2013 YEAR-END REVIEW
BY THE NUMBERS

2013 was a momentous year for the Materials Research Society as we celebrated our 40th anniversary! And what an amazing 40 years it has been—for both the materials community and for MRS. In 1973, Rustum Roy and the inaugural roster of 215 members could never have imagined how quickly materials research would progress to change our history and shape our world, nor could they imagine the incredible impact the Society would have on those achievements. Today, MRS represents a diverse community of 16,600+ members from over 80 countries and is a recognized leader in the advancement of interdisciplinary materials research.

Of course, the tremendous growth and success of our Society is the result of member involvement and the energetic efforts of many MRS volunteers. They offer their precious time, their spirit, their expertise and their unique perspectives for the betterment of the materials community worldwide. To all of them—members, volunteers, officers, headquarters staff, vendors, advertisers, exhibitors, sponsors, host cities and the materials community—we express our deepest gratitude. They have, indeed, helped create the framework upon which the Society has matured and flourished.

That collaborative spirit continued in 2013, as nearly 1000 volunteers rallied together to further the MRS vision of building a dynamic, interactive, global community of materials researchers. Turn the page and you will find a remarkable array of projects, places, premiers and previews that defined the year—by the numbers!

In addition, MRS is pleased to acknowledge a few special achievements of the past year, highlighting the work of our outstanding volunteers, committee members and headquarters staff. For example, we are extremely grateful to Magaly Spector and Dawnielle Farrar, chairs of the Diversity and Women in Materials Science and Engineering Subcommittees, respectively, for creating the MRS Graduate Student Mentoring Program and for their efforts in advancing the professional development of students and under-represented groups through special workshops and programs. The inaugural class of 34 mentor/menteees completed its 12-month program at the end of 2013 with great success and will soon expand to include undergraduate students.

MRS University Chapters sprung up around the globe last year and now total 79. Chapters in Ethiopia and Nigeria were made possible by a new free membership program for students in developing countries. Launched in 2013, these memberships, and resulting Chapters, will enable our talented and enthusiastic students to network and collaborate across campuses and continents.

We celebrated collaborations in 2013 with Sociedad Mexicana de Materiales, the Japan Society of Applied Physics, European MRS, Africa MRS, and Sociedade Brasileira de Pesquisa em Materias. We continue to identify opportunities to work together on projects that will serve the materials community.

The MRS publications portfolio is flourishing, and that is due in large part to the outstanding vision and leadership of Paul McIntyre, chair of the recently restructured Publications Committee. During his 3-year term, which came to a close in 2013, MRS advanced into a new era of publications. Working in partnership with MRS headquarters and Cambridge University Press, not only did he champion efforts to strengthen the existing portfolio, but he led the charge to develop and launch two new journals—MRS Communications and MRS Energy & Sustainability A Review Journal—as well as initiate multiple new book projects.

Whether gathering 100 Boston-area high school students for a Hydrogen Fuel Cell Model Car Challenge during MRS Fall Meetings in the mid-2000s, to serving as 2010 MRS President, to developing and co-editing books and journals on energy and sustainability over the past several years, Dave Ginley brings an unbridled passion and enthusiasm to MRS. That spirit continues with Dave’s current leadership as Chair of the Meetings Committee. He is forging ahead on the Board vision to better serve MRS members and the materials community through meetings— with a focus on enhanced virtual technologies, expanded education/outreach events, and increased programming related to “use-inspired” industry-relevant research.

Xiao P. Jiang and the MTI Corporation have been exhibiting at MRS Spring and Fall Meetings for almost 20 years. Last summer, he and the Jiang Family Foundation expressed a desire to give back to the materials community. Their support has enabled the Materials Research Society Foundation to create a new award honoring post-doctoral researchers, with the first award to be presented at the 2014 MRS Fall Meeting.

Capping off the year, MRS was named one of Pittsburgh’s 2013 Top Workplaces. We were thrilled to be included in the list and are grateful to our headquarters staff who made this happen.

Taking this momentum forward, the next 40 years promise to deliver even more excitement and innovation, as new pioneers and the next-generation of volunteers continue to advance the MRS mission...to advance materials...and to improve the quality of life.

