Pre-Meeting Guide

www.microscopy.org/MandM/2022
Contents

Registration ........................................... 3
Safe Meeting Guidelines ......................... 4
Hotel Information ................................. 5
Travel & City Information ....................... 6
Sustaining Members ............................... 7
Essential Meeting and Venue Information ............. 8
Floor Plans ........................................ 9
Plenaries .......................................... 10
Society Awards .................................. 11
Megabooth 2022 ................................. 12

Future Meeting Dates

July 23-27, 2023
MINNEAPOLIS, MN

July 28-August 1, 2024
CLEVELAND, OH

July 27-July 31, 2025
SALT LAKE CITY, UT

August 3-August 7, 2026
MILWAUKEE, WI

On-Demand for 2022
The M&M 2022 Conference will feature on-demand contributions from presenters unable to provide an in-person oral presentation this year. The conference website and mobile app will feature this content 10 days after the close of the conference. Please watch the M&M website for more details.

COVER IMAGES
FROM LEFT TO RIGHT:
1st Prize, unpublished
Natural Diamond by Nathan Renfro, Gemological Institute of America, Escondido, California

2nd Prize, published
Harpacticoid copepod (possibly Tigriopus) by Håkan Kvarnström, Bromma, Sweden

2nd Prize, unpublished
Feldspars with intergrown graphite by Bernardo Cesare, University of Padova, Padova, Italy

3rd Prize, unpublished
Midge larva by Andrei Savitsky, Independent Microscopist, Cherkasy, Ukraine

www.microscopy.org/MandM/2022 for up-to-date meeting information
### M&M 2022 Registration Rates

<table>
<thead>
<tr>
<th>Registration Type</th>
<th>Early (On or before June 1)</th>
<th>Regular (Beginning June 2; ending July 24)</th>
<th>Onsite (Beginning July 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Meeting - Invited Speaker</td>
<td>$560</td>
<td>$560</td>
<td>$560</td>
</tr>
<tr>
<td>Full Meeting</td>
<td>$560 / $725</td>
<td>$700 / $830</td>
<td>$755 / $870</td>
</tr>
<tr>
<td>Student Full Meeting</td>
<td>$165 / $185</td>
<td>$175 / $200</td>
<td>$200 / $225</td>
</tr>
<tr>
<td>Emeritus Full Meeting (requires Emeritus membership in MSA or MAS)</td>
<td>$225</td>
<td>$225</td>
<td>$225</td>
</tr>
<tr>
<td>Post-Doctoral Researcher Full Meeting</td>
<td>$225 / $305</td>
<td>$280 / $360</td>
<td>$320 / $395</td>
</tr>
<tr>
<td>Partial Meeting — One Day Only (Monday, Tuesday, Wednesday or Thursday)</td>
<td>$270 / $340</td>
<td>$340 / $380</td>
<td>$390 / $440</td>
</tr>
<tr>
<td>Sunday Short Course (separate registration required)</td>
<td>$265 / $340</td>
<td>$310 / $370</td>
<td>$325 / $385</td>
</tr>
<tr>
<td>Student Sunday Short Course (separate registration required)</td>
<td>$95</td>
<td>$115</td>
<td>$135</td>
</tr>
<tr>
<td>Pre-Meeting Congresses (separate registration required)</td>
<td>$185 / $230</td>
<td>$230 / $275</td>
<td>$275 / $315</td>
</tr>
<tr>
<td>Student Pre-Meeting Congresses (separate registration required)</td>
<td>$95</td>
<td>$115</td>
<td>$135</td>
</tr>
<tr>
<td>Additional Exhibitor Registrations</td>
<td>$290</td>
<td>$390</td>
<td>$430</td>
</tr>
<tr>
<td>On-Demand - Student</td>
<td>$75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-Demand - Member</td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-Demand - Non-Member</td>
<td>$250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-Demand - Post-Doc/Emeritus</td>
<td>$175</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Registration is Now Open.**

- For the most up-to-date registration information, visit [http://www.microscopy.org/MandM/2022](http://www.microscopy.org/MandM/2022).
- Register before June 1 to receive the discounted early registration rate!
- Member rates apply to all members (MSA, MAS, MSC-SMC). **Membership will be verified.**

**Cancellation and Refund Policy**

Refund requests received prior to July 8, 2022 will be honored less a $65 administrative fee. No refunds will be issued for cancellations (for any reason) received on or after July 8, 2022, and no refunds will be issued onsite in Portland. E-mail: [MMRegistration@conferencemanagers.com](mailto:MMRegistration@conferencemanagers.com) or fax (703) 964-1246.

