

## MRS reports election results for 2016

[www.mrs.org/governance](http://www.mrs.org/governance)

Members of the Materials Research Society (MRS) have elected a vice president (who will serve as president in 2017) and five directors to join the 2016 MRS Board of Directors. In addition, the MRS Board of Directors has appointed the next MRS Treasurer. The Board is composed of the officers and 12 to 21 directors, established by Board resolution.

The officers of the Society are the president (who serves as chair of the Board), the vice president (who is also the president-elect), the secretary, the treasurer (a position appointed by the Board of Directors), and the immediate past president. Terms of office expire at the end of the year indicated in parentheses. The asterisk (\*) designates those who are newly elected. The annual election ended August 24, 2015.

The Board of Directors is organized into the following governing committees: Audit, External Relations, Finance, Governance, Nominating, Operational Oversight, and Planning. Chairs and Members of the committees are either designated by policy or are appointed by the president.

### 2016 MRS Officers

#### *President*

**Kristi S. Anseth**  
University of Colorado Boulder

#### *Immediate Past President*

**Oliver Kraft**  
Karlsruhe Institute of Technology

#### *Vice President (President-Elect)*

\* **Susan Trolier-McKinstry**  
The Pennsylvania State University

#### *Secretary*

**Sean J. Hearne**  
Sandia National Laboratories

#### *Treasurer*

\* **David J. Parrillo**  
The Dow Chemical Company

#### *Executive Director*

**Todd M. Osman**  
Materials Research Society

### 2016 Board of Directors

**Charles T. Black (2017)**  
Brookhaven National Laboratory

**Alexandra Boltasseva (2016)**  
Purdue University

**C. Jeffrey Brinker (2016)**  
Sandia National Laboratories and  
The University of New Mexico

\* **Matthew Copel (2018)**  
IBM

\* **Paul S. Drzaic (2018)**  
Apple, Inc.

\* **Yury Gogotsi (2018)**  
Drexel University

**Hideo Hosono (2016)**  
Tokyo Institute of Technology

\* **Young-Chang Joo (2018)**  
Seoul National University

**Karen L. Kavanagh (2017)**  
Simon Fraser University

**Kornelius Nielsch (2016)**  
Leibniz Institute of Solid State and  
Materials Research

**Christine Ortiz (2017)**  
Massachusetts Institute of  
Technology

**Sabrina Sartori (2017)**  
University of Oslo

\* **Magaly Spector (2018)**  
The University of Texas at Dallas

**Loucas Tsakalacos (2016)**  
General Electric–Global Research  
Center

**Anke Weidenkaff (2017)**  
University of Stuttgart

### 2016 SIAM Conference on Mathematical Aspects of Materials Science to be held May 8–12 in the United States [www.siam.org/meetings/ms16](http://www.siam.org/meetings/ms16)

The 2016 Society for Industrial and Applied Mathematics (SIAM) Conference on Mathematical Aspects of Materials Science will be held May 8–12, in Philadelphia, Pa. It is sponsored by the SIAM Activity Group on Mathematical Aspects of Materials Science. The organizing committee co-chairs are Peter Smereka of the University of Michigan and David Srolovitz of the University of Pennsylvania.

This conference focuses on interdisciplinary approaches that bridge mathematical and computational methods to the science and engineering of materials, including all electronic structure, atomistic simulation, microstructures, continuum

descriptions, thermodynamics, kinetics, analytical methods, stochastic methods, and computational methods, as well as approaches and questions that are arising within the Materials Genome.

Invited plenary speakers are Kaushik Bhattacharya of the California Institute of Technology, USA; Vasily Bulatov of the Lawrence Livermore National Laboratory, USA; Gábor Csányi of the University of Cambridge, United Kingdom; Mikko Haataja of Princeton University, USA; David Kinderlehrer of Carnegie Mellon University, USA; Carl Krill III of Universität Ulm, Germany; Erica Lilleodden of the Helmholtz-Zentrum Geesthacht, Germany; John Lowengrub of the University of

California–Irvine, USA; Ping-Bing Ming of the Chinese Academy of Sciences, China; Felix Otto of the Max Planck Institute for Mathematics in the Sciences, Germany; Christof Schütte of Freie Universität Berlin, Germany; Reidun Twarock of the University of York, United Kingdom; and Xiao-Ping Wang of Hong Kong University of Science and Technology, China.

