

2015 COUNCIL – OFFICERS & DIRECTORS

President	John Mansfield
Past President	Jeanette Killius
President Elect	Michael Marko
Secretary	Pamela Lloyd
Treasurer	Peter Crozier
Director	Esther Bullitt
Director	Chris Kiely
Director	Bill Russin
Director	Paul Voyles
Director	Paul Kotula
Director	Teresa Ruiz
Director, Local Affiliated Societies	Beverly Maleeff

APPOINTED OFFICERS

Archives	Michael Marko
Awards Committee Chair	Esther Bullitt
Bylaws	Jeanette Killius
Certification Board Chair	Pat Kysar
Educational Outreach Committee Chairs	Craig Queenan, Alyssa Calabro
Educational Resources Chair	Liz Wright
Fellowship Chair	Michael Marko
Finance	Peter Crozier
International Committee Chair	Raynald Gauvin
Membership Committee Chair	Jeffrey Lengyel

FOCUSED INTEREST GROUPS

Focused Interest Group Chairs	Jim DiOrio, Andy Vogt
3D Electron Microscopy in the Biological Sciences	Teresa Ruiz, Michael Radermacher
Aberration-Corrected Electron Microscopy	Paul Voyles
Atom Probe Field Ion Microscopy	Richard L. Martens
Cryo-Preparation	Caroline A. Miller
Diagnostic Microscopy	Jon Charlesworth
Electron Crystallography & Automated Mapping Techniques	Jorg Wiezorek
Electron Microscopy in Liquids and Gas (EMLG)	Renu Sharma
Facility Operation and Management	Randy Nessler
Focused Ion Beam	Nicholas Antoniou
Pharmaceuticals	Joseph Neilly
Information Technology	Nestor Zaluzec

MICROSCOPY AND MICROANALYSIS

Editor in Chief	Robert L. Price
Official Meeting and Program Guide	Richard E. Edelman, Richard Martens
Proceedings Editor	Gail J. Celio, John P. Shields
Microscopy Today Editor	Charles E. Lyman

M&M ANNUAL MEETING

Program Chair 2015	Mark A. Sanders
Program Chair 2016	Joseph Michael
Program Chair 2017	Jay Potts
Program Chair 2018	Yoosuf Picard
Nominating Committee Chair	Jeanette Killius
Placement Office	David Tomlin
Publications Liaison	John Mansfield
Sustaining Members Chair	Noel T. (Tom) Nuhfer
Student Committee Chair	James Kilcrease
Technologists' Forum	Caroline A. Miller
Association Management	Drohan Management Group
Managing Director	Robert Dziuban
Meeting Management	Nicole Guy, Conference Managers
Exhibition Management	Doreen Bonnema, Corcoran Expositions, Inc.

MSA PAST PRESIDENTS

1942	G.L. Clark	1967	Joseph J. Comer	1991	Charles Lyman
1943-44	R. Bowling Barnes	1968	John H. Luft	1992	Patricia Calarco
1945	James Hillier	1969	W.C. Bigelow	1993	Michael Issacson
1946	David Harker	1970	Russell Steere	1994	Robert Cardell
1947	William G. Kinsinger	1971	Robert M. Fisher	1995	Terence E. Mitchell
1948	Perry C. Smith	1972	Daniel C. Pease	1996	Margret Ann Goldstein
1949	F.O. Schmitt	1973	Benjamin Siegel	1997	C. Barry Carter
1950	Ralph W.G. Wyckoff	1974	Russell J. Barnett	1998	Ralph M. Albrecht
1951	Robley C. Williams	1975	Gareth Thomas	1999	David Joy
1952	R. D. Heidenreich	1976	Etienne de Harven	2000	Kenneth Downing
1953	Cecil E. Hall	1977	T.E. Everhart	2001	Ron Anderson
1954	Robert G. Picard	1978	Myron Ledbetter	2002	Stanley L. Erlandsen
1955	Thomas F. Anderson	1979	John Silcox	2003	Alwyn Eades
1956	William L. Grube	1980	Michael Beer	2004	Sara Miller
1957	John H.L. Watson	1981	John Hren	2005	M. Grace Burke
1958	Max Swerdlow	1982	Lee Peachey	2006	W. Gray (Jay) Jerome
1959	John H. Reisner	1983	David Wittry	2007	Michael O'Keefe
1960	D. Gordon Sharp	1984	J. David Robertson	2008	William T. Gunning
1961	D. Maxwell Teague	1985	Dale Johnson	2009	David J. Smith
1962	Keith R. Porter	1986	Robert M. Glaeser	2010	David W. Piston
1963	Charles Schwartz	1987	Linn W. Hobbs	2011	Nestor Zaluzec
1964	Sidney S. Breese	1988	Jean Paul Revel	2012	Janet Woodward
1965	Virgil G. Peck	1989	Ray Carpenter	2013	Ernest Hall
1966	Walter Frajola	1990	Keith R. Porter	2014	Jeanette Killius

