

### *Message from the President*



It has been an honour to serve as FEMS President this year. I am especially grateful to the members of the FEMS Management Committee and Board for their strong support during 2024 and their permanent commitment to the FEMS vision. I also extend my thanks to all our Members Societies that make FEMS what it is; the association of the most important European materials societies committed to promote the wide dissemination of scientific and technical knowledge related to materials.

FEMS mission of strengthening the interaction between materials scientists and engineers across Europe was accomplished this year with the successful organisation of FEMS Junior EUROMAT 2024, held in Manchester (UK) in July, which had early career material researchers and PhD students as the protagonists. Thank you to IOM3 for the perfect organisation!

We are already looking forward to FEMS EUROMAT 2025, which will be held in Granada (Spain) in September 2025, chaired by Prof Rodrigo Moreno (Spanish Society of Materials, SOCIEMAT). FEMS EUROMAT 2025 will feature a strong program, as anticipated by the number and quality of the planned symposia. The submission deadline for abstracts is 31 January 2025. I am looking forward to meeting many of you at the conference next year.

On behalf of the FEMS Management Committee, I send my warmest wishes in anticipation of a joyful holiday season, wishing you and your families health, happiness, prosperity, and continued success in the New Year.

Merry Christmas and Happy New Year!

Prof Aldo R Boccaccini, FEMS President (2024-2025)

### *FEMS Highlights*

#### **FEMS Junior EUROMAT 2024 – A Celebration of Young Talent in Materials Science**

Hosted by IOM3 in Manchester, UK, FEMS Junior EUROMAT 2024 brought together nearly 200 early-career researchers from 21 countries for a week of scientific exchange and networking. The conference featured plenary lectures, keynotes, poster sessions, and workshops, alongside engaging activities such as Matopoly: Manchester and the conference dinner at the Imperial War Museum.

Delegates explored five core themes, including Sustainability and Functional Materials, and participated in the 2024 FEMS Master Thesis Award final.

FEMS President, Professor Aldo R. Boccaccini, praised the event, highlighting the enthusiasm and energy of the participants as a testament to the bright future of European materials science.

 Read more about FEMS Junior EUROMAT 2024 [here](#).



## **2024 FEMS Master Thesis Award – Celebrating Excellence**

The 7th FEMS Master Thesis Award final took place on 6 July 2024 during FEMS EUROMAT 2024, featuring a record-breaking 9 finalists representing Italy, Greece, Spain, France, Sweden, Portugal, and the UK.



**Oliver Preuß** (DGM) won first place for his presentation on "Dislocation-Based Toughening in Single-Crystal  $\text{KNbO}_3$ ". Second place was awarded to **Inès Addi** (SF2M) for her work on "Grain boundaries engineering in TWIP Ti alloys for enhanced mechanical properties". **Sara Scolari** (AIM) took third place with her presentation on "Agglomeration of integrated cycle steel plant by-products through several organic binders".

Congratulations to all national finalists:

**John Joy** (SFMT); **Bernardo Luís Moreira Ribeiro** (SPM); **Marios Sotiriou** (HMS); **Luís Casabona Cendra** (SOCIEMAT); **Savvas Papamakarios** (HSSTCM); **Emilia Russell** (IOM3).

The FEMS Master Thesis Award recognizes the best Master Thesis in Materials Science and Engineering and is presented annually by FEMS Member Societies. Starting in 2024, the top-3 finalists receive cash prizes.

For more information on the 2025 FEMS Master Thesis Award, visit the official FEMS website: [FEMS Master Thesis Award](#).

## **FEMS Web & Social Media Executive**

As of October, Ms. [Joana Sousa](#) has taken over the role of FEMS Web & Social Media Executive. Joana will manage FEMS social media channels, website content, press releases, and collaborations with FEMS Member Societies' webmasters and secretaries. For any communication-related inquiries, Joana can be reached at [communications@fems.org](mailto:communications@fems.org).

## **FEMS finalist competes in IOM3 YPWLC**



2024 FEMS Master Thesis Award winner, Oliver Marian Preuß, was invited to compete in the IOM3 Young Persons' World Lecture Competition on Thursday 28 November 2024.

Representing FEMS, Oliver competed against students and early career professionals from around the world giving 15 minute lectures judged by a panel of three judges. First prize went to Sebasa Theresa Ramahrare from South Africa, 2nd place to Oliver Preuß and 3rd place to Jerome Liew from Malaysia.

## **FEMS Official Event:**

### **Materials Assisted by Digital Science Revolution, Benefits & Risks for Industry**

29 January 2025 | Online (Zoom)

Join leading experts for an online discussion on how digital tools, such as AI and machine learning, are revolutionizing materials science. This event will focus on enhancing automated designs, improving database interoperability, and advancing reverse materials engineering.