The submission deadline for contributed lectures, posters, and mini-symposium presentation abstracts is December 15. The travel fund application deadline for students and postdocs is December 4. Pre-registration ends April 11, 2016. For more information, go to [www.siam.org/meetings/ms16](http://www.siam.org/meetings/ms16). □



# 2015 MRS<sup>®</sup> FALL EXHIBITORS

## HYNES CONVENTION CENTER | LEVEL 2

### Exhibit Hours

**Tuesday, December 1** 11:00 am – 5:30 pm

**Wednesday, December 2** 11:00 am – 5:30 pm

**Thursday, December 3** 10:00 am – 1:30 pm

**A & N Corporation** Booth 517  
www.ancorp.com  
Vacuum Chambers; Vacuum Fittings; Vacuum Valves

**abcr GmbH** Booth 1312  
www.abcr.de  
Ceramic Powders; Metal-organics; Silanes

**ACI ALLOYS, Inc.** Booth 212  
www.acialloys.com  
Sputtering Targets; Evaporation Material; Crucible Liners;  
Other Custom Alloy Needs

**Across International LLC** Booth 213  
www.acrossinternational.com  
Material Processing Equipment; Vacuum Ovens

**ACS Publications** Booth 125  
pubs.acs.org  
ACS Publications Materials Science Portfolio

**Adama Innovations Ltd.** Booth 322  
www.adamainnovations.com  
Diamond AFM Cantilevers

**AdValue Technology, LLC** Booth 609  
www.advaluetech.com  
Crucibles; Tubes and Rods; Sample Pans for Thermal Analysis

**Advanced Energy** Booth 829  
www.advanced-energy.com  
Ascent AP; High Voltage Power Supplies; Precision Optical  
IR Pyrometers

**Advanced Polymer Materials Inc.** Booth 906  
www.apmpolymers.com  
Biodegradable Polymers; Block Copolymers;  
Functional Copolymers

**Advanced Research Systems, Inc.** Booth 316  
www.arscryo.com  
4K Cryogenic Probe Station; Nanoscience Optical Cryostat;  
Closed-Cycle Cryocoolers

**Aerotech, Inc.** Booth 910  
www.aerotech.com  
Q-Series Piezo Stages; Q-Lab Controller; ANT Stages

**AIP Publishing** Booth 117  
journals.aip.org  
Physics Journals; Conference Proceedings; Digital Archive

**AIST-NT, Inc.** Booth 1308  
www.aist-nt.com  
Atomic Force/Scanning Probe Microscopes; Combined  
AFM & Raman Spectroscopy Systems

**AIXTRON SE** Booth 407  
www.aixtron.com  
MOCVD, PECVD, CVD, OVPD, PVPD and  
ALD Deposition Equipment

**AJA International, Inc.** Booth 800  
www.ajaint.com  
Deposition Systems; Sputter Sources; Sputter Targets

**Aldrich Materials Science** Booth 1024  
www.sigmaaldrich.com/matsci  
Organic and Printed Electronic Materials; Nanomaterials;  
Materials for Energy and Electronics; Biomaterials; Graphene

**Alfa Aesar, a Johnson Matthey Company** Booth 912  
www.alfa.com  
High-Purity Metals; Evaporation Materials; Ceramics

**Alicat Scientific, Inc.** Booth 707  
www.alicat.com  
Mass Flow Controllers; Pressure Controllers

**Allwin21 Corp.** Booth 1118  
www.allwin21.com  
Licensed Manufacturer of AG Associates 610 RTP; Etchers,  
Ashers and Sputter for III-V Process; RTP for Si and RTP

**American Physical Society** Booth 124  
journals.aps.org  
Publications

**Anasys Instruments Corp.** Booth 1006  
www.anasysinstruments.com  
Nanoscale Infrared Spectroscopy (nanoIR, nanoIR2);  
afm+; nanoTA2

**Andeen-Hagerling, Inc.** Booth 421  
www.andeen-hagerling.com  
Capacitance Bridges; Capacitance Standards

**Angstrom Engineering Inc.** Booth 928  
www.angstromengineering.com  
PVD, CVD, Sputter Deposition Systems; Electron Beam &  
Thermal Evaporation Systems; R&D and Pilot Production  
Systems; Robotic Cluster Tools

