

Welcome From the Program Committee

doi:10.1017/S1431927614013142

Welcome to this Microscopy and Microanalysis meeting, M&M 2014 in Hartford, Connecticut!

The Microscopy Society of America, the Microanalysis Society, and the International Metallographic Society, and the Canadian Microscopy Society have excelled in bringing the latest and most innovative applications and instrumental developments from investigators in the biological and physical sciences using microscopy and microanalysis techniques. M&M 2014 features more than 37 symposia covering a broad range of topics, ample educational opportunities in the form of courses/tutorials and pre-meeting events including courses, a congress and a workshop. This year is special as we also welcome the Microscopical Society of Canada and the International Union of Microbeam Analysis Societies (IUMAS) who will hold their IUMAS-6 meeting prior to M&M 2014.

This year we are honored to welcome two world renowned scientists, Professor Sir. Colin Humphreys and Professor Brian Ford as this year's plenary speakers. Professor Humphreys will discuss how electron microscopy and atom probe tomography can save the world; by helping solve some of the world's energy problems and how they can also enable commercial exploitation of materials. His research interests include all aspects of electron microscopy and analysis, semiconductors (particularly gallium nitride), ultra-high temperature aerospace materials and superconductors. His work has ranged from defect image interpretation via electron diffraction theory to developing new electron microscope techniques. During his long and fruitful career, Prof. Humphreys received several international awards in recognition of his accomplishments, including the MSA Distinguished Scientist Award. He is a long-standing member of the Microscopy Society of America and was inducted as an MSA Fellow in 2009.

Our second plenary speaker is Prof. Brian Ford, an independent research biologist, author, and lecturer who regularly publishes on scientific issues for the general public. He has also been a television personality for more than 40 years. One of his best-known discoveries was of the original specimens of Antony van Leeuwenhoek, which were well preserved within the collections of the Royal Society of London since the seventeenth century. Prof. Ford's fabulous lecture will be "Images from the earliest microscopes ever made". A Fellow and Member of Court at Cardiff University, Brian is a former Fellow at the Open University, Visiting Professor at the University of Leicester and a Member of the Senior Combination Room at Gonville and Caius College, Cambridge University, where he is currently based.

This year we have two named symposium to honor the life and work of Oliver Wells and Gérard Simon. Oliver C. Wells, who was a champion of all things related to the SEM, was Sir Charles Oatley's second PhD student at Cambridge University to work on the SEM (after Dennis McMullan) and is considered one of the founding fathers of the field. He was a particularly appreciated researcher and analyst who was willing to try something new or different even when all the experts of the day had already dismissed the idea. He was a tinkerer and had a passion for electron detectors. He had great respect for the analyst who was knowledgeable about the SEM and could obtain a plethora of information about a sample by varying all the controllable microscope parameters. He enjoyed meeting to discuss the SEM, always encouraged people to publish their work, and strove to give credit to individuals who were overlooked for significant work. His pioneering work and life will be celebrated in a memorial symposium bearing his name.

To honor Dr. Wells', his memorial session solicited papers on a wide range of topics central to his legacy: "low loss" electron imaging, energy filtered imaging, very high energy imaging, the origin of secondary electrons, new electron detectors, novel uses for established detectors, reducing sample charging in the SEM, and varying SEM analysis conditions to show different information about a sample. Since Dr. Wells was one of the "fathers" of the SEM, the session is also intended to showcase the evolution of the SEM and show how the SEM has contributed to society as a whole. Dr. Wells was also the grandson of H.G. Wells.

Our other memorial session honours Professor Gérard T. Simon who made many contributions to the development of microscopy in Canada. Born in Switzerland in 1931, Gerard T. Simon began a successful career as a professor of medicine at the University of Geneva where he created the first electron microscopy laboratory in the Department of Pathology. In 1967, he immigrated to Canada with his family where he became director of the Department of Electron Microscopy of the Banting Institute in Toronto.

The career of Gerard T. Simon led him to take over the electron microscopy laboratory of the Faculty of Health Sciences at McMaster University in Hamilton. In recognition of the exceptional accomplishment of Professor Simon in the Microscopical Society of Canada, a merit scientific award named after him is given annually to students in the fields of biological, physical and material sciences. When he retired in 1996, the Honourable Jean Chrétien, Prime Minister of Canada presented him an award in recognition of his professional achievement.