**Accessibility**

If you require special accommodation in order to participate fully in the meeting, please ask to speak with the meeting manager, or email [MeetingManager@microscopy.org](mailto:MeetingManager@microscopy.org). Requests made after July 1 or onsite at the meeting will be accommodated as much as possible.
Safe Meeting Guidelines

As of April 8, 2022

MSA & MAS continue to monitor official Centers for Disease Control COVID-19 safety protocols working closely with our partners at the Oregon Convention Center, the city of Portland and Multnomah County, and the state of Oregon. Guidelines are changing constantly across the United States and we are working to create the safest environment possible for this event. Participant well-being is our first priority. Here’s what we’re doing to protect your health and peace of mind so you can focus on getting the most from this event.

• **Vaccine Verification:** All registered, in-person attendees must provide proof of full vaccination status. No exceptions. Any individual attending M&M 2022—including all attendees, exhibitors, staff and service partners—will be verified as fully vaccinated.

• **Masks Required:** Masks will be required within the event space, hotels and all special function venues in accordance with the City of Portland mask requirement.
  • Speakers will be permitted to remove their masks when actively giving their presentations, if they wish.
  • Attendees will be permitted to remove their masks briefly while actively eating or drinking at official M&M 2022 functions.

• **Proof of Vaccination:** Proof of a CDC-issued vaccination card, WHO-approved vaccination card, or vaccination record from your physician is required. Your proof of vaccination must include the type of vaccination provided and the date that the last dose was administered. A digital photo of a CDC-issued vaccination card stored on a phone or electronic device, or a printed photo of a CDC-issued vaccination card are acceptable in addition to the original card or record.

• **Defining Fully Vaccinated:** A person is considered fully vaccinated 14-days after their final dose of a two-dose vaccine series, such as the Pfizer and Moderna vaccines or any World Health Organization approved vaccine.

No Vaccine Exemptions:
If an attendee, exhibitor, or M&M staff member does not meet the vaccine requirements outlined on this page, they are NOT considered fully vaccinated and will not be permitted to attend M&M 2022 in-person.

Patience, Please
As has been the case for the past two years, the situation is changing constantly, and guidelines are fluid. M&M reserves the right to change these guidelines at any time and to deny entry to this event to any participant not in compliance with these guidelines. Please be patient with event organizers, facility partners, and your fellow event participants, and please operate with kindness and understanding.

M&M will continue to evaluate what is best for event participants to ensure we meet safely and that every attendee and member of the staff and service communities are comfortable.

Access to Live Conference and Exhibition
M&M will adhere to venue meeting procedures and guidelines and will follow strict CDC guidance for meetings and events while allowing guests to come together safely.

M&M will require **proof of full vaccination to enter this event.** There are no exceptions. Any individual attending the M&M 2022 in-person events including: registered attendees, guests, exhibitors and M&M staff, OCC staff, and service partners must be fully vaccinated in order to gain access to this event.

Additional questions can be directed to meetingmanager@microscopy.org.
Hotels & Reservations

The open reservations portal, as well as the most current listing of available hotels and rates, is available at: https://www.microscopy.org/MandM/2022/travel/hotel.cfm.

Book your room through the M&M 2022 Housing Bureau, and get an immediate reservation confirmation. A valid credit card is required to reserve a room.