**Angstrom Sciences Inc.** Booth 1307  
www.angstromsciences.com  
Magnetrons; Sputtering Material; Sputtering Cathodes

**Angstrom Scientific Inc.** Booth 523  
www.angstrom.us  
Electron Microscopes and Accessories; AFM, SPR, TEM  
Holders; Nano-manipulators

**Annealsys** Booth 806  
www.annealsys.com  
RTP; CVD; DLI-CVD; MOCVD; ALD; RTCVD

**Applied NanoStructures, Inc.** Booth 1206  
www.apnano.com  
AFM Scanning Thermal Imaging; SPM Probes; MEMS

**Applied Surface Technologies** Booth 602  
www.co2clean.com  
CO<sub>2</sub> Snow Jet Cleaning; Surface Cleaning;  
Substrate Cleaning

**Applied Vacuum Technology, LLC** Booth 1212  
www.appliedvacuum.com  
UHV Chambers; UHV Flanges; Custom Components  
and Assemblies

**Aramco** Booth 317  
www.aramco.jobs  
Advanced Materials Research; Membranes; Catalysis

**Asahi Spectra Co., Ltd.** Booth 1030  
www.asahi-spectra.com  
Xenon Light Source for Photoreaction; Monochromatic  
Illuminator; Optical Filters

**Asylum Research, an Oxford Instruments Company** Booth 510  
www.AsylumResearch.com  
Atomic Force Microscopes; Scanning Probe Microscopes

**attocube systems AG** Booth 605  
www.attocube.com  
Piezo Positioning Systems; Low-vibration Cryogen-free  
Cryostats; Low Temperature Scanning Probe and  
Confocal Microscopes

**B&W Tek, Inc.** Booth 706  
www.bwtek.com  
Raman Spectrometers; Spectrometer Modules; Lasers;  
LIBS; NIR Spectrometers

**Barnett Technical Services LLC** Booth 1313  
www.barnett-technical.com  
Micromanipulators; Electron Beam-Induced Current;  
Raman Imaging

**Bio-Logic USA, LLC** Booth 922  
www.bio-logic.us  
Potentiostat; Battery Cycler; Scanning Probe Microscopy

**Bio Materials Analysis Technology Inc. (Bio MA-Tek)** Booth 1208  
www.bioma-tek.com  
Disposable *In-situ* TEM; K-kit Loading Tools;  
Liquid TEM Services

**Biolin Scientific, Inc.** Booth 1205  
www.biolinscientific.com  
Quartz Crystal Microbalance with Dissipation; Precision  
Tensiometers; Deposition Troughs

[www.mrs.org/fall-2015-exhibit](http://www.mrs.org/fall-2015-exhibit)

**BioNavis Ltd.** Booth 523  
www.bionavis.com  
Semi-Automated and Automated MP-SPR Instruments;  
MP-SPR Sensors

**Blue Wave Semiconductors, Inc.** Booth 801  
www.bluewavesemi.com  
Pulsed Laser Deposition System; Hot-Filament CVD System;  
Substrate Heaters

**BNNT, LLC** Booth 1029  
www.bnnt.com  
Boron Nitride Nanotubes

**Brookhaven Instruments Corporation** Booth 606  
www.brookhaveninstruments.com  
Particle Size Analyzers; Zeta Potential Analyzers;  
Molecular Weight Analyzers

**Bruker** Booth 301  
www.bruker.com  
X-Ray Diffraction; X-Ray Fluorescence; Near Infrared  
Spectroscopy; Raman Spectroscopy

**Bruker AFM Probes** Booth 320  
www.BrukerAFMProbes.com  
AFM Probes; AFM Accessories

**Bruker Nano Surfaces** Booth 300  
www.bruker.com/nano  
Atomic Force and 3D Optical Microscopes; Stylus Profilers;  
Tribometers; Nano-, Micro- and Macro-Indenters;  
Scratch Testers