Key findings will be further explored during AI 4 Digital Materials at FEMS EUROMAT 2025 in Granada.

[!\[\]\(0d5ec72f61334709c3fc9450209b754f\_img.jpg\) Learn more and register here.](#)

## **FEMS Awards**

The Federation of European Materials Societies (FEMS) is delighted to announce that nominations are now open for the 2025 FEMS Prestigious Awards, celebrating excellence and innovation in Materials Science and Engineering.

This year's awards reflect the FEMS vision of broader outreach and recognition of outstanding achievements across different career stages and sectors.

### **Award Categories**

- **2025 FEMS European Materials Gold Medal**

For outstanding contributions to the field of Materials Science and Engineering at an advanced career stage.

- **2025 FEMS Materials Science & Technology Prize**

For exceptional contributions to Materials Science and Engineering by early-career professionals.\*

- **2025 FEMS Materials Innovation Medal**

For outstanding contributions to technological development and innovation in Materials Science and Engineering, by individuals or groups.

**Nomination Deadline:** 31 January 2025

We encourage all FEMS Member Societies to promote these prestigious awards and submit nominations for deserving members.

For more information, please visit the FEMS website or contact [secretary@fems.org](mailto:secretary@fems.org)

## FEMS EUROMAT 2025

FEMS EUROMAT 2025 – Abstract Submissions Now Open!

Mark your calendars for FEMS EUROMAT 2025, the flagship congress of the Federation of European Materials Societies, which will take place in Granada, Spain.

This event will gather leading materials science and engineering experts from academia and industry and it will feature plenary sessions, technical symposia, and networking events.

Don't miss the opportunity to showcase your research at one of Europe's most prestigious materials conferences!



### Important dates

-  Event Dates: 8–13 September 2025
-  Abstract Submission Deadline: 31 March 2025
-  Notification of Acceptance: 30 April 2025

 For more details and submission guidelines, visit the [FEMS EUROMAT 2025 website](https://euromat2025.fems.eu).



### Meet the Editor

Prof Nikolaos Michailidis  
Physical Metallurgy Laboratory  
Aristotle University of Thessaloniki

FEMS Member Society members are eligible for a 20% discount on Article Processing Fees.

Learn more and submit your research today: [\*\*European Journal of Materials\*\*](https://www.tandfonline.com/tems).

## European Journal of Materials

The European Journal of Materials, published by Taylor & Francis on behalf of FEMS, is a fully open-access journal covering the functional and structural behavior of materials. It focuses on cutting-edge topics, including advanced processing, modeling, and materials for sustainability, healthcare, and energy applications.

The journal accepts original research, reviews, short communications, and opinion pieces, aiming to bridge research and practical applications in materials science.

European Journal of Materials is  
indexed in Scopus

## *FEMS Member Societies*



### **Assocompositi highlights from 2024**

In 2024, Assocompositi has been deeply committed to sustainability initiatives for composite materials. We have published a technical guide and established an internal Sustainability Committee which is currently working on updating the Italian standard for composite end-of-life management. In September, we organized our Composites Summer School in La Spezia focused on technologies for composites in the marine sector with a visit to the Sanlorenzo shipyards.

### **Plans for 2025**

Assocompositi is committed to supporting and driving the growth of the Italian composite industry. We will be at the forefront of the Italian presence at JEC World 2025, co-organizing the Italy Pavilion. This 450-square-meter space will showcase 40 exhibitors. Additionally, on March 5, 2025, we will host the Country on Stage Italy conference, focusing on Italian industry solutions and circularity research for composites. On June 11 and 12, the second edition of the JEC Forum Italy will take place on Lake Como, organized in collaboration with JEC. This event will feature technical conferences on automotive, aerospace, innovation, and sustainability, alongside buyer-supplier meetings. This increased focus on promoting the Italian composite market, both domestically and internationally, reflects our members' strength and innovative spirit.



**The Italian Association for Metallurgy, AIM, had a brilliant 2024, with around 2,700 participants enrolled in 30 in-person events.**

Of the 10 courses organised, we would like to highlight the very good results of Forging, Metallurgy for Non-Metallurgists and Heat Treatment.

Among the 14 Study Days, we'd like to mention the success of the Seminar on Super Nickel Base Alloys, which was attended by 193 technicians.

In 2024 AIM held also its 40th National Conference and 5 International Conferences, among which IFM 2024 - International Forgemasters Meeting, with 637 attendees and ECIC 2024 - European Coke and Iron Congress, with 241 participants.

In 2024, 65 scientific papers have been published on La Metallurgia Italiana - International Journal of the Italian Association for Metallurgy, which is covered in the Science Citation index Expanded by Clarivate Analytics (formerly Thomson Reuters), and in Scopus by Elsevier B.V.