Orlando Auciello, PhD
2013 MRS President

Todd M. Osman, PhD
MRS Executive Director

Orlando Auciello
2013 MRS President

Todd M. Osman
MRS Executive Director

Orlando Auciello, PhD
2013 MRS President

Todd M. Osman, PhD
MRS Executive Director
2013 BY THE NUMBERS

Looking back to 2013, we are delighted to see all the Materials Research Society has accomplished. With help from our members, volunteers, exhibitors, sponsors, partners and headquarters staff, our Society has truly flourished. We are pleased to present a year-end review summary of some of our biggest achievements this past year.

- offered 108 technical symposia at the 2013 MRS Spring and Fall Meetings, bringing in 11,699 total on-site attendees
- sold out the 2013 MRS Fall Meeting exhibit with a record-breaking 324 exhibitor booths
- accommodated 657 job seekers at the Fall and Spring Meeting Career Centers
- achieved record attendance of 1,411 at the XXII International Materials Research Congress (IMRC), held in partnership with the Sociedad Mexicana de Materiales (SMM)
- jointly sponsored 23 symposia as part of the 74th Japan Society of Applied Physics Autumn Meeting, garnering 1,063 participants
- managed three events through the MRS Conference Services Program, yielding a cumulative attendance of 1,323

Looking back to 2013, we are delighted to see all the Materials Research Society has accomplished. With help from our members, volunteers, exhibitors, sponsors, partners and headquarters staff, our Society has truly flourished. We are pleased to present a year-end review summary of some of our biggest achievements this past year.

- celebrated 40 years of service to the materials research community
- continued the success and growth of the Society with the help of approximately 1,000 volunteers from across the globe
- served an MRS membership of over 16,600
- furthered our global reach by representing women and men from 80 countries around the world in our membership and meetings
- boasted 79 University Chapters worldwide
- announced the first 3 Materials Research Society Foundation grants and 6 University Chapter Special Project Awards at the 2013 MRS Spring Meeting
- advanced 1 mission—to promote communication for the advancement of interdisciplinary materials research to improve the quality of life
- garnered 3.4 million page views on the MRS website
- strengthened MRS presence on social media, generating a viral reach of 527,980 on Facebook alone
- reported the latest breakthroughs in materials science through the MRS news site, Materials360 Online, yielding over 243,500 annual page views
- added 800 presentations to the MRS OnDemand® library, allowing 3,895 people in 56 countries access to both live and recorded talks from MRS Meetings

Downloaded from https://www.cambridge.org/core/terms. https://doi.org/10.1557/mrs.2014.48
honored 85 MRS members through the MRS Awards Program

announced a new MRS Award honoring excellence in materials science for the 6th consecutive year

increased combined downloads across all MRS publications, hosted on Cambridge Journals Online (CJO), to a total of over 745,500

ranked in the top 10 percent of materials science journals with MRS Bulletin, which had an Impact Factor of 5.024 for 2013

received MRS Communications’ 1st Impact Factor in its 1st year of eligibility based on just 1 issue

published 6 special focus issues of Journal of Materials Research (JMR)

named 3 prominent field leaders as Editors-In-Chief of the new MRS Energy & Sustainability—A Review Journal

offered libraries and members online access to over 100,000 proceedings papers in the MRS Online Proceedings Library (OPL)

achieved a readership of over 73,000 for the Materials360® e-newsletter

continued to bring materials research to the public with the 11th year of the traveling exhibit, Strange Matter, reaching over 3.5 million exhibition attendees to date

sent 3,245 letters to Congress through Materials Voice

guided a coalition of over 20 organizations that culminated in legislation ensuring access to helium for scientists

introduced the MRS Graduate Student Mentoring Program, where 34 mentor/mentee pairs were matched and participated in a 12-month program to provide valuable insight into a future STEM career

2013 MRS Officers
Orlando Auciello
President
University of Texas at Dallas

Tia Benson Tolle
Vice President/President Elect
The Boeing Company

Bruce M. Clemens
Immediate Past President
Stanford University

Sean J. Hearne
Secretary
Sanda National Laboratories

Michael R. Fitzsimmons
Treasurer
Los Alamos National Laboratory

Todd M. Osman
Executive Director
Materials Research Society

2013 MRS Board of Directors
Ana Claudia Arias
University of California, Berkeley

Shenda M. Baker
Syndegen, Inc.