2015

Rafal Dunin-Borkowski
E. Ann Ellis
Miguel Jose-Yacamán
Kent McDonald
Stanley Platek
Michael Postek
Susanne Stemmer
Michael Treacy

2014

Gianluigi Botton
Abhaya Datye
Marijia Gajdardziska-Josifovska
Lucille A. Giannuzzi
Thomas Kelly
John Mansfield
Martha McCartney
Xiaoqing Pan
David Piston
Wah Chiu
David J. Smith

2013

Timothy Baker
Nigel Browning
Hamish Fraser
David C. Muller
Michael Radermacher
David J. Smith
Eric Stach
David DeRosier

2012

Uli Dahmen
Ann Goldstein
Moon Kim
William J. Landis
Jingyue Liu
Beverly Maleeff
Bob Price
Frances Ross
David Seidman
Debra Sherman
Nan Yao

2011

Ueli Aebi
Phil Batson
Patricia Calarco-Isaacson
Peter A. Crozier
Alwyn Eades
Brendan J. Griffin
William T. Gunning, III
W. Gray Jerome
Richard D. Leapman
Hannes Lichte
Charles E. Lyman
Michael A. O'Keefe
George Perry
Robert B. Simmons
Janet H. Woodward

2010

Ralph M. Albrecht
Lawrence F. Allard
Kenneth H. Downing
Joseph I. Goldstein
Michael Isaacson
Michael K. Miller
George Pappas
Stephen J. Pennycook
John P. Petrali
Zhong L. Wang
David B. Williams

2009 (Inaugural Class)

Marc Adrian
Ron Anderson
James Bentley
Mary Grace Burke
Ray W. Carpenter
C. Barry Carter
Albert V. Crewe
Marc De Graef
Vinayak P. Dravid
Jacques Dubochet
Patrick Echlin
Raymond F. Egerton
Marilyn G. Farquhar
Don W. Fawcett
Joachim Frank

Robert M. Glaeser
Audrey M. Glauert
Raymond Kenneth Hart
Hatsujiro Hashimoto
Richard Henderson
Sir Peter B. Hirsch
Archibald Howie
Hugh E. Huxley
Takeo Ichinokawa
Sumio Iijima
Shinya Inoue
David C. Joy
Morris J. Karnovsky
Aaron Klug
Ondrej L. Krivanek
Myron C. Ledbetter
Dennis McMullan
Joseph Richard Michael
Sara Elizabeth Miller
Terrence E. Mitchell
Thomas Mulvey
Dale E. Newbury
Gertrude Rempfer
Jean-Paul Revel
Harald Rose
F.O. Schmitt
Caroline Schooley
Ryuichi Shimizu
John Silcox
Robert Sinclair
S. J. Singer
Fritiof Sjostrand
Kenneth C.A. Smith
Avril V. Somlyo
John C.H. Spence
Alasdair Steven
Peter R. Swann
Gareth Thomas
Kiyoteru Tokuyasu
Nigel Unwin
Joseph S. Wall
Oliver Wells
Michael J. Whelan
Nestor J. Zaluzec
Elmar Zeitler
Yimei Zhu

