



Minutes of the 2025 AGM of the Engineering, Physical and Material Sciences Section of the Royal Microscopical Society which was held on Tuesday 1 July 2025 during mmc2025.

Members present: Anna Baldycheva FRMS (EPMS Chair), Julia Parker FRMS (EPMS Deputy Chair), Peter O'Toole FRMS (RMS President), Rod Shipley (RMS Honorary Treasurer), Michelle Peckham FRMS (RMS Executive Honorary Secretary), Nitin Arya FRMS, James Bancroft, Sergio Bertazzo, Matt Bilton, Sri Chava, Xiaohui Chen, Sean Collins FRMS, Paul Gunning FRMS, Katie Holden, Morag Rose Hunter, Roland Kroger FRMS, Ileana Micu FRMS, Fabio Nudelman FRMS, Laki Pantazis FRMS, Dana Perry, Iain Porter, Lior Pytowski, Jake Richardson, Manfred Schuster FRMS, Daniel Soong FRMS, Steve Thomas FRMS, Ferran Valderrama FRMS, Claire Wells FRMS, Steven West FRMS, Sali Davis (RMS Chief Executive), Jade Sturdy (RMS Committee Co-ordinator and PA to Chief Executive) and Georgina Fletcher (BioImagingUK).*

1. Apologies for Absence

Apologies for absence had been received from: Kerry Thompson FRMS.

2. Minutes of the 2024 Annual General Meeting

The minutes were approved as a true and accurate record of the meeting.

3. Matters Arising

There were no matters arising.

4. Report from Section Chair

The Section Chair gave the following report:

“The EPMS Committee represents a vibrant and interdisciplinary community advancing microscopy and microspectroscopy techniques across the physical sciences, engineering and materials research. Our work spans fundamental studies and industrial applications, supporting developments in energy, biomaterials, devices, and manufacturing. The past year has been particularly productive, with our Section delivering a diverse programme of events, strengthening community engagement and making significant strides in outreach and inclusivity.

Scientific Events and Conferences:

For the sixth consecutive year, our Section supported the Microscopy and Microspectroscopy Symposium as part of the SNAIA Conference on Research and Innovations in Science and Technology of Materials (CRISTMAS), organised by the STEMM Global Scientific Society. The conference was held from 10–13 December 2024 at Chimie ParisTech, Paris. I had the honour of presenting the RMS Best Student Presentation Award and chaired the Special Women in STEMM Session. This was a dedicated session on characterisation methods in art and heritage and included a visit to the Louvre Museum Labs.

The Faraday Discussion on Multiscale Imaging of Biomineralisation Systems Conference was organised by Fabio Nudelman and Roland Kröger in collaboration with the Royal Society of Chemistry and took place on 14–16 May 2025 in Edinburgh. The conference brought together cross-disciplinary experts and addressed key questions on biomineralisation mechanisms relevant to biomedicine, archaeology, and geochemistry. It attracted 73 participants and received highly positive feedback.

On 15 January 2025, Xiangli Zhong chaired the FIB Annual Meeting in Manchester. The event attracted over 200 registered attendees and had four sponsors. Given the success of this event, plans are underway to expand the meeting to two days in future years.

Frontiers in Physical Imaging 2024 was held in London on 19–20 November 2024. It was the first event of its kind, drawing 46 registered attendees and supported by 12 sponsors and was jointly organised with the Electron Microscopy Section, focusing on recent advances in electron and X-ray microscopy in the physical sciences. The meeting included four themes: sample preparation, imaging-induced damage, 4D STEM, and biomineralisation imaging. Each session was followed by vibrant discussions.

Outreach and Education

The Edinburgh Science Festival took place on 14 April 2025 organised by Fabio Nudelman, Jenny Gracie, and Fraser Laidlaw, the event included short lectures and hands-on demonstrations using light and scanning electron microscopy.

Participation was capped at 20 due to lab constraints, and the event was fully booked. Feedback was excellent, with strong interest in further public engagement using microscopy. Planning is already underway to participate in the 2026 Festival, potentially featuring a Tabletop SEM.

