# mmc2023 (incorporating EMAG 2023): Book now!

4 - 6 July 2023, Manchester Central, UK

www.mmc-series.org.uk

We are now just weeks away from mmc2023 (incorporating EMAG 2023) kicking off in the wonderful and vibrant city of Manchester, UK, and the excitement is well and truly building ahead of the RMS's flagship event.

The Microscience Microscopy Congress (mmc) is renowned as one of the biggest and best international events in microscopy, imaging, and flow cytometry - bringing together hundreds of people who use microscopes for work, study and pleasure. Alongside a huge, three-day conference, the event boasts a world-class exhibition, showcasing the very best in microscopy for research and industry visitors. There is also a wide range of workshops, satellite meetings, social networking opportunities and more.

After a Covid-enforced, four-year gap since the last in-person mmc, the Congress will be taking place once again at the superb Manchester Central Convention Complex, from 4 - 6 July. This year's Congress is shaping up to be one of the best ever. A record number of abstracts (more than 400) have been submitted, and the event will also include a new and improved RMS Learning Zone, plus a multi-category, International Scientific Imaging Competition.

Registration is still open, so now is the time to book your place at this fantastic event for the microscopy, imaging and flow cytometry community.

### **Exhibition**

Up to 80 companies – including many of the biggest names in microscopy and imaging – will be on hand to showcase their products and give practical demonstrations. The exhibition also provides important exposure for a number of smaller companies keen to share their latest technological developments.

Find out more about all our exhibitors by checking out the latest exhibitor list and exhibition floorplan.

The exhibition runs for three days alongside the conference, and is completely FREE for anyone to attend. Visitors can register in advance, or simply turn up and register for an exhibition-only ticket, giving them access to everything on show – including live demonstrations, expert advice, and company workshops all under one roof. Free access to all the poster sessions, Scientific Imaging Competition and everything that the RMS Learning Zone has to offer, is also included.

mmc2023 Exhibition

Book now: https://www.mmc-series.org.uk/

4 - 6 July 2023, Manchester, United Kingdom Microscience Microscopy Congress incorporating EMAG 2023

















# Conference

Meanwhile the conference itself consists of six parallel streams, with no fewer than 36 sessions covering every aspect of microscopy, imaging and flow cytometry, including recent and emerging applications. The blockbuster programme will cover the full range of latest techniques, applications and hottest emerging topics – plus an incredible cast of speakers and supporting poster sessions. The conference will also incorporate EMAG 2023, organised by the Institute of Physics's Electron Microscopy and Analysis Group (EMAG).

In addition to the academic content, the programme includes a number of sessions sure to be of interest to a wide range of scientific industries. Check out the full conference programme.

# **Plenary speakers**

Our line-up of Plenary speakers for mmc2023 features some of the leading figures in microscopy and imaging from across the globe. Their talks are sure to light up the conference platform, and we are delighted to welcome them all to Manchester Central.

#### **Professor Joerg Bewersdorf** Yale University, USA

#### Talk title: All-optical Superresolution imaging of molecules in their nanoscale cellular context



Joerg Bewersdorf is the Harvey and Kate Cushing Professor of Cell Biology and Professor of Biomedical Engineering and of Physics at Yale University. He received his Master's degree (Dipl. Phys., 1998) and his doctoral degree in physics (Dr. rer. nat., 2002) training with Dr. Stefan W. Hell at the Max Planck Institute for Biophysical Chemistry in Goettingen, Germany. After 4 years at The Jackson Laboratory in Bar Harbor, Maine, he relocated his research group to Yale University in 2009. An optical physicist/biophysicist by training, Dr. Bewersdorf has been a long-time contributor to the field of super-resolution light microscopy development and the application of these techniques to cell biological questions.

#### Professor Judith Klumperman

University Medical Center Utrecht, Netherlands

#### Talk title: Correlative Light Electron Microscopy (CLEM) methods and applications in cell biology



Judith Klumperman has been professor of Cell Biology at the University Medical Centre Utrecht in The Netherlands since 2001. Her laboratory focuses on understanding

membrane trafficking in health and disease, with focus on the endolysosomal system. Judith is expert in electron microscopy and combines molecular and biochemical approaches with advanced light and electron microscopy. Her lab is widely recognised as expertise centre for electron microscopy (EM), especially immuno-EM and correlative microscopy (CLEM). By CLEM, molecular, dynamic and functional information from light or live cell microscopy is directly correlated to EM images. Judith's current research focuses on the role of tethering complexes in lysosome biogenesis and the role of lysosomes in cancer and neurodegenerative diseases. Judith is Chair of the national Netherlands Electron Microscopy Infrastructure (https://nemi.microscopie.nl/).