**Cambridge Polymer Group** Booth 808  
www.campoly.com  
Contract Research; Analytical Testing;  
Materials Formulation

**Cambridge University Press** The Hub, Hall D  
www.cambridge.org  
Books; Journals

**Carl Zeiss X-Ray Microscopy, Inc.** Booth 310  
www.zeiss.com/microscopy  
Microscopes; Cameras; Imaging Systems

**Chemat Technology, Inc.** Booth 201  
www.chemat.com  
Spin Coating; Dip Coating; Chemical Precursors

**COSMOTEC, Inc.** Booth 722  
www.cosmotec.us  
UHV Electrical Feedthrough; Ceramic-to-Metal Bonding  
Products; In-Vacuum Connectors

**CRAIC Technologies, Inc.** Booth 505  
www.microspectra.com  
UV-visible-NIR microscopes; Microspectrophotometers;  
Raman Microspectrometers

**CRC Press-Taylor & Francis** Booth 101  
www.crcpress.com  
Books; Journals; Online Content

**Cryogenic Control Systems, Inc. (Cryo-con)** Booth 809  
www.cryocon.com  
Temperature Controllers and Monitors; Sensors; Accessories

**Cryogenic Limited** Booth 619  
www.cryogenic-usa.com  
SQUID Magnetometer; Cryogen-Free Vibrating Sample  
Magnetometer; High Field Superconducting Magnets

**CrystalMaker Software Ltd.** Booth 929  
www.crystallmaker.com  
CrystalMaker; CrystalDiffract; SingleCrystal

**CTECH-Coating Technologies, S.L.** Booth 1303  
www.ctechnano.com  
Thin-film Coating Solutions with ALD

**CVD Equipment Corporation** Booth 211  
www.cvdequipment.com  
CVD Equipment; Gas/Chemical Delivery Systems;  
Gas Abatement Systems

**DCA Instruments, Inc.** Booth 522  
www.dca.fi  
MBE Systems; UHV Sputtering Systems;  
UHV Substrate Manipulators

**De Gruyter** Booth 123  
www.degruyter.com  
Books; Journals; eBooks

**DECTRIS Ltd.** Booth 1202  
www.dectris.com  
X-ray Detectors; Non-destructive Testing;  
Single-Photon Counting

**Delcom Instruments** Booth 207  
www.delcom-inst.com  
Non-contact Sheet Resistance Instrumentation

**Delong America Inc.** Booth 1022  
www.lv-em.com  
LVEM5 and LVEM25 Benchtop Electron Microscopes

**Delphon** Booth 1310  
www.delphon.com  
Gel-Pak Boxes, Trays, Slides and Films; UltraTape  
Cleanroom Tapes and Labels

**Denton Vacuum, LLC** Booth 913  
www.dentonvacuum.com  
Sample Preparation Tools; High Vacuum Carbon  
Evaporators; Thin Film Deposition Systems

**DigiM Solution LLC** Booth 1210  
www.digimsoftware.com  
DigiM Image to Simulation; DigiM Porosimetry;  
DigiM Contract Research

**Digital Surf** Booth 704  
www.digitalsurf.com  
Surface Imaging, Analysis and Metrology Software for  
Microscopes and Profilers

**DOWA International Corporation** Booth 821  
www.dowa.co.jp/index\_e.html  
Semiconductor Materials; Ag Sintering Paste;  
High Purity Materials

**Duniway Stockroom Corporation** Booth 600  
www.duniway.com  
Ion Pumps; Vacuum Gauges; Vacuum Supplies

**EBARA Technologies, Inc.** Booth 920  
www.ebaratech.com  
Dry Vacuum Pumps; Turbomolecular Pumps;  
Vacuum Gauges

**Ecopia Corp.** Booth 306  
www.ecopia21.co.kr  
Hall Effect Measurement Systems; Rapid Thermal  
Processing Systems; Mini Thermal Evaporator and  
Sputtering Systems

**EDAX Inc.** Booth 813  
www.edax.com  
Energy Dispersive X-ray; EBSD; X-ray Detectors

**Edinburgh Instruments Ltd.** Booth 210  
www.edinst.com  
Fluorescence Spectrometer; Transient Absorption  
Spectrometer; Lasers

**Electron Microscopy  
Innovative Technologies** Booth 1020  
www.emitLLC.com  
SEM Rentals; Desktop SEM; Chemical Analysis (EDS)

**Electron Microscopy Sciences/Diatome** Booth 1016  
www.emsdiasum.com  
Grinders/Polishers; Diamond Wheels/Saws;  
Microscopy Supplies

