

Microanalysis Society

Established 1966

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Officers 2014

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MAS Past Presidents

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

MAS Sustaining Members

Advanced MicroBeam, Inc.	Hysitron, Inc.	Probe Software, Inc.
Bruker Nano	IBSS Group	PulseTor, LLC
CAMECA Instruments, Inc.	IXRF Systems, Inc.	SEMTEC Laboratories, Inc.
Carl Zeiss Microscopy, LLC	JEOL USA, Inc.	SEMTEC Solutions, Inc.
EDAX, Inc.	L.A. Giannuzzi & Associates, LLC	South Bay Technologies, Inc.
Electron Microscopy Sciences	Lehigh University	SPI Supplies/Structure Probe, Inc.
FEI Company	Leica Microsystems, Inc.	Ted Pella, Inc.
Gatan, Inc.	Materials Analytical Services, LLC	Thermo Fisher Scientific, Inc.
Geller MicroAnalytical Laboratory	Micron, Inc.	
Hitachi High Technologies America, Inc.	Oxford Instruments, 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 pro-fessional activities. The award winner is chosen through nomi-nation 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 distin-guished technical contributions to the field of micro-analysis. 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 Presidentt.

MAS Outstanding Paper Awards

These awards are presented annually to the authors of out-standing papers from the previous annual meeting in each of four catego-ries. 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.F. 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. Musselman
 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
 1997 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 L. 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

MAS 2014 Awards

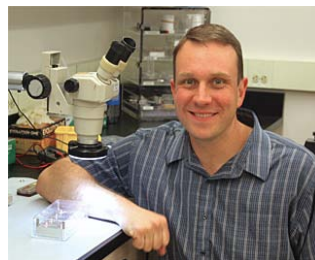


Duncumb Award for Excellence in Microanalysis Ondrej Krivanek

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 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.



K.F.J. Heinrich Award Brian Gorman

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.

MAS 2014 Awards



Presidential Science Award
Hamish L. Fraser

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 (LENSTM, hot isostatic pressing (HIP), and Kinetic Metallization). More recently, he has concentrated effort on establishing and developing the CAMM.



Presidential Service Award
Ian M. Anderson

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.