Maps showing details about neighborhoods, downtown, and other areas of the city are available on the Travel Portland website and are downloadable from: https://www.travelportland.com/plan-your-trip/maps-of-portland/.
Travel and City Information

Ground Transportation

RENTAL CAR / VAN /SHUTTLE:
https://flypdx.com/groundtransportation
for detailed information on taxi service, limousine service, and scheduled shuttle service fees and schedules.

MAX LIGHT RAIL:
Portland features one of the best light-rail systems in the country. Travel Portland will provide complimentary MAX light rail passes to all M&M 2022 attendees. The passes will be valid during the entire duration of the conference on MAX light rail, buses, and the Portland Streetcar. Visit www.trimet.org for fares, schedules, and system maps.

MORE PORTLAND TRAVEL INFO:
For detailed attraction, tour, dining and travel information for visitors, please go to the Travel Portland website at www.travelportland.com.

Getting To & Around Portland

The Portland International Airport (PDX) is located only 12 miles (roughly 20 minutes by car) from downtown Portland. The airport features free Wi-Fi, guest services information and assistance center, and several restaurants, stores, and personal-services outlets.

Visit https://flypdx.com for detailed information about the airport.
Thank you

to our sustaining members

Advanced Microscopy Techniques
Applied Physics Technologies
Bruker Nano Analytics
Carl Zeiss Microscopy, LLC
CEOS GmbH
CryoElectron Microscopy Research Center
Dectris Ltd.
Diatome US
Direct Electron LP
Duniway Stockroom Corp.
EDAX
Electron Microscopy Sciences
EXpressLO LLC
Fischione Instruments
Gatan
Hitachi High-Tech America, Inc.
HREM Research Inc.
ibss Group, Inc.
International Centre for Diffraction Data
IXRF Systems
JEOL USA, Inc.
Kleindiek Inc.
Lehigh Microscopy School
Micro Star Technologies
Micron, Inc.
Microscopy Innovations LLC
Nanoscience Instruments, Inc.
Nion Co.
Oxford Instruments
Probe Software, Inc.
Protochips, Inc.
Quantum Design
RaySpec Ltd
Scientific Instrumentation Services, Inc.
SEMTech Solutions, Inc.
Simple Origin, Inc.
Ted Pella Inc.
TESCAN
Thermo Fisher Scientific
Tousimis
XEI Scientific, Inc.

Visit www.microscopy.org/MandM/2022 for

M&M 2022 Week At-A-Glance
Exhibitor and Sponsor Listings
Pre-Meeting Congresses
Full Symposium Descriptions
Microscopy Outreach
Sunday Short Courses
Tutorials
Technologists’ Forum

... and more!

As of April 13, 2022
Essential Meeting & Venue Information

Accessibility
If you require special accommodation in order to participate fully in the meeting, please ask to speak with the meeting manager, or email MeetingManager@microscopy.org. Requests made after July 1 or onsite at the meeting will be accommodated as much as possible.

Awards
Major Society Awards for MSA and MAS, along with M&M student awards, will be presented at the Plenary Session immediately following the first Plenary Talk (Monday morning). For detailed listings of all awards, criteria, and award winners, please visit http://microscopy.org/MandM/2022/.

Cancellation and Refund Policy
Refund requests received prior to July 8, 2022 will be honored less a $65 administrative fee. No refunds will be issued for cancellations (for any reason) received on or after July 8, 2022, and no refunds will be issued on-site in Portland. E-mail: MMRegistration@conferencemanagers.com or fax (703) 964-1246.

Food for Purchase
Inexpensive, portable breakfast and snack items are available for purchase in the convention center on the exhibit/registration level (7:30 am–10:30 am). Lunch concessions are available for purchase inside the exhibit hall during lunch hours (11:00 am–2:00 pm).

Portland & Regional Visitor Information
Stop by the Travel Portland booth located inside the convention center, to pick up local information, including maps, dining guides and tour info, and visitor information on Portland and surrounding areas.

Internet & E-mail
Free wireless internet is available for M&M attendees in the Oregon Convention Center. Check your email and surf the web at the Internet Café inside the M&M exhibit hall during exhibit hours (located next to the MSA MegaBooth). For more information on the MegaBooth, see page 12.