**Elsevier** Booth 111  
www.elsevier.com  
Books; Journals; Electronic Products

**EMSL Analytical, Inc.** Booth 220  
www.emsl.com  
Analytical Laboratory

**Energetiq Technology, Inc.** Booth 709  
www.energetiq.com  
UV Light Source; Broadband Light Source;  
High Brightness Light Source

**FEI Company** Booth 701  
www.fei.com  
Talos TEM; Titan Themis; Teneo; Helios G3; Helios PFIB

**FemtoTools AG** Booth 620  
www.femtotools.com  
Nanomechanical Testing System; Micromechanical Testing  
and Assembly Station

**Film Sense** Booth 930  
www.film-sense.com  
Ellipsometer; Thin Film Measurements; *In Situ* Measurements

**Fischione Instruments** Booth 506  
www.fischione.com  
TEM Accessories; Sample Preparation; Specimen Holders

**FlackTek, Inc.** Booth 702  
www.speedmixer.com  
Mixing Machines; Laboratory Mixers; High-speed Mixing

**Fraunhofer USA Center  
for Coatings and Diamond Technologies** Booth 208  
www.ccd.fraunhofer.org  
Contract R&D; Diamond Materials; Thin Films

**FRONTICS AMERICA Inc.** Booth 919  
www.fronticsamerica.com  
Instrumented Indentation Techniques

<b>Furuya Metal Americas, Inc.</b> www.furuya-ma.com Precious Metals Manufacturing; Thermocouples; Crucibles	<b>Booth 721</b>	<b>ibss Group, Inc.</b> www.ibssgroup.com GV10x DS Asher; Gentle Asher Chamber; GV/GA Mobile Car Set	<b>Booth 206</b>	<b>Japan Society of Applied Physics</b> www.jsap.or.jp/english/index.html Journals	<b>Booth 109</b>
<b>Gamry Instruments</b> www.gamry.com Potentiostats; Impedance Spectroscopy; Quartz Crystal Microbalance	<b>Booth 804</b>	<b>Image Metrology A/S</b> www.imagemet.com SPIP™ Image Analysis Software	<b>Booth 1100</b>	<b>JASCO</b> www.jascoinc.com Raman; FTIR Microscopes; Microscopy	<b>Booth 308</b>
<b>Gatan, Inc.</b> www.gatan.com TEM and SEM Specimen Preparation Instruments; Analytical TEM Instruments; <i>In situ</i> TEM Imaging Cameras and Software	<b>Booth 412</b>	<b>Imina Technologies SA</b> www.imina.ch Micro- and Nanomanipulator; Probe Stations; Electron Microscope Accessories	<b>Booth 307</b>	<b>JEOL USA, Inc.</b> www.jeolusa.com TEM; SEM; Auger	<b>Booth 413</b>
<b>Geib Refining Corp.</b> www.geibrefining.com Precious Metals; Refining; Shield Cleaning	<b>Booth 608</b>	<b>Inel, Inc.</b> www.inel.us Powder Diffractometer; X-ray Diffractometer; Powder Diffraction	<b>Booth 324</b>	<b>Kaufman &amp; Robinson, Inc.</b> www.ionsources.com Ion Sources; Electron Sources; Power Supplies	<b>Booth 805</b>
<b>Goodfellow Corporation</b> www.goodfellowusa.com Metals and Materials for Research & Development	<b>Booth 1013</b>	<b>Inert Technology</b> www.inerttechnology.com Glovebox Systems; Gas and Solvent Purification Systems	<b>Booth 725</b>	<b>KEYENCE Corporation</b> www.keyence.com Microscopes; 3D Measurement Systems; Surface Analysis	<b>Booth 823</b>
<b>HeatWave Labs Inc.</b> www.cathode.com Substrate Heaters; Electron Guns; Cathodes	<b>Booth 711</b>	<b>Innovative Photonic Solutions</b> www.IPSLasers.com Wavelength Stabilized Lasers; Raman Probes	<b>Booth 1107</b>	<b>Keysight Technologies</b> www.keysight.com/find/nano AFM; Nanoindenters; FE-SEM	<b>Booth 401</b>
<b>Heidelberg Instruments, Inc.</b> www.himt.de Maskless Aligner Systems; Direct Write Lithography Tools; Volume Pattern Generators	<b>Booth 1304</b>	<b>Insplosion AB</b> www.insplorion.com Real-time Surface Process Monitoring; LSPR on a Substrate; Nanoplasmonic Sensing	<b>Booth 1023</b>	<b>KLA-Tencor Corporation</b> www.kla-tencor.com Stylus Profiler; Universal Microscope	<b>Booth 616</b>