PHYSICAL SCIENCES (2015)

Peter Hawkes

Peter Hawkes, now retired, was Director of Research at the CNRS Laboratory of Electron Optics (now the CEMES) in Toulouse. He has a PhD (1963) and Sc.D. (1982) from the University of Cambridge, where he was a Research Fellow of Peterhouse and later, a Senior Research Fellow of Churchill College. He was Director of the Laboratory of Electron Optics in 1987 and received the Silver Medal of the CNRS in 1983. He was founder-president of the European Microscopy Society (1988-1990) and President of the French Microscopy Society (1998-1999), of which he is an honorary member. He has written several books on electron optics and electron microscopy as well as long book chapters, especially on electron lens aberrations. He writes regular round-ups of publications in the broad area of microscopy and charged-particle optics for Ultramicroscopy; he is a member of the editorial board of the Journal of Microscopy and Ultramicroscopy and editor-in-chief of Advances in Imaging & Electron Physics, launched more than 50 years ago by Bill Marton, who was the second recipient of the DSA award, in the same year as Albert Crewe (1976).

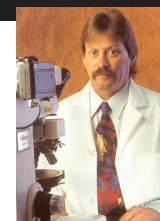


Over the years he has worked on many aspects of electron optics and electron image processing, with special reference to aberration studies, and has attempted to introduce image algebra into the world of electron imaging. He has also contributed to the history of electron microscopy, notable by editing "The Beginnings of Electron Microscopy" and attracting biographies of Ernst and Helmut Ruska, Bodo von Borries and Jan Le Poole and a tribute to Sir Charles Oatley to the Advances and writing histories of aberration correction in electron microscopy.

In 1987, he was elected Fellow of the Optical Society of America, sponsored by Emil Wolf.

BIOLOGICAL SCIENCES (2015)

Michael Davidson, Florida State University Director, Optical Microscopy Division of the National High Magnetic Field Laboratory



Michael W. Davidson is the director of the Optical Microscopy Division of the National High Magnetic Field Laboratory at The Florida State University. As research scientist, he has been deeply involved in microscopy for over 3 decades and his scientific interests include the packaging of DNA into viruses, liquid crystallinity in biological systems and is considered one of the world's experts in developing fluorescent probes and techniques for microscopy; a subject he has published on extensively. He has coauthored numerous research articles with some of the top researchers in their fields, including several Nobel Laureates, and the imaging tools that he helped create have deeply impacted the work of hundreds of microscopists around the world. His facility at FSU houses the largest and most diverse collection of fluorescent proteins and related tools which he has made readily available and that has become an indispensable resource to the biomedical research community. He created several immensely popular educational websites, including Molecular Expressions, Nikon's MicroscopyU and the Olympus Microscopy Resource Center, all providing a tremendous resource not only to those wishing to learn about microscopy, but also to expert microscopists wishing to broaden their knowledge base. Mike is the driving force behind the two preeminent microphotography competitions; Nikon's Small World and Olympus' BioScapes, both of which recognize the intersection of art and science under the microscope and draw thousands of entries annually. His popular "Pioneers in Optics" series he writes for Microscopy Today serves as a K-12 educational resource to introduce kids to optics and microscopy. Mike has mentored hundreds of students who have come through his laboratory on their way to careers in biomedical research and imaging and his tireless work and dedication to advancing the state-of-the-art in optical microscopy will have an enduring impact on science.