The full texts of all accepted papers will be published in the electronic form proceedings and issued to delegates at the Conference. A selection of the best papers will be also published in “La Metallurgia Italiana” – the scientific journal of AIM

The programme of 2025 is very promising with already 25 planned events.

The first international Conference will be Tooling 2025, co-organised with ASMET in Trento on 25-27 March 2025.

In June in Ancona we will have the 16th National Days on Corrosion and Protection.

The biggest event will be 7th ESTAD 2025 – The European Steel Technology and Application Days, to be held in Verona on 6-9 October and focused on the iron and steel supply chain, from raw materials and energy sources to steel applications.

We will close the year with the International Workshop Carlo Longaretti on Digital Tools for the Metallurgical Industry in Bergamo on 27-28 November.

For full information on our events and activities we invite you to visit our website: <https://www.aimnet.it/> and to follow us on our social networks: Linkedin, Instagram, Youtube and Facebook.



## **DGM Announces Exciting Developments: Launch of DGM-Academy, New Leadership, and Upcoming Events**

The German Society for Materials Science (DGM) is excited to share several significant updates to advance the field of materials science and engineering both nationally and across Europe.

### **DGM-Academy: The Hub for Lifelong Learning in Materials Science**

DGM has officially launched the DGM-Academy, a cutting-edge initiative aimed at fostering education and skill development within the materials science community. Offering a wide range of courses, workshops, and training programs, the academy bridges the gap between academic research and practical industry applications. It serves as a hub for professionals seeking to expand their expertise and stay at the forefront of innovation.

Starting early next year, the DGM-Academy will expand its offerings with the introduction of an extensive on-demand video and abstract media library. This resource will provide wider access to the wealth of knowledge presented at DGM conferences, making valuable insights available to a broader audience. In addition, the academy is developing new digital training formats to support flexible, self-paced learning. These innovations are designed to meet the evolving needs of professionals, offering convenient ways to enhance their skills and stay updated on the latest advancements in materials science and engineering. For more details, please visit [www.dgm.de/academy](http://www.dgm.de/academy).

## Welcoming New Presidents

At the general assembly held in September, DGM members elected Professor Dr.-Ing. Gunther Eggeler, Ruhr University Bochum and Dr.-Ing. Till Schneiders, Stemcor Special Products GmbH as the new president of the society. Their term will commence on 1 January 2025, and conclude on 31 December 2026. With their combined expertise and shared commitment, they aim to strengthen DGM's mission of advancing materials science and fostering collaboration between academia and industry.

## Countdown to MaterialsWeek 2025

Preparations are underway for MaterialsWeek 2025, DGM's flagship event and a premier gathering for scientists, engineers, and industry leaders. This event will offer engaging sessions, groundbreaking research presentations, and networking opportunities, making it a cornerstone of the global materials science calendar. MaterialsWeek 2025 promises to inspire meaningful discussions on the latest trends and challenges in the field.

## New Event Formats: H2MSE and AIMSE

DGM is proud to introduce H2MSE (Hydrogen-Related Innovations in Materials Science and Engineering), a brand-new event format focusing on hydrogen's transformative role in sustainable materials science. Additionally, preparations are underway for the second edition of AIMSE (Artificial Intelligence in Materials Science and Engineering), following its successful debut. AIMSE continues to serve as a vital platform for international collaboration and cutting-edge knowledge exchange in AI-driven materials science.



In 2024, IOM3 launched a community-driven marketing campaign; #WeAreIOM3 – 'Many disciplines, One community, Shaping the future' to highlight the expertise in the Institute's membership. Also in 2024, the IOM3 journal portfolio successfully transferred from Taylor & Francis to Sage; the new home for 70+ IOM3 journals. IOM3 members have free access to Sage's wider engineering collection, in addition to free portfolio access.

In July, IOM3 organised the FEMS Junior EUROMAT 2024 in Manchester, with IOM3 President Kate Thornton as conference chair. This is held every two years, celebrating the work of early career materials scientists and researchers. The conference also held the FEMS Master Thesis Award competition whose winner went on to be one of the finalists in the Young Persons' World Lecture Competition Final and won second place. The Student and Early Career Group has been very active this year, with the Image Competition in March, the Young Persons' Lecture Competition in May and the Young Persons' World Lecture Competition final (YPWLC) which was held in November this year. The winner of the YPWLC final was Sebasa Theresa Ramahlare from South Africa.

In the coming year, IOM3 is preparing for Materials, Minerals & Mining for People, Places, Planet 2025 (M3P3) - a pan-Institute convention in 2025 designed to celebrate our members' diverse interests, support collaboration, and showcase the many disciplines of IOM3 in one community, shaping the future together.