<b>Herzan LLC</b> www.herzan.com AEK-2002 Acoustic Enclosure; TS Vibration Isolation Tables; WaveCatcher Site Survey Tool	<b>Booth 304</b>	<b>Integrated Dynamics Engineering</b> www.ideworld.com Vibration Isolation; EMI Cancellation; Acoustic Controls; Robotics	<b>Booth 931</b>	<b>Kleindiek Nanotechnik</b> www.nanotechnik.com Nanomanipulators and Micromanipulators for SEM/FIB; High-end Nanoprobing Solutions; Precision Substages	<b>Booth 523</b>
<b>HHV Ltd.</b> www.hhvlt.com Thermal Resistance, e-Beam and Sputter Systems; Thin Film Optical Coatings and Components	<b>Booth 1009</b>	<b>Intermodulation Products AB</b> www.intermodulation-products.com FM Upgrade for Quantitative AFM; Surface Analysis; Multifrequency Lock-in Amplifier	<b>Booth 1021</b>	<b>KP Technology USA Inc.</b> www.kelvinprobe.com Kelvin Probe; Air Photoemission; SPV/SPS	<b>Booth 905</b>
<b>Hidden Isochema Ltd.</b> www.hiddenisochema.com Manometric Gas Sorption Analyzers; Gas and Vapor Sorption Analyzers	<b>Booth 309</b>	<b>International Centre for Diffraction Data (ICDD)</b> www.icdd.com X-Ray Powder Diffraction; Database; Software	<b>Booth 409</b>	<b>Kurt J. Lesker Company</b> www.lesker.com Pure Targets and Materials; Vacuum Components; Thin Film Deposition Systems; Target Bonding Services; UHV Manipulation; Vacuum Valves	<b>Booth 400</b>
<b>Hitachi High Technologies America, Inc.</b> www.hitachi-hita.com Electron Microscopes; Atomic Force Microscopes; Ion Milling Instrumentation and Sample Preparation	<b>Booth 1117</b>	<b>IOP Publishing</b> www.ioppublishing.org Journals; Magazines; ebooks	<b>Booth 105</b>	<b>Lake Shore Cryotronics, Inc.</b> www.lakeshore.com Probe Stations; Hall Effect Measurement Systems; Materials Characterization Systems; Cryogenic Instruments and Sensors	<b>Booth 501</b>
<b>HORIBA Scientific</b> www.horiba.com/scientific Spectroscopy/Spectrometers; Raman; Ellipsometry	<b>Booth 611</b>	<b>ISS, Inc.</b> www.iss.com Spectrofluorometers; Confocal Microscopes; Time-Resolved Fluorescence	<b>Booth 921</b>	<b>Leighton Electronics Inc.</b> www.leighton.com Increase Yield to Save Money; Contactless Rs and Mu; Contactless Carrier Density	<b>Booth 1311</b>
<b>Hummingbird Scientific</b> www.hummingbirdscientific.com TEM/SEM Specimen Holders; TEM/SEM Accessories; Microfabrication	<b>Booth 1004</b>	<b>J microTechnology, Inc.</b> www.jmicrotechnology.com Probe Stations; Test Probes; Test Fixtures	<b>Booth 904</b>	<b>Linseis Inc.</b> www.linseis.com Thermal Expansion CTE; Electrical Resistivity/Seebeck; Thermal Conductivity	<b>Booth 621</b>
<b>Huntington Mechanical Laboratories, Inc.</b> www.huntvac.com Feedthroughs; Valves; Chambers	<b>Booth 1000</b>	<b>Janis Research Company, LLC</b> www.janis.com Micromanipulated Probe Stations; Cryostats; Cryocoolers	<b>Booth 406</b>	<b>Logitech Ltd.</b> www.logitech.uk.com Akribis-air Intelligent Sample Preparation System; CMP Tribo System; Wafer Substrate Bonding Unit	<b>Booth 1124</b>
<b>Hysitron, Inc.</b> www.hysitron.com TI 950 TriboIndenter; TI Premier; PI 85 SEM PicoIndenter	<b>Booth 417</b>	<b>Japan Science and Technology Agency</b> www.jst.go.jp/tt/EN/univ-ip/cips/licensing.html Technologies for Licensing; Japanese Novel Materials	<b>Booth 217</b>	<b>M. Braun, Inc.</b> www.mbraunusa.com Gloveboxes; Vacuum Deposition Systems; Solvent Purification Systems	<b>Booth 812</b>