	BIOLOGICAL SCIENCES	PHYSICAL SCIENCES
1975	Keith Porter	Robert Heidenreich
1976	L.L. Marton	Albert Crewe
1977	Robley C. Williams	James Hillier
1978	Thomas Anderson	Vernon E. Cosslett
1979	Daniel C. Pease	John M. Cowley
1980	George E. Palade	Gareth Thomas
1981	Sanford L. Palay	Vladimir K. Zworykin
1982	Richard M. Eakin	Benjamin M. Siegel
1983	Hans Ris	Otto Scherzer
1984	Cecil E. Hall	Sir Charles Oatley
1985	Gaston Dupouy	Ernst Ruska
1986	F. O. Schmitt	Peter Hirsch
1987	Marilyn G. Farquhar	Jan B. LePoole
1988	Morris J. Karnovsky	Hatsujiro Hashimoto
1989	Don W. Fawcett	Elmar Zeitler
1990	Audrey M. Glauert	Gertrude F. Rempfer
1991	Hugh E. Huxley	Archie Howie
1992	Fritiof Sjöstrand	Oliver C. Wells
1993	Jean-Paul Revel	Kenneth C.A. Smith
1994	Andrew P. Somlyo	Dennis McMullan

	BIOLOGICAL SCIENCES	PHYSICAL SCIENCES
1995	Shinya Inoue	David B. Wittry
1996	Myron C. Ledbetter	John Silcox
1997	S. J. Singer	Peter R. Swann
1998	Avril V. Somlyo	Michael J. Whelan
1999	Sir Aaron Klug	Takeo Ichinokawa
2000	K. Tokuyasu	S. Amelinckx
2001	Patrick Echlin	Thomas Mulvey
2002	Marc Adrian	Ryuichi Shimizu
2003	Joachim Frank	Harald Rose
2004	Robert M. Glaeser	Raymond F. Egerton
2005	Richard Henderson	Sumio Iijima
2006	Joseph S. Wall	John C.H. Spence
2007	Nigel Unwin	Terence E. Mitchell
2008	Alasdair Steven	Ondrej L. Krivanek
2009	Jacques Dubochet	Robert Sinclair
2010	George Papas	Michael Isaacson
2011	Ueli Aebi	Hannes Lichte
2012	Timothy Baker	Ulrich Dahmen
2013	David DeRosier	C. Barry Carter
2014	Wah Chiu	David J. Smith

Major Society Awards



BURTON MEDAL AWARD

Andrew Minor (2015)
University of California, Berkeley



Andrew Minor received a B.A. in Economics and Mechanical Engineering from Yale University and his MS and PhD in Materials Science and Engineering from the University of California, Berkeley. Currently, he is an Associate Professor at U.C. Berkeley in the Department of Materials Science and Engineering and also holds a joint appointment at the Lawrence Berkeley National Laboratory where he is the Acting Director of the National Center for Electron Microscopy in the Molecular Foundry. He has co-authored over 120 publications and presented over 80 invited talks on topics such as nanomechanics, lightweight alloy development, characterization of soft materials, and in situ TEM technique development. He was twice awarded the LBL Materials Science Division Outstanding Performance Award (2006, 2010) and in 2012 he was awarded the AIME Robert Lansing Hardy Award from TMS.

YEAR RECIPIENT

1975	James Lake
1976	Michael S. Isaacson
1977	David C. Joy
1978	Robert Sinclair
1979	Norton B. Gilula
1980	John C.H. Spence
1981	Barbara J. Panessa-Warren
1982	Nestor J. Zaluzec
1983	Ronald Gronsky
1984	David B. Williams
1985	Richard D. Leapman
1986	J. Murray Gibson
1987	Ron A. Milligan
1988	A.D. Romig, Jr.
1989	Laurence D. Marks
1990	W. Mason Skiff
1991	Joseph R. Michael
1992	Kannan M. Krishnan
1993	Joseph A.N. Zasadzinski
1994	Jan M. Chabala
1995	Joanna L. Batstone
1996	Vinayak P. Dravid
1997	P.M. Ajayan
1998	Ian M. Anderson
1999	Zhong Lin Wang
2000	Eva Nogales
2001	Jian Min Zuo
2002	Nigel D. Browning
2003	Frances M. Ross
2004	Z. Hong Zhou
2005	David J. Larson
2006	David A. Muller
2007	Peter D. Nellist
2008	Steven J. Ludtke
2009	Eric Stach
2010	Sergei V. Kalinin
2011	Radostin Denev
2012	David Ginger
2013	John L. Rubinstein
2014	Maria Varela