Job & Resume Postings/Placement Office (see MSA MegaBooth info on page 12)
Post your company’s or department’s job listing, peruse posted resumes for that perfect job candidate, or post your own resume. Take advantage of thousands of microscopists and microscopy companies all gathered in one place! Go to the MSA MegaBooth (Exhibit Hall) for details.

M&M 2023 – Meeting & City Information
Stop by for advance information on the 2023 M&M Meeting in Minneapolis, MN! The 2023 table is located in the main registration area, and has visitors guides, maps, and other important information.

MSA MegaBooth
See complete details on Page 12. Check out all that MSA has to offer its members and M&M attendees: Free Internet Café, book display from scientific publishers, updated information on the Certification Board, and a DVD Library. Register for the popular Vendor Tutorials, sign up for MSA Membership, check out recent editions of Microscopy Today, learn about Project MICRO, and join the Technologists’ Forum.

Phone Numbers & Information
• Oregon Convention Center Main: (503) 235-7575
• Exhibitor Service Desk: ask@oregoncc.org
• ZOOM+Care NE Grand Super Clinic (Urgent Care): (503) 684-8252 (7 days: 7:00 AM - midnight); www.zoomcare.com
• Emergency Room (24 hours): Oregon Health & Science University (OHSU) – 503-494-7551

Proceedings
Conference proceedings are available online at the start of the conference. All full meeting registrations include access to the online proceedings. Printed and USB proceedings are no longer available.

MAS Booth
MAS has a membership and information booth located in the main registration foyer. Sign up for membership, get information on Society events at or after the M&M Meeting, and talk with MAS members and stakeholders to learn how to get involved!

Smoking Policy
M&M 2022 is a smoke-free meeting. If you wish to smoke, you will need to go outside (street level).

Tote Bags
All non-Exhibitor Meeting Registrants are entitled to a meeting tote bag. Bags are distributed in the registration area.
Unless indicated otherwise, all official conference events are being held at the Oregon Convention Center, located on the east side (Convention Center District) of downtown Portland, Oregon.

M&M Exhibit Halls BCD
B Rooms, C Rooms, D Rooms, and F Rooms

= M&M 2022 EXHIBIT HALLS

= M&M 2022 MEETING ROOMS
M&M 2022 Plenary Session

Creating Connections: An Introduction to the Alda Method®

The Creating Connections program hosted by the Alan Alda Center for Communicating Science at Stony Brook University is a live, online workshop designed to help scientists and researchers learn to engage and inspire diverse audiences through effective communication. Participants will learn how to balance being prepared with responding in the moment to address questions. The program emphasizes universal communication strategies, including avoiding jargon, and technical skills for creating engagement online.

The Alda Method is a unique approach to science communication training that combines improvisational theater-based techniques with message-design strategies, including analogies and narrative. The immersive method emphasizes two-way communication to build trust and invite others to share in the wonder and joy of science. It incorporates research and best practices from science communication, journalism, ethics, and other relevant fields.

Health Versus Disease: The Facts in the Case of the Microbiota

Wendy Garrett is the Irene Heinz Given Professor of Immunology and Infectious Diseases at the Harvard T. H. Chan School of Public Health and a Professor of Medicine at Dana-Farber Cancer Institute and Harvard Medical School. She is co-director and co-founder of the Harvard Chan Microbiome in Public Health Center. Dr. Garrett’s team explores interactions between the gut microbiome and the immune system, both in physiological and pathological conditions, with a focus on inflammatory bowel diseases and colorectal cancer. Her team has identified microbial species, functions, and metabolites influencing host health and disease by using an interdisciplinary approach bridging meta’omics, microbiology, cellular immunology, biochemistry, cell biology, and cancer biology. The mission of Dr. Garrett’s lab is to identify basic biologic mechanisms to be applied to precision medicine.
Major Society Award Winners