David Cohen
Weizmann Institute of Science, Israel

Duane B. Dimos
Sanda National Laboratories

Stephen J. Eglash
Stanford University

Chang-Beom Eom
University of Wisconsin—Madison

Susan Ermer
Lockheed Martin

Eric Garfunkel
Rutgers University

Sossina M. Haile
California Institute of Technology

Andrea M. Hodge
University of Southern California

Oliver Kraft
Karlsruhe Institute of Technology, Germany

Hideki Matsumura
Japan Advanced Institute of Science and Technology, Japan

Fiona C. Meldrum
University of Leeds, United Kingdom

Eric A. Stach
Brookhaven National Laboratory

Stephen K. Streiffer
Argonne National Laboratory

Susan E. Trolie-McKinstry
The Pennsylvania State University

2013 Committee Chairs

ACADEMIC AFFAIRS COMMITTEE
M. Stanley Whittingham
Binghamton University, State University of New York

AWARDS COMMITTEE
C. Barry Carter
University of Connecticut

GOVERNMENT AFFAIRS COMMITTEE
Nabil D. Bassim
U.S. Naval Research Laboratory

MEETINGS COMMITTEE
David S. Ginley
National Renewable Energy Laboratory

MEMBER ENGAGEMENT COMMITTEE
Yves J. Chabal
University of Texas at Dallas

PUBLIC OUTREACH COMMITTEE
Aditi Risbud
University of Utah

PUBLICATIONS COMMITTEE
Paul C. McIntyre
Stanford University
10 THINGS YOU SHOULD KNOW about the Materials Research Society Foundation

1. The Foundation advances the MRS mission to “promote communication for the advancement of interdisciplinary materials research to improve the quality of life.”

2. The Foundation funds all MRS core programs in education, outreach and peer recognition.

3. In January 2013, the Foundation announced six MRS University Chapter Special Project Awards—where dedicated funding supported projects proposed by our University Chapters.

4. In its first year, and from 30+ grassroots, member proposals received, three were funded by the Foundation for an approximate total of $30,000. All three were outreach projects geared to bring the excitement of scientific literacy and awareness to underrepresented minority students and teachers.

5. The Foundation supports all efforts of the MRS Awards Program, honoring those whose work has already had a major impact in materials research, as well as those whose work shows great promise for future leadership. In 2013, a new award recognizing excellence in post-doctoral research was announced.


7. Through the Foundation, MRS now offers free electronic memberships for students studying in developing countries. These memberships enable students to connect with colleagues from around the world—from forming MRS University Chapters to participating in live-streamed events via MRS OnDemand®.

8. MRS partnered with the National Science Foundation to bring 16 undergraduate students from 10 different minority-serving institutions to the 2013 MRS Fall Meeting. These students, from the Partnership for Research and Education in Materials (PREM) Program, participated in professional and leadership development and networking opportunities throughout the week.

9. In addition to hundreds of individual donors and program sponsors, four Corporate Partners supported the Foundation in 2013—Platinum Partner, Aldrich Materials Science; Silver Partners, Lake Shore Cryotronics and CRC Press—Taylor & Francis Group; and Bronze Partner, GE Global Research.

10. Learn how you can help make a difference or apply for project funding at www.mrs.org/foundation.
CALL FOR PAPERS

www.mrs.org/fall2014

Abstract Submission Deadline June 19, 2014
Abstract Submission Opens May 19, 2014

2014 MRS
FALL MEETING & EXHIBIT
November 30 - December 5, 2014 | Boston, Massachusetts

Meeting Chairs
Husam N. Alshareef  King Abdullah University of Science and Technology
Amit Goyal  Oak Ridge National Laboratory
Gerardo Morell  University of Puerto Rico
José A. Varela  University of São Paulo State – UNESP
In Kyeong Yoo  Samsung Advanced Institute of Technology