This year's M&M promises to be one of the most exciting meetings ever. The Executive Program Committee and the Symposia Organizers have done a wonderful job planning the 2014 meeting. Each year we enhance and strengthen the Societies that come together to share and collaborate on scientific knowledge.

It is time for us to join together and participate in M&M 2014 as Mark Twain wrote of the city of Hartford in 1868, "Of all the beautiful towns it has been my fortune to see this is the chief." The 2014 M&M meeting promises to be the chief meeting of the year. The Executive Program Committee welcomes you to a celebration of microscopy and microanalysis in the city of Hartford, CT on Aug 3rd – Aug 7th 2014.

Executive Program Committee





David BellProgram Committee Chair
Harvard University



Mark Sanders Program Vice Chair University of Minnesota



Yoosuf PicardMAS Co-Chair
Carnegie Mellon University



James Martinez IMS Co-Chair National Aeronautics and Space Administration







Edward Vicenzi IUMAS Co-Chair Smithsonian Institution



Committee Members and Session Chairs

L. Anderson	Johns Hopkins University	J.E. Martinez	NASA Johnson Space Center
	Harvard University	M. Marko	Wadsworth Center
R. Arenal	Universidad de Zaragoza	M.R. McCartney	Arizona State University
	Carnegie Institution for Science		3M Corporation
M. Baram	McMaster University		Sandia National Laboratories
	Lee Kong Chian School of Medicine, Singapore		National Institute of Standards and Technology
	Synchrotron SOLEIL		Indiana University
	McMaster University		Duke University
	Pacific Northwest National Laboratory		Saarland University
	Bergen County Academies		Cornell University
P. Carpenter			University of Oxford
•	Colorado School of Mines		University of New England
	The Aerospace Corporation		University of New England
	Université Laval		Chalmers University
	Albrechts University	N. Osakabe	
	Oak Ridge National Laboratory	R.J. Parrington	
	Lawrence Berkeley National Laboratory		University of Toronto
	University of Western Australia		University of Illinois at Chicago
	Cornell University		Carnegie Mellon University
D. Cooper	French Alternative Energies and Atomic Energy		EC-JRC Institute for Transuranium Elements
	Commission		Bergen County Technical Schools
	National Institute of Standards and Technology	M. Radermacher	University of Vermont
	Exponent Inc.	Adam Robinson	University of Cambridge
	Pacific Northwest National Laboratory		McGill University
O. Dugne	French Alternative Energies and Atomic Energy	J.M. Rodenburg	University of Sheffield
	Commission		University of Vermont
	University of Minnesota		University of Minnesota
R. Erni			University of Minnesota
	Georgia Institute of Technology		Georgia Institute of Technology
	University of California at Berkeley		Max-Planck-Institute of Standards and Trahmalague
	L.A. Giannuzzi and Associates	V.S. Smentkowski	National Institute of Standards and Technology
	IBM T. J. Watson Research Center		
	Purdue University		Tohoku University
	Indiana University		Arizona State University
	Colorado School of Mines		Florida State University University of New South Wales
·	University of Western Australia		McGill University
	CEOS Gmbh		U.S. Naval Research Laboratory
	Hogue Metallography		Bruker-Nano
	McMaster University		Alfred University
	University of Victoria Oak Ridge National Laboratory	K. Suenaga	National Institute of Advanced Industrial
	University of Massachusetts Amherst	R. Suchaga	Science and Technology
	Vanderbilt University	H. Takahashi	
	University of Tennessee		U.S. Environmental Protection Agency
	University of Texas at Dallas		Oak Ridge National Laboratory
	University of Oxford	E.P. Vicenzi	
	University of Illinois at Chicago	J. Walmsley	
	Stanford University		Northwestern University
	Sandia National Laboratories		Brookhaven National Laboratory
	University of California, Davis		National Institute of Standards and Technology
	MIA Cellavie		Emory University
	Lawrence Livermore National Laboratory		Idaho National Laboratory
	National Institutes of Health		University of Western Sydney
	Technishe Universitat Dresden		University of Alberta
	Gatan Inc.		Max-Planck-Institut für Eisenforschung
	Albert Einstein College of Medicine		GmbH
C.M. MacRae		H. Zheng	Lawerence Berkeley National Laboratory
	Atomic Weapons Establishment UK		Brookhaven National Laboratory
	Ī		•