**Mantis Deposition, Inc.** Booth 622  
www.mantisdeposition.com  
UHV Deposition Sources and Systems; Nanoparticle Technology; UHV Surface Analysis

**McVac Manufacturing Co. Inc.** Booth 822  
www.mcvac.com  
Thin Film Coating Instruments; Ultra High Vacuum Components; Welding; Machining; Helium Leak Testing

**MDC Vacuum Products, LLC** Booth 700  
www.mdcvacuum.com  
A/R Coated Viewports; UHV Pressure Burst Disks

**METTLER TOLEDO** Booth 507  
www.mt.com  
Flash DSC; TGA; DMA

**Micro Photonics Inc.** Booth 305  
www.microphotonics.com  
Micro- and Nano- 3D Tomography; HV and UHV Systems; 3D Nondestructive Testing

**Micro Photonics Inc.** Booth 209  
www.microphotonics.com  
Graphene; Laue; Oxford Applied Research

**MicroFab Technologies, Inc.** Booth 903  
www.microfab.com  
Inkjet Printing Systems; Printed Electronics; Printed Sensors

**Microtrac Inc.** Booth 1213  
www.microtrac.com  
Particle Analyzers; Image Analyzers; Surface Area

**Microwave Enterprises, Ltd.** Booth 911  
www.mwe-ltd.com  
Microwave Plasma CVD Systems; Diamond Deposition Systems; Single Crystal and Polycrystalline Lab Grown Diamond Material

**MicroXact Inc.** Booth 807  
www.microxact.com  
Probe Stations

**MKS Instruments** Booth 1011  
www.mksinst.com  
Vacuum Quality Monitor; Vacuum Gauges and Components; Mass Flow Controllers

**MMR Technologies, Inc.** Booth 1001  
www.mmr-tech.com  
Hall Systems; elan2 Liquid Nitrogen Generators; Joule Thomson Mini Macro Refrigerators

**Molecular Vista, Inc.** Booth 1309  
www.molecularvista.com  
Nano IR; Micro Raman; Tip-enhanced Raman Spectroscopy (TERS); Near Field Microscopy; Photo-induced Force Microscopy (PiFM); Atomic Force Microscopy (AFM)

**MTI Corporation** Booth 901  
www.mtixtl.com  
Thermal Processing Equipment; Battery R&D Equipment; Material Analysis Equipment

**Multiwire Laboratories, Ltd.** Booth 810  
www.multiwire.com  
Real-Time Back-Reflection Laue X-ray Camera System

**Namiki Precision of California, Inc.** Booth 205  
www.namiki.net  
Wafer Cleaning System; Sapphire Substrate; BMG

**Nano-Master, Inc.** Booth 203  
www.nanomaster.com  
Atomic Layer Deposition Equipment; Ion Beam Milling and Etching Systems; Semiconductor Equipment

**NanoAndMore USA Inc.** Booth 610  
www.nanoandmore.com  
AFM and SPM Probes; Particle Size and Zeta Potential Analyzers; DIHM

**NANOLANE** Booth 1106  
www.nano-lane.com  
N-Lab; Sarfus Mapping Stations; SEEC Sensor

**NanoMagnetics Instruments USA, LLC** Booth 1101  
www.nanomagnetics-inst.com  
Scanning Probe Microscopy; Atomic Force Microscopy; Hall Effect Measurement Systems

