Microanalysis Society

Established 1966

Officers 2014

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MAS Past Presidents

1968 L.S. Birks
1969 K.F.J. Heinrich
1970 R.E. Ogilvie
1971 A.A. Chodos
1972 K. Keil
1973 D.R. Beaman
1974 P. Lublin
1975 J.E. Colby
1976 E. Lifshin
1977 J.I. Goldstein
1978 J.D. Brown
1979 D.F. Kyser
1980 O.C. Wells
1981 J.R. Coleman
1982 R.L. Myklebust
1983 R. Bolon
1984 D.C. Joy
1985 D.E. Newbury
1986 C.G. Cleaver
1987 C.E. Fiori
1988 W.F. Chambers
1989 D.B. Wittry
1990 A.D. Romig, Jr
1991 J.T. Armesrong
1992 D.B. Williams
1993 T.G. Huber
1994 J.A. Small
1995 J.J. McCarthy
1996 D.E. Johnson
1997 J.R. Michael
1998 R.B. Marinenko
1999 J.J. Friel
2000 C.E. Lyman
2001 R.W. Linton
2002 G.P. Meeker
2003 E.S. Etz
2004 P.K. Carpenter
2005 I.H. Musselman
2006 R. Gauvin
2007 P.G. Kotula
2008 I.M. Anderson
2009 C. Johnson
2010 E.P. Vicenzi
2011 J.H.J. Scott
2012 J.F. Mansfield
2013 Kristin Bunker

MAS Sustaining Members

Advanced MicroBeam, Inc.
Bruker Nano
CAMECA Instruments, Inc.
Carl Zeiss Microscopy, LLC
EDAX, Inc.
Electron Microscopy Sciences
FEI Company
Gatan, Inc.
Geller MicroAnalytical Laboratory
Hitachi High Technologies America, Inc.
Hysitron, Inc.
IBSS Group
IXRF Systems, Inc.
JEOL USA, Inc.
L.A. Giannuzzi & Associates, LLC
Lehigh University
Leica Microsystems, Inc.
Materials Analytical Services, LLC
Micron, Inc.
Oxford Instruments, Inc.
Probe Software, Inc.
PulseTor, LLC
SEMTEC Laboratories, Inc.
SEMTEch Solutions, Inc.
South Bay Technologies, Inc.
SPI Supplies/Structure Probe, Inc.
Ted Pella, Inc.
Thermo Fisher Scientific, Inc.
MAS Awards

All MAS Awards are recommended by the Awards Committee for approval by either the President or Council.

**Peter Duncumb Award for Excellence in Microanalysis**
Sponsored by Bruker Nano. The Duncumb Award recognizes outstanding achievement over a sustained period of time in the field of microanalysis through technical accomplishment, leadership, and educational and professional activities. The award winner is chosen through nomination by the MAS membership and selection by vote of MAS Council.

**Presidential Service Award**
This award honors a member of MAS for outstanding volunteer service to the society over a sustained period of time. The award winner is chosen annually by the MAS President.

**Presidential Science Award**
This award honors a senior scientist for outstanding technical contributions to the field of microanalysis over a sustained period of time. The award winner is chosen annually by the MAS President.

**K. F. J. Heinrich Award**
This award honors a scientist under the age of forty for distinguished technical contributions to the field of microanalysis. The award winner is chosen annually by the MAS President.

**M&M Student Awards**
These awards are presented annually to students presenting high quality technical papers with significant microanalysis content at the annual meeting. The award is comprised of complimentary registration and significant funds to defray travel expenses to attend the meeting. Application is accomplished by requesting consideration for a student award during the paper submission process. Qualified applicants must be full-time students at an accredited educational institution, must be first author of the paper submitted for consideration, and must present the paper in person at the meeting. MAS Distinguished Scholars receive invitations to attend MAS-sponsored functions throughout the week of the annual meeting, including the Presidents' Reception and the MAS Social. The award winners are chosen annually by the MAS President.

**MAS Outstanding Paper Awards**

These awards are presented annually to the authors of outstanding papers from the previous annual meeting in each of four categories. The four awards are as follows:

- **Birks Award**, for best contributed paper – Sponsored by JEOL USA, Inc.
- **Macres Award**, for best instrumentation or software paper – Sponsored by Oxford Instruments, Inc.
- **Cosslett Award**, for best invited paper – Sponsored by MAS
- **Castaing Award**, for best student paper – Sponsored by CAMECA Instruments, Inc.