# Professor Amanda Petford-Long

Argonne National Laboratory, USA

#### Talk title: Exploring the local behaviour of functional nanostructures using transmission electron microscopy



Amanda Petford-Long is an Argonne Distinguished Fellow in the Materials Science Division (MSD) at Argonne National Laboratory in Chicago. In addition to her own

research programme, she serves as the Division Director of MSD and leads Argonne's Microelectronics strategy development group. She has a D.Phil (PhD) in Materials Science from the University of Oxford and a BSc in Physics from University College, London. She moved to Argonne in 2005 from the University of Oxford where she was a full professor in the Materials Department. Her research focuses on nanomaterials and a particular emphasis is on magnetic and resistiveswitching nanostructures with potential applications in information storage technology, and on the use of in-situ TEM. She has published over 350 scientific papers. She is a Fellow of the Royal Academy of Engineering, the Royal Microscopical Society, and the American Physical Society and is a Professor in the Materials Science and Engineering Department at Northwestern University.

#### **Professor Philip Withers**

University of Manchester/Henry Royce Institute, UK

#### Talk title: Correlative 3D and 4D Electro and X-ray Microscopy

Philip Withers is the first Regius Professor of Materials at the University of Manchester and



Chief Scientist of the Henry Royce Institute for Advanced Materials. The Royce brings together the universities of Manchester, Leeds, Sheffield, Oxford, Cambridge, Cranfield,

Strathclyde and Imperial College, NNL and UKAEA to support the accelerated design of new materials and a better understanding of existing ones. He has pioneered the use of X-ray CT and electron microscopy to undertake correlative multiscale, multimodal and time-lapse characterisation. In this approach he employs advanced techniques to follow the behaviour of engineering and natural materials often in 3D in operando. In 2008 he set up the Henry Moseley X-ray Imaging Facility, one of the most extensive suites of X-ray Imaging facilities in the world with a special focus on in situ time lapse 3D X-ray imaging and now part of a National Research Facility for Lab. X-ray CT. In 2014, the Facility was awarded the Queen's Anniversary Prize.

#### **Dr Erin Tranfield**

Instituto Gulbenkian de Ciência, Portugal

#### Talk title: Surviving a life changing accident and relearning how to be a scientist



Erin Tranfield obtained her PhD at the University of British Columbia (Canada), did a postdoc at NASA Ames Research Center (USA) and another at the European Molecular

Biology Laboratory (EMBL-HD, Germany). In 2013, she moved to the Instituto Gulbenkian de Ciência to build a biological electron microscopy facility. Today, Erin and her dedicated team support the research of Portuguese-based scientists, aiming to answer a diverse array of biological and material



science questions. Erin has more than 20 years of biological electron microscopy experience with expertise in room temperature EM, cryoimmobilisation, electron tomography, and CLEM. She is the President of the Portuguese Microscopy Society, the co-chair of the ESA Topical Team on Celestial Dust Toxicity, a member of the EMBL Alumni Board, part of numerous evaluation panels and she recently joined the Editorial Board of Wiley Analytical Science. In 2020 Erin founded the TechEM Seminar Series which aims to bring advanced technical seminars to EM Facility staff all over Europe and Asia. Erin received the 2023 Alan Agar Award for Electron Microscopy from the Royal Microscopy Society.

# Get the Congress App

The new mmc2023 App is a great tool to help you navigate your way through the Congress. You can create a personal schedule of the talks and workshops you want to catch, take notes and network with other delegates – and more.

The congress app is hosted by Engagefully, just search for them in your app store.

# Poster sessions, networking and social programmes

To mark the opening of mmc2023, an informal BiolmagingUK / Early Career Networking Reception will take place in the foyer of Manchester Central from 6pm onwards on Monday 3 July. This is free to attend.

From the Tuesday onwards, once the conference talks have finished for the afternoon, the daily poster sessions allow you to browse the mmc2023 Poster Village and discuss the research with the authors. The mmc2023 Poster Village will house over 100 posters incorporating a wide range of microscopy techniques in both life and physical science. Poster sessions are free to attend and open to conference and exhibition visitors alike. There is no need to book in advance, just turn up and register.







On Wednesday 5 July, a choice of three evening networking events at Manchester restaurants are available to book with your conference ticket. These have been organised for EMAG delegates, Frontiers in Bioimaging and the AFM & SPM scientific communities.

#### Find out more

# Satellite meetings and bonus features

mmc2023 (incorporating EMAG 2023) will bring together a number of smaller meetings and workshops, allowing you to meet with colleagues working in your field as well as with crossdisciplinary peers, all at the same event.