NANOMATERIALS AND SYNTHESIS
GG Nanomaterials for Harsh Environment Sensors
   and Related Electronic and Structural Components—
   Design, Synthesis, Characterization and Utilization
HH Flame and High-Temperature Synthesis of Functional Nanomaterials—
   Fundamentals and Applications
II Semiconductor Nanocrystals, Plasmonic Metal Nanoparticles,
   and Metal-Hybrid Structures
JJ 3D Mesoscale Architectures—
   Synthesis, Assembly, Properties and Applications
KK Directed Self-Assembly for Nanopatterning
LL Semiconductor Nanowires—Growth, Physics, Devices, and Applications
MM Carbon Nanotubes—Synthesis, Properties, Functionalization and Applications

THEORY, CHARACTERIZATION AND MODELING
NN Mathematical and Computational Aspects of Materials Science
DO In Situ Characterization of Dynamic Processes during Materials
   Synthesis and Transformation
PP Advances in Scanning Probe Microscopy for Multimodal Imaging
   at the Nanoscale
QQ Advances in Nanoscale Subsurface, Chemical and Time-Resolved
   Studies of Soft Matter
RR Scaling Effects in Plasticity—
   Synergy between Simulations and Experiments
SS Informatics and Genomics for Materials Development
TT Advanced Materials Exploration with Neutrons and X-Rays—
   The State-of-the-Art in the International Year of Crystallography

GENERAL
UU Structure-Property Relations in Amorphous Solids
VV Reactive Materials—Past, Present and Future
WW Defects and Radiation Effects in Advanced Materials
XX Bridging Scales in Heterogeneous Materials
YY Advanced Structural and Functional Intermetallic-Based Alloys
ZZ Hierarchical, High-Rate, Hybrid and Roll-to-Roll Manufacturing
AAA Undergraduate Research in Materials Science—Impacts and Benefits

BIOIMATERIALS AND SOFT MATERIALS
A Organic Bioelectronics
B Multifunctional Polymeric and Hybrid Materials
C Medical Applications of Noble Metal Nanoparticles (NMNs)
D Materials and Concepts for Biomedical Sensing
E Hard-Soft Interfaces in Biological and Bioinspired Materials—
   Bridging the Gap between Theory and Experiment
F Reverse Engineering of Bioinspired Nanomaterials
G Plasma Processing and Diagnostics for Life Sciences
H Micro/Nano Engineering and Devices for Molecular and Cellular
   Manipulation, Stimulation and Analysis
I Emerging 1D and 2D Nanomaterials in Health Care

ELECTRONICS AND PHOTONICS
J Emerging Non-Graphene 2D Atomic Layers and van der Waals Solids
K Graphene and Graphene Nanocomposites
L Optical Metamaterials and Novel Optical Phenomena Based
   on Nanofabricated Structures
M Materials and Technology for Nonvolatile Memories
N Frontiers in Complex Oxides
O Oxide Semiconductors
P Hybrid Oxide/Organic Interfaces in Organic Electronics
Q Fundamentals of Organic Semiconductors—
   Synthesis, Morphology, Devices and Theory
R Diamond Electronics and Biotechnology—Fundamentals to Applications

ENERGY AND SUSTAINABILITY
S Advances in Materials Science, Processing and Engineering
   for Fuel Cells and Electrolyzers
T Wide-Bandgap Materials for Solid-State Lighting
   and Power Electronics
U Organic Photovoltaics—Fundamentals, Materials and Devices
V Sustainable Solar-Energy Conversion Using
   Earth-Abundant Materials
W Perovskite-Based and Related Novel Material Solar Cells
Y Technologies for Grid-Scale Energy Storage
Z Materials Challenges for Energy Storage across Multiple Scales
AA Synthesis, Processing and Mechanical Properties of Functional
   Hexagonal Materials for Energy Applications
BB Molecular, Polymer and Hybrid Materials for Thermoelectrics
CC Advanced Materials and Devices for Thermoelectric
   Energy Conversion
DD Materials for Advanced Nuclear Technologies
EE Scientific Basis for Nuclear Waste Management XXXVIII
FF Materials as Tools for Sustainability