Candidates for the MAS Outstanding Paper Awards are nominated, through consultation with symposium organizers and the MAS membership, by the MAS Directors in their final year of service at the time of the meeting, then approved by vote of MAS Council.
MAS Awards

Previous Award Winners

Presidential Science

1977 R. Castaing
1978 K.F.J. Heinrich
1979 P. Duncumb
1980 D.B. Wittry
1981 S.J. Reed
1982 R. Shimizu
1983 J. Philibert
1984 L.S. Birks
1985 E. Lifshin
1986 R. Myklebust
1987 O.C. Wells
1988 J.D. Brown
1989 J. Hillier
1990 T.E. Everhart
1991 J.I. Goldstein
1992 G. Lorimer & G. Cliff
1993 D.E. Newbury
1994 D.C. Joy
1995 G. Bastin
1996 A.V. Somlyo & A.P. Somlyo
1997 D.B. Williams
1998 F.H. Schamber
1999 R.A. Sareen
2000 R.F. Egerton
2001 P.E. Batson
2002 K. Keil
2003 P.E. Russell
2004 J.T. Armstrong
2005 M. Slodzian
2006 B.J. Griffin
2007 R.D. Leapman
2008 T.F. Kelly
2009 J.R. Michael
2010 J. Donovan
2011 P. J. Statham
2012 N. Zaluzec
2013 P. Echlin

Presidential Service

1977 P. Lublin
1978 D.R. Beaman
1979 M.A. Giles
1980 A.A. Chodos
1981 R. Myklebust
1982 J. Doyle
1983 D. Newbury
1984 J.I. Goldstein
1985 M.C. Finn
1986 V. Shull
1987 D.C. Joy
1988 G. Cleaver
1989 W.F. Chambers
1990 E. Fiori
1991 T.G. Huber
1992 E.S. Etz
1993 H.A. Freeman
1994 J.L. Worrall
1995 R.W. Linton
1996 P.E. Hlava
1997 J.A. Small
1998 J.J. McCarthy
1999 T.G. Huber
2000 R.B. Marinenko
2001 C.E. Lyman
2002 J.F. Mansfield
2003 I.H. Hesselman
2004 J.R. Michael
2005 G. Meeker
2006 H.A. Freeman
2007 P.K. Carpenter
2008 L.M. Ross
2009 V. Woodward
2010 S. Wight
2011 D. Kremser
2012 C. Johnson
2013 J.J. McGee

K.F.J. Heinrich

1986 P. Statham
1987 J.T. Armstrong
1988 D.B. Williams
1989 R. Leapman
1990 R.W. Linton
1991 A.D. Romig, Jr.
1992 S. Pennycook
1993 P.E. Russell
1994 J.R. Michael
1995 N. Lewis
1996 R. Gauvin
1998 V.P. Dravid
1999 J. Bruley
2000 H. Ade
2001 C. Jacobsen
2002 D. Wollman
2005 M. Watanabe
2006 M. Toth
2007 G. Kothleitner
2008 P.G. Kotula
2009 D. Drouin
2010 H. Demers
2011 J. Brewer
2012 E. Marquis
2013 J. LeBeau

Peter Duncumb Award for Excellence in Microanalysis

2007 D.B. Williams
2008 J.I. Goldstein
2009 D.E. Newbury
2010 D. Joy
2011 J. Michael
2012 J. Bentley
2013 E. Lifshin
Ondrej Krivanek graduated with a B.Sc. in Physics from Leeds University and a Ph.D. from Cambridge University, both in the UK. He was a postdoctoral fellow at Kyoto University, Bell Laboratories and the University of California at Berkeley, assistant professor of Physics at Arizona State University, director of research at Gatan, visiting professor at Tokyo Institute of Technology, CNRS Orsay and Cambridge University, and research professor at the University of Washington. In 1997, he co-founded Nion Company near Seattle in Washington State. He has since been Nion’s president and more recently also adjunct professor of physics at Arizona State University.

During his post-doc at Berkeley, Ondrej found that he liked thinking up, designing, making and then using pioneering new instruments more than working with existing ones, and later on that instrument development can often be done more effectively in a small company setting than in academia. Instruments whose design he originated, such as Gatan’s electron energy loss spectrometers and imaging filters, CCD cameras and DigitalMicrograph software, and more recently electron-optical aberration correctors and Nion’s whole electron microscopes and monochromators, can be found in many laboratories around the world, and they have helped to produce many scientific advances. The Nion microscopes in particular have been able to explore matter in unprecedented detail, including, very recently, performing phonon spectroscopy and spectrum-imaging in an electron microscope.