If you have not already done so, you can add these to your booking when registering for your main Congress ticket:

- Pre-Conference Workshops (including EMAG and ImageJ) -Monday 3 July
- BioImagingUK Meeting -Monday 3 July
- Early Career Symposium -Monday 3 July
- Super-Resolution Workshop -Friday 7 July (this workshop needs to be booked separately)
- Associated Meetings

# Scientific Imaging Competition

An ever-popular fixture at mmc, the RMS Scientific Imaging Competition will be running once again during this year's Congress. A shortlist of the best submitted images will be on display throughout the event, providing an artistic backdrop to proceedings – and some essential viewing for all our visitors.

The competition features no fewer than seven scientific categories, including a 'short video' category for the very best moving images. Winners and runners-up in each category will be announced during the Congress, with the judges making their final deliberations at Manchester Central.

The 2023 RMS Scientific Imaging Competition

# New and improved RMS Learning Zone!

The RMS is bringing a fresh twist to its mmc2023 Learning Zone, with lunchtime lectures, workshops and panel discussions. Our experts will, as ever, be on hand to share their knowledge with visitors and provide tutorials covering a range of fundamental microscopy techniques.



Meanwhile, don't forget to take a look at the Society's fabulous collection of replica antique microscopes from the McCormick Collection. These eye-catching instruments have been manufactured to the absolute letter of the original specifications – dating back, in some cases, to the 1600s.

Also on display will be a recently donated collection of beautiful Victorian slides – and the original microscope used to view them. These slides are the subject of two in**focus** articles by RMS History Committee Chair Dr John Hutchison Hon FRMS, the latest of which appears in this issue!



# Accommodation

If you haven't already booked your hotel room, you need to get your skates on! Accommodation is not included with registration for mmc2023 but there are a huge number of hotels located just a short walk away from Manchester Central.

Visit our mmc2023 accommodation page for more information and a list of guide prices. There may still be time to take advantage of exclusive rates offered to conference delegates and exhibitors - though bookings will be subject to availability and prices may now vary.

Alternatively you can telephone the Reservation Highway helpdesk on +44 (0) 1423 525577 or email admin@reservation-highway.co.uk. You can also complete a downloadable booking form for mmc2023 if you prefer.

# Sustainability

The RMS is committed to reducing waste, and making all of our activities more environmentally friendly and sustainable. This is especially important to us at our flagship event, mmc2023 (incorporating EMAG 2023).

We have already made a number of improvements to the way we operate at the RMS. If you would like to hear more about our environmental activities, you can view the RMS Sustainability Statement

Here are a few ways in which the Society is delivering more sustainable events – including mmc2023:

- Promoting the use of public transport
- Choosing a sustainable venue, with excellent transport links - Manchester Central Sustainability Strategy
- Not printing conference material but making it accessible online and through the conference app
- Reusing existing event materials like pens and notepads
- Where possible, using local suppliers
- Including vegan options and sustainable catering

# First time at mmc? – Here's what to expect:

Meet those who have shaped and changed the field of microscopy, imaging and flow cytometry, in both life and physical sciences.

Network with mentors, professors and students – all of whom share your passion for microscopy and imaging.

Seize the opportunity to forge relationships with



potential future colleagues and collaborative partners for your research.

# ...And some helpful Tips

- Dress the part. Attire for the congress is business casual.
- 2. Attend the sessions that interest you. Sadly, there just won't be time to see and do everything, so focus on the things you are most passionate about, rather than trying to attend every session.
- Check out the lectures and handson equipment in the RMS Learning Zone. These are great ways to learn more and improve your skills.
- 4. Socialise! Attend social events. Quite simply, this is the best way to network and get to know the people you ought to stay in touch with.
- Check out the programme online in advance. Plan which sessions you wish to attend and familiarise yourself with their general location.
- 6. Wear comfortable shoes. You'll probably be on your feet a fair bit, so don't let them get sore – a sure-fire way to ruin any day!

- Remember to visit the Exhibition, Workshops, Scientific Imaging Competition Display and Poster Village. Free refreshments are available in the Exhibition all day!
- Download the app. It's a mobile and fast way to view the programme while you are attending sessions.
- **9. Find time to get out and about.** Explore the amazing city of Manchester. The birthplace of the industrial revolution boasts great historical and cultural attractions, as well as shops, restaurants and nightlife.
- 10. Book your hotel if you haven't already! Make booking easy and book your hotel room via the hotel booking agency on the mmc2023 website.
- II. Share your experience via Facebook, LinkedIn, and Twitter and use the event hashtag:#mmc2023UK

# **Register now!**

Registration is still open, and all the information on rates, accommodation and transport can be found on the official mmc-series website.

We look forward to seeing you there!