BURTON MEDAL—BIOLOGICAL
Yuan He, Northwestern University

BURTON MEDAL—PHYSICAL
Colin Ophus, Lawrence Berkeley National Laboratory

ALBERT CREWE AWARD
Jordan Adam Hachtel, Oak Ridge National Laboratory

HILDEGARD H. CROWLEY AWARD FOR OUTSTANDING TECHNOLOGIST, BIOLOGICAL SCIENCES
Janice Green Pennington, University of Wisconsin-Madison

CHUCK FIORI AWARD FOR OUTSTANDING TECHNOLOGIST, PHYSICAL SCIENCES
Hendrik Colijn, The Ohio State University

MORTON D. MASER DISTINGUISHED SERVICE AWARD
Edward Patrick Calomeni, The Ohio State University Medical Center

GEORGE PALADE AWARD
Melody G. Campbell, Fred Hutchinson Cancer Research Center

DISTINGUISHED SCIENTIST – PHYSICAL SCIENCES
Rudolf Tromp, IBM Yorktown Heights & University of Leiden

DISTINGUISHED SCIENTIST – BIOLOGICAL SCIENCES
Kenneth A. Taylor, Florida State University

Major Society Award Winners

PRESIDENTIAL SCIENCE AWARD
John Panitz, University of New Mexico

PRESIDENTIAL SERVICE AWARD
Kerry Siebein, National Institute of Standards and Technology

PETER DUNCUMB AWARD FOR EXCELLENCE IN MICROANALYSIS
Colin MacRae, CSIRO Mineral Resources

KURT F.J. HEINRICH AWARD
Jordan Hachtel, Oak Ridge National Laboratory

BEST PAPER AWARDS M&M 2021

BIRKS AWARD—BEST CONTRIBUTED
Sponsored by JEOL
Aaron Torpy, CSIRO Mineral Resources

COSSELT AWARD—BEST INVITED
Sponsored by MAS
Timmons Erickson, Jacobs Technology

CASTAING AWARD—BEST STUDENT
Sponsored by Cameca
Dara Lacznia, Purdue University

MACRES AWARD—BEST INSTRUMENTATION/SOFTWARE
Sponsored by Oxford Instruments
Aleksander Mosberg, SuperSTEM Daresbury
MegaBooth in the EXHIBIT HALL

Open during all exhibit hall hours

The MSA MEGABOOTH showcases all that MSA membership has to offer. If you are currently a member, stop by to catch up on all the new society developments. Member information available at Regular, Sustaining (corporate), and Student levels.

Sign up for VENDOR TUTORIALS here! These popular sessions are presented on Monday, Tuesday, and Wednesday evenings after the exhibit hall has closed for the day. Don’t miss out – advance registration is required!

The TECHNOLOGISTS’ FORUM (TF): Attention Technologists! Stop by to find out how you can grow and develop your skills, your professional career, and your network by joining the Forum!

The PLACEMENT OFFICE is MSA’s job-listing service. Post a job, peruse job listings, post a resume, and/or find that perfect candidate for your job opening. All for FREE during the meeting!

The Microscopy Society of America offers several programs to help its LOCAL AFFILIATED SOCIETIES hold successful meetings through the Tour Speaker and Meeting Funding programs. For more information on programs and participating societies:

Visit http://microscopy.org

CERTIFICATION BOARD – Find out about MSA’s certification program for Electron Microscopy Technologists and how being certified can help you in your next job search!

MICROSCOPY TODAY and MICROSCOPY and MICROANALYSIS are the society’s two publications – one a magazine format, the other a peer-reviewed scientific journal. Information for authors and advertisers is available here.

EDUCATIONAL OUTREACH – Browse materials and find out how to start an outreach program in your local area. Get details on the special programming at the M&M meeting for educators and kids of all ages.

Visit the Project MICRO display to learn about this organization’s education and outreach goals.

Join other MSA members to promote specific disciplines relevant to microscopy and microanalysis by becoming a member of a Focused Interest Group (FIG).

Meet with MSA Student Council officers and learn about the growing community of students, postdocs, and early-career professionals in microscopy and microanalysis. Build your professional network, share experiences, discuss research, and find out how to get more involved with the most dynamic group of young professionals that microscopy and microanalysis has to offer.