Ondrej has published over 240 papers and book chapters, with over 6000 citations. His work has been honored by an R&D 100 award, the Seto Prize of the Japanese Microscopy Society, the Duddell Prize of the Institute of Physics, the Distinguished Scientist Award of the Microscopy Society of America, an Honorary Fellowship in the Royal Microscopical Society, and an election to the British Royal Society.

Brian Gorman is currently an Associate Professor of Materials Science at the Colorado School of Mines. Brian earned his B.S., M.S., and Ph.D. in Ceramic Engineering at the University of Missouri – Rolla (now Missouri S&T) under the direction of Harlan Anderson. After his graduate work, he joined the Department of Materials Science and Engineering at the University of North Texas as a postdoctoral researcher in close collaboration with Texas Instruments. Brian went on to teach at UNT for 5 years while working on summer sabbatical at the National Renewable Energy Laboratory in Golden, CO. He joined the faculty at the Colorado School of Mines in 2009, again working closely with NREL and NIST-Boulder.

Brian’s research group focuses on developing and applying correlative atom probe tomography and transmission electron microscopy techniques to determine the atomic scale structure and chemistry of ceramics and semiconductors. Recently, his group has been focusing on ferroelectric and dielectric oxide ceramics, CdTe and CIGS photovoltaics, GaN nanostructures, transparent conducting oxides, and ion conducting oxides. Brian’s goal with APT is to directly determine the electrical, optical, and mechanical properties of these materials from the 3-D atomic scale chemistry. His group is also developing in-situ annealing techniques for atomic scale diffusion measurements using laser pulsed APT.

Brian has been an active contributor to the M&M annual meeting by chairing many technical sessions on FIB and APT. Currently, Brian serves as a Director of MAS. He has co-authored over 60 journal publications and has given over 70 invited presentations at national and international conferences.
Hamish L. Fraser graduated from the University of Birmingham (UK) with the degrees of B.Sc. (1970) and Ph.D. (1972). He was appointed to the faculty of the University of Illinois in 1973 (Assistant, Associate and Full Professor), before moving in 1989 to the Ohio State University (OSU) as Ohio Regents Eminent Scholar and Professor. He was appointed as a Senior Research Scientist at the United Technologies Research Center from 1979-1980. He has also been a Senior von Humboldt Researcher at the University of Göttingen, a Senior Visitor at the University of Cambridge, a visiting professor at the University of Liverpool, and spent a sabbatical leave at the Max-Planck Institut für Werkstoffwissenschaften in Stuttgart. He has been an Honorary Professor of Materials and Technology at the University of Birmingham since 1988. In 2014, he was recognized as an Honorary Professor at the Nelson Mandela Metropolitan University in Port Elizabeth, South Africa.

At present, he serves as Director of the Center for the Accelerated Maturation of Materials (CAMM) at OSU. He has been a member of the National Materials Advisory Board and the US Air Force Scientific Advisory Board. He has consulted for a number of national laboratories and several industrial companies. He is a Fellow of TMS, ASM, IOM3 (UK), and MSA. He has published over 380 papers in scholarly journals, and given over 280 invited presentations. He has graduated 48 doctoral students and 36 students graduating with the degree of M.S.

His work is based on research involving the development of advanced methods of materials characterization (involving high resolution and analytical electron microscopy), materials processing, and microstructure/property relationships. Dr. Fraser has an active research program in the development of new and improved materials, including: advanced materials characterization, direct 3-D microstructural representation, modeling microstructure/properties in light alloys, with an emphasis at present on Ti alloys, development of creep resistant beta-Ti alloys, development of low modulus beta-Ti alloys for orthopedic implants, and powder metallurgy, including additive manufacturing (LENS™, hot isostatic pressing (HIP), and Kinetic Metallization). More recently, he has concentrated effort on establishing and developing the CAMM.

Ian M. Anderson has been a member of the Microanalysis Society since 1991. He became involved in MAS through the Society’s technical programming, having organized numerous symposia beginning in 1996, the first Microscopy & Microanalysis (M&M) meeting. He served as Program Chair for M&M 2004. Ian has also been strongly involved in the Society’s governance. He has served as Director (1999-2001) and President (2007-2008) of the Society. More recently he has served as Chair of the Strategic Planning Committee (2010-2014).

Ian’s activities in MAS have focused on shoring up the foundations of the Society and in the involvement of a larger cross-section of the Society’s membership in its activities. He oversaw the transition to standing committees of roles that had been filled for many years by dedicated individuals, in particular the establishment of Finance and Awards Committees. Ian is honored to receive the Society’s Presidential Service Award.