrial Technology; Dae-Guen Kim, Korea Institute of Industrial Technology; Tae-Yang Kwak, Korea Institute of Industrial Technology; Wonseok Yang, Korea Institute of Industrial Technology; Hak Young Kim, Korea Institute of Industrial Technology; Young-Ok Yoon, Korea Institute of Industrial Technology; Shae K. Kim, Principal Researcher, Korea Institute of Industrial Technology

Paper: "Effect of Volume Fraction of Icosahedral Phase in CaO Added Mg-Zn-Y Alloys"

"This award encourages me to continue my research on magnesium alloys," said Lim. "TMS membership is a great way to meet experts and make new friends in my research field."

Best Paper-Student

Michael J. Nemcko, Graduate Student, McMaster University; Pauline Mas, McMaster University; Moisei Bruhis, Research Engineer, McMaster University; David S. Wilkinson, Dean and Faculty of Engineering, McMaster University

Paper: "Characterization of Damage in Magnesium Using Digital Image Correlation and Electron Backscattered Diffraction Patterning"

"I am sincerely honored to receive this award. TMS meetings are an excellent place to learn about ongoing research and meet potential collaborators. They provide great opportunities for discussions with distinguished researchers from academia and industry," said Nemcko.

LMD Energy Best Paper-Professional

This award recognizes author(s) for excellence of a paper published in the preceding year's volume of the energy proceedings or *JOM*.



Ting-an Zhang



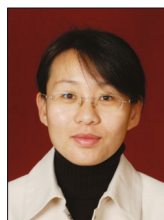
Hongliang Zhao



Zhihe Dou



Guozhi Lv



Qiuyue Zhao



Yan Li

Ting-an Zhang, Hongliang Zhao, Yan Liu, Zhihe Dou, Guozhi Lv, Qiuyue Zhao, Yan Li—Northeastern University

Paper: "Recent Advances in Carbon Dioxide Mineralization to Nano-size Calcium Carbonate Utilizing Wastewater," *Energy Technology 2014*.

"We are honored that the paper's scientific values have been recognized and believe it will pull more researchers into similar investigations so that the technology can be best circulated and implemented," said Zhang. "I am really honored with this award, which is a

great encouragement to me as a young researcher," noted Hongliang Zhao.

LMD Magnesium Technology Best Poster

This award recognizes the best contribution to the previous year's Magnesium Technology Symposium poster session.



Christian Klose

Christian Klose, Vice President Biomedical Technology and Lightweight Construction, Leibniz Universität Hannover; Christian Demminger, Researcher, Leibniz Universität Hannover; Hans Jürgen Maier, Director, Leibniz Universität Hannover

Poster: "Sensory Magnesium

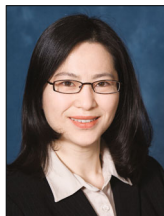
Components—Online-Measurement of Static and Dynamic Loads Utilizing Magnetic Magnesium Alloys"

"The TMS 2014 Annual Meeting gave me the opportunity to share the results of my research project with other scientists and professionals, which gave me a lot of input for my future work," said Klose. "I am grateful that the TMS annual meeting brings people together who come from different material science groups all over the world."

DIVISION AWARDS

Materials Processing & Manufacturing Division (MPMD) Distinguished Service Award

An individual whose dedication and commitment to the MPMD has made a demonstrable difference to the objectives and capabilities of the division and TMS is honored with this award.



Katsuyo Thornton
Associate Professor, University of Michigan

Citation: *For her dedication and leadership in establishment of a vibrant, comprehensive, and successful TMS program in Integrated Computational*

Materials Engineering (ICME).

“It has been nothing but a pleasure and honor to serve in various capacities within TMS,” said Thornton. “This recognition means a great deal to me because it indicates that these efforts have been fruitful. I’m looking forward to many more years of active service in TMS.”

MPMD Distinguished Scientist/Engineer Award

This award recognizes an individual who has made a long-lasting contribution to design, syntheses, processing, and performance of engineering materials, with significant industrial applications.



Xiaodong (Chris) Li
Professor, University of Virginia

Citation: *For his pioneering nanomechanical research in nanomanufacturing, nanomaterial-enabled energy systems, biological and bio-inspired systems and devices, and*

mechanics and tribology in turbine energy systems.

“I am very grateful and honored to receive this award because TMS has been a great home for me. Since I joined in 1981, I have gained valuable experiences and professional career growth through involvement and interactions within TMS,” said Li.

Structural Materials Division (SMD) Distinguished Service Award

This award honors an individual whose dedication and commitment to the SMD has made a demonstrable difference to the objectives and capabilities of the division and TMS.



Judy Schneider
Professor, Mississippi State University

Citation: *For exceptional service and dedication to SMD objectives, programing, and enthusiastic mentoring of young professionals.*

“TMS has been very nurturing to me in establishing my academic career and SMD has always been my home. Because of the great benefits I receive from active involvement, I encourage others to take an active role. Sometimes that little push in the door makes all the difference in a person’s future,” said Schneider.

SMD Distinguished Scientist/Engineer Award

Recognizes long-lasting contributions to the fundamental understanding of microstructure, properties, and performance of structural materials for industrial applications.



Michael Kassner
Professor, University of Southern California

Citation: *For his prolonged and distinguished contributions to structural materials in the areas of creep and plasticity of metals through his authorship*

of relevant journal publications and books; his direct contribution to the commercial aspects of metals processing through patents in the area of accumulative roll bonding; and his long-standing career in teaching fundamentals of structural materials at leading universities.

“I have been a member of TMS for more than 35 years. As a materials scientist who has principally participated in structural metals and alloys research, TMS has been my natural home-society,” said Kassner. “It has been the integral professional society of my career.”

Kaitlin McMahon is the TMS Copy Writer. Lynne Robinson, JOM Contributing Editor, and Deborah Price, TMS Awards and Recognition Specialist, also contributed to this article.