



Microanalysis Society Officers

Established 1968

OFFICERS 2015

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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. Armstrong
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
2013-14	K.L. Bunker

DUNCUMB AWARD FOR EXCELLENCE IN MICROANALYSIS

Sponsored by Bruker-Nano Analytics

Peter J. Statham (2015)
Oxford Instruments (U.K.)



Dr. Peter J. Statham has been a leader in the science and technology of microanalysis for 40 years, responsible for many contributions in the scientific literature (more than 90 papers) as well as patents and important advances in commercial energy-dispersive X-ray spectrometry measurement platforms. Beginning with an invited paper at the 1974 MAS conference in Ottawa, he has a long and distinguished history with the Microanalysis Society, serving our organization in many roles over the years, and he is the recipient of some of the most prestigious awards granted by our society.

Peter began his career in the United Kingdom, receiving a first degree in Physics from Cambridge before obtaining a PhD from the same institution based on a thesis entitled "Quantitative X-ray energy spectrometry". He then continued his work on energy-dispersive spectrometry in the United States as a post-doctoral fellow at the University of California at Berkeley, where he also began a long-term interest in image processing. Peter returned to the UK to accept a position at Link Systems, which in 1989 became part of the Oxford Instruments Group; he is currently Director of Research at Oxford Instruments Nanoanalysis.

Peter has served on MAS Council and on the Institute of Physics EMAG Committee, and he is currently the UK technical expert for energy-dispersive spectrometry appointed to the ISO/TC 202 Committee on Microbeam Analysis. It is perhaps not surprising that Peter has earned such recognition during his career in microanalysis because in 1986 then-MAS-President Gordon Cleaver presented Peter with the very first K. F. J. Heinrich Award, honoring his distinguished technical contributions as a scientist under the age of forty. Peter also received the Presidential Science Award from the Microanalysis Society in 2011 and Honorary Membership of EMAS in 2015.

Previous Awardees

2007	D.B. Williams
2008	J. I. Goldstein
2009	D.E. Newbury
2010	D. Joy
2011	J. Michael
2012	J. Bentley
2013	E. Lifshin
2014	O. L. Krivanek

KURT F.J. HEINRICH AWARD

Philippe Pinard (2015)
RWTH Aachen University, Central Facility for Electron Microscopy (Germany)



Philippe Pinard obtained a Master of Engineering degree in materials engineering from McGill University under the supervision of Prof. Raynald Gauvin and Dr. Pierre Hovington. He is currently pursuing a PhD at the RWTH Aachen University in Germany under the supervision of Prof. Joachim Mayer and Dr. Silvia Richter. His research interests include scanning electron microscopy, x-ray microanalysis, Monte Carlo simulations, and electron backscattered diffraction. As a programming enthusiast, he has developed throughout his studies three open source software for electron microscopy: EBSD-Image (post-processing of electron diffraction patterns), pyPENLOPE (application and graphical interface for the Monte Carlo code PENLOPE) and pyMonteCarlo (generic interface for Monte Carlo simulation programs).

In his young career, Philippe received several awards. In 2010, he was presented a Distinguished Scholar award from the Microanalysis Society and the Gerald T. Simon award from the Microscopical Society of Canada. He was honoured to be selected among the Early Career Scholars at the International Union of Microbeam Analysis Societies meeting in 2014. He received a Young Scientist award at the European Microbeam Analysis workshops in 2011 and 2013, as well as the Presidential award for the best contributed paper in 2015. For his studies, he was granted two scholarships from the Natural Sciences and Engineering Research Council of Canada, including the Julie Payette scholarship given to the top 24 Master candidates in the country. He is author or co-author of 9 papers in international journals and 12 conference presentations including 3 invited talks.

Previous Awardees

1986	P.J. Statham	2000	H. Ade
1987	J.T. Armstrong	2001	C. Jacobsen
1988	D.B. Williams	2002	D.A. Wollman
1989	R.D. Leapman	2005	M. Watanabe
1990	R.W. Linton	2006	M. Toth
1991	A.D. Romig, Jr.	2007	G. Kothleitner
1992	S.J. Pennycook	2008	P.G. Kotula
1993	P.E. Russell	2009	D. Drouin
1994	J.R. Michael	2010	H. Demers
1995	E.N. Lewis	2011	L.N. Brewer
1997	R. Gauvin	2012	E.A. Marquis
1998	V.P. Dravid	2013	J.M. LeBeau
1999	J. Bruley	2014	B.P. Gorman

PRESIDENTIAL SCIENCE AWARD

Mike Keenan (2015) Sandia National Laboratories (Ret.)