ALBERT CREWE AWARD

Meng Gu (2015)
University of California, Davis



Meng Gu received his B.S. degree (2008) in materials science and engineering in Shanghai Jiao Tong University in China and PhD degree (2011) in materials science in the University of California Davis. His PhD research centered on the growth and atomic scale characterization of complex oxide thin films using pulsed laser deposition and aberration corrected scanning transmission electron microscopy (STEM). After joining Environmental Molecular Sciences Laboratory in the Pacific Northwest National Laboratory in 2011, his research shifted to the study of energy materials including batteries materials, and catalyst, metal-oxide electronics. He has developed the operando setup of a nano-battery for in-situ TEM observations and three dimensional chemical imaging using X-ray energy dispersive spectroscopy (XEDS) tomography. Recently, Dr. Gu has joined Dow Corning Corporation as a senior analytical scientist focusing on Cryo-TEM study of soft materials and advanced microscopy analysis of silicon alloy, catalysis, and solar energy. He has 63 peer-reviewed journal publications and 20 meeting abstracts and proceedings. His publications have been highlighted by U.S. DOE, PNNL, SLAC national lab, London Center for Nanotechnology, Imperial College London and other social media.

YEAR RECIPIENT

2012	Wu Zhou
2013	Lena Fitting-Kourkoutis
2014	Jinwoo Hwang

MORTON D. MASER DISTINGUISHED SERVICE AWARD

JoAn Hudson (2015) Clemson University

JoAn Hudson has been an MSA member since 1982. She served on the Education Committee (1989-1994) and was appointed chair of the committee from 1997-1999. Elected to Council as Biological Director (1997-1999), she was appointed to the Editorial Board (2000-2003) and the Publications Committee (2005-2008). Two terms as Elected Treasurer, from 2008-2013, are followed by her attention to the ongoing concerns and interests of MSA.

JoAn's professional work began at Clemson University in 1974. In 2001, she joined CAMCOR at the University of Oregon where she taught and served as Director of the Electron Microscopy, Confocal and Histology Facilities. She returned to Clemson University in 2004 where she was appointed Director of the Electron Microscopy Facility in the newly founded Advanced Materials Laboratory. As Research Professor in the Department of MSE and as Director of the EM Facility, JoAn retired from Clemson University in 2014.



GEORGE PALADE AWARD

Alexey Amunts (2015) Medical Research Council, Laboratory of Molecular Biology (U.K.)

During his PhD at Tel Aviv University, Alexey Amunts elucidated X-ray crystal structure of plant Photosystem I. It is a multi-subunit complex of protein and pigment components that catalyzes the capture of sunlight and its transformation into electrochemical energy, regarded as the most efficient energy conversion device in nature.

Since 2011, Alexey has been a postdoctoral researcher in Venki Ramakrishnan's lab at MRC-LMB. He is working on elucidating the molecular mechanism of how the mitochondrial genetic code is translated into proteins, with the aim of harnessing this knowledge to develop novel therapeutics. Recently, the team achieved a major breakthrough by resolving the architecture of mitochondrial protein synthesis machinery at atomic details entirely by cryo-EM. Methodologically, this work shows that we are moving toward a time when structural knowledge of otherwise intractable multi-component, low abundant complexes that are at the heart of many biological processes will be determined by cryo-EM that would transform the structural biology.



YEAR RECIPIENT

1992	Ronald Anderson
	G. W. Bailey
	Frances Ball
	Blair Bowers
	Deborah Clayton
	Joseph Harb
	Kenneth Lawless
	Morton D Maser
	Caroline Schooley
	John H.L. Watson
1993	E. Laurence Thurston
1994	Richard Crang
1995	Raymond K. Hart
1996	José Mascorro
1997	William T. Gunning III
1998	Nestor J. Zaluzec
1999	Charles Lyman
2000	Barbara A. Reine
	Hildegard H. Crowley
2002	Beverly Maleeff
2003	M. Grace Burke
2004	Ralph Albrecht
2005	W. Gray (Jay) Jerome
2006	Jeanette Killius
2007	Robert L. Price
2008	Stuart McKernan
2010	Pamela Lloyd
2011	Janet Woodward
2012	Gina Sosinsky
2013	Caroline Miller
2014	Mike Marko