Current Activities and mmc2025 Programme

Our section has been instrumental in shaping the technical programme for mmc2025 and have contributed to the following sessions:

- FIB Applications and EM Sample Prep Techniques in Physical Sciences (Session Chair: Xiangli Zhong).
- FIB Applications and EM Sample Prep Techniques in Biological Sciences (Session Chair: Michael Grange).
- Cryo and In Situ Imaging Techniques at the Chemistry-Biology Interface (Session Chair: Sergio Bertazzo).
- Energy Materials – Microscopy and Analytical Advances (Session Chair: Sean Collins).
- Microscopy of Materials across Industry (Session Chair: Andy Brown).

Looking Ahead: Upcoming Events and Initiatives

A Workshop on the Applications of 4D-STEM is taking place from 16–17 September 2025 in Leeds. This one-day hybrid meeting will include invited speakers Judy Kim and Colin Opus, with UKRI support and potential sponsorship from Tescan. The organising team is working with RMS to ensure accessibility through low registration fees.

An In-situ Workshop will take place in late 2025 with the venue and dates to be confirmed. The event, co-organised by Julia Parker, Manfred Schuster and Roland Kröger, will welcome 40 participants and include support for ECRs to attend through bursaries from Diamond.

An X-ray and Electron Scattering Symposium is planned for 2026; this event builds on a successful internal meeting held in Leeds in November 2024.

The 21st International Microscopy Congress (IMC21) will take place in Liverpool from 31 August – 4 September 2026. Planning is progressing well, with the RMS serving as the PCO and several RMS representatives involved in the Scientific Organising Committee.

Women in Microscopy Initiatives

Plans are underway for a dedicated Women in Microscopy Meeting in 2026, which may be accompanied by a Special Issue of the Journal of Microscopy. The EPMS Section have been actively supporting diversity through events such as the Women in STEMM Summit (March 2024) and the CRISTMAS 2023/2024 conferences. A second edition of the Special Issue on Women in Microscopy is currently being planned.

Workshops and Training

We are reviewing results from the PDT FIG Training Survey to identify high-demand areas and shape the future training strategy for the community.

Schools Engagement

The EPMS Section remains committed to supporting microscopy education in schools through teacher training, curriculum-linked activities, and the mmc2025 Learning Zone. We are also exploring collaboration opportunities with universities to expand outreach.

Committee Transitions

The following members will conclude their term of office at the EPMS AGM:

- Igor Melinski (Ordinary Member)
- Fabio Nudelman (Ordinary Member)
- Matthew Bilton (Co-opted Member)
- Sean Collins (Co-opted Member)
- Leonardo Lari (Co-opted Member)

This results in three Ordinary and five Co-opted Member vacancies, as well as Early Career Representative vacancy. We plan to expand the committee's scope to include emerging areas such as heritage science and AI-assisted microscopy.

I would like to express my sincere thanks to all outgoing committee members for their invaluable service. I also thank our current members for their ongoing enthusiasm and dedication, and RMS staff, particularly Jade Sturdy and Sali Davis, for their steadfast support. I am confident that EPMS will continue to grow, expanding its impact through innovation, collaboration, and education in microscopy.”

5. Election of Officers

There being no other nominations, the following Officers were duly elected:

Chair: Anna Baldycheva, University of Exeter
Deputy-Chair: Julia Parker, Diamond Light Source

6. Election of Ordinary Members

There being no other nominations, the following Ordinary Members were duly elected:

Sergio Bartazzo, University College London
Xiaohui Chen, University of Manchester
Kayla Falon, University of Glasgow
Roland Kröger, University of York
Manfred Schuster, Johnson Matthey

Paul Gunning, Dogan Ozkaya and XiangLi Zhong will also be invited to attend meetings.

7. Any Other Business

There was no other business.

* **Non-members present:** Luka Cairney, Poppy Cairney