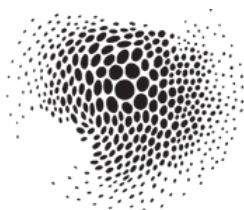
**The Materials Research Society of Serbia** actively supported the organization of the 25th Jubilee Annual Conference YUCOMAT 2024 and the 13th World Round Table Conference on Sintering (WRTCS 2024), held at Hunguest Hotel Sun Resort, Herceg Novi, Montenegro, from 2-6 September 2024.

Key highlights included the awarding of the MRS Serbia Award to Prof Vladimir Torchilin for his groundbreaking work in pharmaceutical biotechnology and nanomedicine. Prof Torchilin also delivered a plenary lecture titled “Stimuli-sensitive drug delivery systems”.

The conferences provided an exceptional platform for the exchange of ideas. See the [book of abstracts 2024](#).

The 22nd Young Researchers' Conference was held at the Serbian Academy of Sciences from 4-6 December 2024.

Preparations for **YUCOMAT 2025** (1-5 September 2025, in Herceg Novi) are underway, with confirmed plenary speakers listed on the MRS Serbia [website](#).



Bond voor Materialenkennis

### **BvM**

is a Dutch/Belgian network of experts in the field of materials science and technology. Members are researchers and technicians at universities, colleges, research institutes and within industry. Various subgroups active in a defined area of materials and/or production technology are connected within the BvM, each organizing dedicated meetings and symposia for their members.

The Laser, Tribology, Corrosion and Heat Treatment communities find their way to larger and small companies. Tribology organized their meeting at ASML (Veldhoven), for example, and the Kring Metaalbewerking met Lasers (KMBL) visited Tata Steel (IJmuiden). The Vereniging voor Warmtebehandelingstechniek (VWT) held one of its meetings in Germany (Ipsen, Kleve).

The following symposia stood out:

- Tribology of the Low Countries, University of Twente, April 2024
- Advanced Ceramic Manufacturing in the Benelux, in collaboration with the Nederlandse Keramische Vereniging (KNV), Eindhoven University of Technology, October 2024

Furthermore, the BvM organized the Symposium Addressing Corrosion Challenges in the Energy Transition on Corrosion Awareness Day (24 April) to kick-off a knowledge exchange hub for the exchange of application-oriented knowledge about materials choices, corrosion management and safety between technicians, materials scientists, project leaders and policy makers (watch the trailer). More to come in 2025.



### **The Hellenic Society for the Science and Technology of Condensed Matter**

is a Greek non-profit scientific society founded in 1981. Its main objective is to promote the exchange of new developments and achievements in the field of Condensed Matter and Materials Science, and to support their applications.

During 2024, HSSTCM took the following actions and organized the following events: - On 14 and 15 December, HSSTCM organized the Online Workshop on Computational Materials Science-2024. This was the 10th workshop in a series that started in 2015. Talks on computational modeling and machine learning methods applied to polymers, organic electronics, soft matter, bio-organic and magnetic materials as well as on metamaterials were offered to mainly young scientists (MSc, PhD students, and Post-Doctoral Fellows). HSSTCM covered the registration fees of 3 young scientists for their participation in the 38th Pan-Hellenic Conference on Solid State Physics and Materials Science held in Ioannina (September 2024). On January 16, HSSTCM organized the online competition for the Best Greek MSc Thesis Award in the field of Condensed Matter and Materials Science-2023. The winner, Mr Savvas Papamakarios, represented HSSTCM at the FEMS Master Thesis final which took place during the FEMS Junior EUROMAT 2024 Conference (Manchester, July 2024).



## Highlights from SPM Activities in 2024 and an Exciting 2025 Ahead

In 2024, the Portuguese Society of Materials (SPM) hosted a variety of impactful events, including seminars, workshops, and institutional collaborations. Highlights included the celebration of World Materials Day with awards such as the Maria Manuela Oliveira Prize, recognizing Professor Maria Helena Braga, and João Miranda's selection to represent Portugal at the FEMS EUROMAT 2025 Best Thesis Award competition.

SPM organized and supported numerous initiatives, such as workshops on circular economy, energy materials characterization, and surface engineering, alongside courses on metallic corrosion and atmospheric heritage preservation. The society partnered with international conferences, including AOP2024, BDS2024, and Hi-rEV2024, promoting knowledge exchange in cutting-edge materials science.

SPM also strengthened ties with the German Society for Materials Science (DGM), offering its members access to specialized training, including an X-ray techniques course.

Looking ahead, SPM is proud to announce [MATERIAIS 2025](#), taking place 1-3 July at IST Lisbon. This premier event will host the XXII Congresso da Sociedade Portuguesa de Materiais, XIII International Symposium on Materials, and III Encontro Ibérico de Ciência de Materiais, bringing together researchers and industry professionals.

For more details on these activities and upcoming initiatives, visit [SPM's website](#).