Prior to his retirement, Dr. Mike Keenan was a Distinguished Member of the Technical Staff at Sandia National Laboratories. He joined Sandia after being awarded a PhD in physical chemistry by the University of Illinois at Urbana-Champaign. Dr. Keenan spent most of his career in the Materials Science Center where his early research interests included the physical properties of polymers and packaging of electronic components. Subsequently, Dr. Keenan managed Sandia's Analytical Chemistry Department; following that, he took advantage of an opportunity to pursue long-standing interests in computing and statistics by applying them to the multivariate analysis of hyperspectral images. The analysis of such images, where a full spectrum is acquired at each point in a 2D or 3D sample, poses significant challenges ranging from the massive sizes the data sets generated by current imaging systems to the low signal-to-noise typical of the individual spectra.

Dr. Keenan's contributions included developing efficient algorithms to extract chemical information from spectral images in an optimal and unbiased manner, and providing approaches to deal with the critically important task of accounting for the noise characteristic of counting measurements. These accomplishments were recognized by a 2002 R&D 100 Award shared with Paul Kotula, also at Sandia, for Component Analysis Software. This development enabled the routine multivariate statistical analysis of large spectral images, given the modest computing resources generally available in the lab. Dr. Keenan was also member of the Sandia team that was awarded an R&D 100 Award in 2009 for the Hyperspectral Confocal Fluorescence Microscope System.

Since his retirement from Sandia, Dr. Keenan has continued to pursue research in this area as an independent scientist. His interests include developing and applying efficient numerical algorithms, general noise models, and new analysis approaches that accentuate selectable aspects of the multivariate models with the goal of improving interpretability.

Previous Awardees

1977	R. Castaing
1978	K.F.J. Heinrich
1979	P. Duncumb
1980	D.B. Wittry
1981	S.J.B. Reed
1982	R. Shimizu
1983	J. Philibert
1984	L.S. Birks
1985	E. Lifshin
1986	R.L. Myklebust
1987	O.C. Wells
1988	J.D. Brown
1989	J. Hillier
1990	T.E. Everhart
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	G. Slodzian
2006	B.J. Griffin
2007	R.D. Leapman
2008	T. F. Kelly
2009	J.R. Michael
2010	J.J. Donovan
2011	P.J. Statham
2012	N.J. Zaluzec
2013	P. Echlin
2014	H.L. Fraser

PRESIDENTIAL SERVICE AWARD

Stuart McKernan (2015) 3M



Stuart McKernan received his initial education at Bristol University in the UK, earning his B.Sc., M.Sc., and PhD in Physics. His interest in electron microscopy began as a final-year B.Sc. project on the handedness determination of quartz by electron microscopy. Following a postdoctoral fellowship at Bristol he moved to Cornell University in 1986 when he became a member of the Society. In 1991 Stuart moved to the University of Minnesota and also became a member of the Minnesota Microscopy Society where he has been a director, president, and webmaster as well as being involved locally with project MICRO. He now works for 3M in the electron microscopy group at the central research and analytical lab.

Stuart has supported MAS in a number of different capacities including serving as a Director on Council from 2008-10. He was the Program Chair for the Microscopy and Microanalysis 2000 meeting in Philadelphia, and coordinator of the database used to program annual meeting since 1998. He was the editor of the meeting proceedings from 2002 to 2012, and has attended every program planning meeting since 1996.

Previous Awardees

1977	P. Lublin
1978	D.R. Beaman
1979	M.A. Giles
1980	A.A. Chodos
1981	R.L. Myklebust
1982	J. Doyle
1983	D.E. Newbury
1984	J.I. Goldstein
1985	M.C. Finn
1986	V. Shull
1987	D.C. Joy
1988	C.G. Cleaver
1989	W.F. Chambers
1990	C.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.P. Meeker
2006	H.A. Freeman
2007	P.K. Carpenter
2008	L.M. Ross
2009	V. Woodward
2010	S.A. Wight
2011	D.T. Kremser
2012	C. Johnson
2013	J. McGee
2014	I.M. Anderson

MAS OUTSTANDING PAPER AWARDS (2014)

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

BIRKS AWARD:

Hideyuki Takahashi, JEOL

(For best contributed paper) - Sponsored by JEOL USA

Exciting Possibilities of Soft X-ray Emission Spectroscopy as Chemical State Analysis in EPMA and FE-SEM

MACRES AWARD:

Kirstin Alberi, National Renewable Energy Laboratory

(For best instrumentation or software paper) - Sponsored by Oxford Instruments, Inc.

Photoluminescence Imaging of Semiconductors

COSSLETT AWARD:

Xavier Llovet, University of Barcelona (Spain)

(For best invited paper) - Sponsored by MAS

Application of Monte Carlo Calculations to Improve Quantitative Electron Probe Microanalysis

CASTAING AWARD:

Chantelle Venter, University of Pretoria (South Africa)

(For best student paper) - Sponsored by CAMECA, Inc.

An In Ovo Investigation of the Ultrastructural Effects of the Heavy Metals Cadmium and Chromium on Liver Tissue



Sustaining Members

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