**Nanomechanics, Inc.** Booth 521  
www.insem.com  
Nanoindenter; Contract Lab Services

**Nanonics Imaging Ltd.** Booth 917  
www.nanonics.co.il  
NSOM/SNOM/SPM; AFM/Raman/TERS; Multiprobe Systems

**Nanoscience Instruments, Inc.** Booth 519  
www.nanoscience.com  
Scanning Electron and Atomic Force Microscopes; Optical Profilers; Nanoindenters; Micromechanical Testing; MEMS Testing Systems; AFM Probes

**Nanoscribe GmbH** Booth 830  
www.nanoscribe.de  
3D Laser Lithography Systems; Photoresists

**Nanosurf, Inc.** Booth 1010  
www.nanosurf.com  
Atomic Force Microscopes; FluidFM; Automated Nanomechanical Analysis

**National Reconnaissance Office** Booth 225  
acq.westfields.net  
Research & Development Funding

**Nature Publishing Group** Booth 122  
www.nature.com  
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### ENERGY AND ENVIRONMENT

- EE1 Emerging Materials and Phenomena for Solar Energy Conversion
- EE2 Advancements in Solar Fuels Generation—Materials, Devices and Systems
- EE3 Materials and Devices for Full Spectrum Solar Energy Harvesting
- EE4 Electrode Materials and Electrolytes for Lithium and Sodium Ion Batteries
- EE5 Next-Generation Electrical Energy Storage Chemistries
- EE6 Research Frontiers on Liquid-Solid Interfaces in Electrochemical Energy Storage and Conversion Systems
- EE7 Mechanics of Energy Storage and Conversion—Batteries, Thermoelectrics and Fuel Cells
- EE8 Grid-Scale Energy Storage
- EE9 Hydrogen and Fuel Cell Technologies for Transportation—Materials, Systems and Infrastructure
- EE10 Recent Advances in Materials for Carbon Capture
- EE11 Caloric Materials for Renewable Energy Applications
- EE12 Radiation Damage in Materials—A Grand Multiscale Challenge
- EE13 Actinides—Fundamental Science, Applications and Technology
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### ELECTRONICS AND PHOTONICS

- EP1 Organic Excitonic Systems and Devices
- EP2 Silicon Carbide—Substrates, Epitaxy, Devices, Circuits and Graphene
- EP3 Perovskite-Based Photovoltaics and Optoelectronic Devices
- EP4 Emerging Silicon Science and Technology
- EP5 Metal Oxide Hetero-Interfaces in Hybrid Electronic Platforms
- EP6 Integration of Heterovalent Semiconductors and Devices
- EP7 Material and Device Frontiers for Integrated Photonics
- EP8 Resonant Optics—Fundamentals and Applications
- EP9 Materials and Processes for Nonlinear Optics
- EP10 Optoelectronic Devices of Two-Dimensional (2D) Materials
- EP11 Novel Materials for End-of-Roadmap Devices in Logic, Power and Memory
- EP12 Materials Frontiers in Semiconductor Advanced Packaging
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- EP14 Materials for Next-Generation Displays
- EP15 Diamond Power Electronic Devices

### MATERIALS DESIGN

- MD1 Materials, Interfaces and Devices by Design
- MD2 Tuning Properties by Elastic Strain Engineering—From Modeling to Making and Measuring
- MD3 Functional Oxide Heterostructures by Design
- MD4 Phase-Change Materials and Applications
- MD5 Fundamentals of Organic Semiconductors—Synthesis, Morphology, Devices and Theory
- MD6 Electronic Textiles
- MD7 Advances in Lanthanide Materials for Imaging, Sensing, Optoelectronics and Recovery/Recycling
- MD8 Multiscale Behavior of Materials in Extreme Environments
- MD9 Magnetic Materials—From Fundamentals to Applications
- MD10 Micro-Assembly Technologies

### NANOTECHNOLOGY

- NT1 Functional Nanostructures and Metamaterials for Solar Energy and Novel Optical Phenomena
- NT2 Oxide and Chalcogenide-Based Thin Films and Nanostructures for Electronics and Energy Applications
- NT3 Carbon Nanofluidics
- NT4 Emerging Non-Graphene 2D Materials
- NT5 Nanodiamonds—Fundamentals and Applications
- NT6 Colloidal Nanoparticles—From Synthesis to Applications
- NT7 Nanoparticle Characterization and Removal
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- SM1 Liquid Crystalline Materials—Displays and Beyond
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- SM4 Engineering Biointerfaces with Nanomaterials
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