YEAR RECIPIENT

2012	Gabriel Lander
2013	Peng Ge
2014	Ricardo Guerrero-Ferreira

HILDEGARD H. CROWLEY OUTSTANDING TECHNOLOGIST AWARD FOR BIOLOGICAL SCIENCES



Norman Olson (2015)
University of California, San Diego

Norm Olson was born and grew up in a small town in Northwestern Minnesota. He got his Bachelor of Arts degree in Biology from Concordia College in Moorhead, Minnesota and his Master's degree from North Dakota State University. He did his graduate research in electron microscopy at NDSU. Norm then taught college for several years before accepting a microscopist position at Purdue University. There he did research on the structure of viruses and he worked to set up a state-of-the-art microscopy facility. In 2004, Norm followed his supervisor, Dr. Timothy Baker, out to the University of California San Diego where he set up another state-of-the-art-electron microscopy facility. Since that time he has mentored well over 100 graduate students. Norm retired in October of 2014.

CHUCK FIORI OUTSTANDING TECHNOLOGIST AWARD FOR PHYSICAL SCIENCES



Masahiro Kawasaki (2015)
JEOL

Masahiro Kawasaki is a technical director at JEOL USA Inc. and has been enthusiastically involved in the application and development of electron microscopy techniques since joining JEOL Ltd. in 1985. He received Bachelor of Engineering and Doctor of Engineering degrees from Kyoto Institute of Technology in 1985 and 1998, respectively. In the 1990s, he collaborated on the development of JEOL's first commercial field emission (FE) high-resolution analytical TEM. In 1996 when a scanning unit was installed for general scanning purposes on an FE-TEM, he became curious about high resolution STEM imaging and successfully developed the electron optics conditions that enabled the first atomically resolved Z-contrast imaging capability. He collaborated with a number of researchers on materials characterization using this new STEM technique with TEM. He has continued to work with various researchers by assisting them to advance microscopy techniques including phase plate, high energy backscattered electron and analytical electron microscopies.

YEAR RECIPIENT

1993	Ben O. Spurlock
1994	Bernard J. Kestel
1995	Kai Chien
1996	David W. Ackland
1997	John P. Benedict Stanley J. Klepeis
1998	Charles J. Echer Hilton H. Molehauer
1999	John C. Wheatley John M. Basgen
2000	Nancy Crise Smith
2001	Conrad G. Bremer
2002	José A. Mascorro
2003	Edward A. Ryan
2004	Mark C. Reuter
2005	Chris Nelson John J. Bozzola
2007	Thomas Deerinck
2009	Lynne Gignac Mary Morpew
2010	E. Ann Ellis
2011	Robert Grassucci
2012	Kunio Nagashima
2013	Robyn Roth K. Shawn Reeves
2014	Hong Yi Eddy Garcia-Meitin

(as of May 20, 2015)

American Institute of Physics
Carl Zeiss Microscopy, LLC
Carnegie Mellon University
Columbian Chemicals Co
Diatome U.S.
Direct Electron, LP
E.A. Fischione Instruments, Inc.
Electron Microscopy Sciences
EXpressLO LLC
FEI Company
Hitachi High Technologies America
HREM Research Inc.
ibss Group, Inc.
International Centre for Diffraction Data
IXRF Systems, Inc.
Ladd Research Industries
Lehigh Microscopy School
Leica Microsystems, Inc.
Mager Scientific, Inc.
Micron, Inc.
Olympus Soft Imaging Solutions- GMBH
Oxford Instruments
PulseTor, LLC
Scientific Instrumentation Services, Inc.
SGX Sensortech (MA) Ltd
Ted Pella Inc.
Tescan USA Inc.
Tousimis Research Corporation