SIO Grafen Spring Meeting – an IAM4Sweden and FAME-Ecosys Event
Meeting insights, by Jonas Löfvendahl, Chalmers Industriteknik.
Meeting took place 14th of April 2026, in Lund, Sweden.

This event was a collaboration of IAM-I, IAM4Sweden, InnoMatSyn and SIO Grafen. It gathered people from all over Europe and became a deep dive into the Scandinavian and European ecosystem for advanced materials – focusing on how to accelerate AdMa to the market.

Summary of panel talks:

Panel 1: Startups perspective on bridging innovative advanced material to use.
Key barriers to the commercialization of advanced materials include challenges in scaling production from laboratory to industrial levels and insufficient access to financing. Transitioning from successful small-scale prototypes to large-scale, reliable production remains complex and costly, particularly given the limited availability of accessible scale-up environments in Europe.
A critical bottleneck is funding: a significant share of companies moving from startup to scale-up stages secure financing outside of EU, leading to loss of value creation. Public funding therefore remains essential, especially considering the long development cycles characteristic of deep-tech sectors. Initiatives such as the European Competitiveness Fund aim to address this gap, though further support is needed.
Another important factor is early market validation. Securing a first paying customer is crucial for learning and commercial progress, yet public sector procurement rarely supports innovative solutions due to risk-averse structures.
Additionally, structural improvements are required, including the establishment of pre-production facilities and adoption of longer-term investment perspectives. Strengthening these elements, alongside a supportive ecosystem, would significantly enhance Europe's ability to retain and scale advanced materials innovation.

Panel 2: The value chain perspective in bringing advanced materials to the market.
Europe's advanced materials ecosystem faces structural and strategic challenges across the value chain, particularly in scaling production and maintaining competitiveness globally. A key issue is the ambition to establish complete value chains within Europe; without political action and effective scale-up solutions, companies risk relocating outside the region.
Financing and risk-sharing remain central concerns. Public funding must play a stronger role, both in early support for advanced materials R&I and through to the support of scale-up activities via targeted investments and dedicated facilities. Government action is also critical in stimulating demand, as public procurement could serve as a powerful mechanism for acting as a first customer and accelerating market uptake.
Market dynamics further highlight the importance of early customer engagement and adaptation to user needs. At the same time, some companies strategically manage standardisation to avoid commoditisation and preserve competitive advantage.
Regulatory frameworks present additional challenges. While well-intentioned, their growing complexity and uncertainty regarding future requirements create hesitation for long-term investments. Skills supply is another constraint, as attracting and retaining international talent is complicated by unclear migration conditions.

Looking ahead, stronger mobilisation around European funding instruments, notably the European Competitiveness Fund and FP10, will be essential to secure innovation capacity and ensure Europe's leadership in advanced materials.

Panel 3: Research perspective, from basic research to innovation.
The innovation cycle in advanced materials is inherently non-linear and requires long-term perspectives rather than short-term project frameworks. While materials such as graphene demonstrate significant potential, their applications emerge gradually across diverse pathways. A key challenge is bridging the gap between academia and industry, where differing objectives and communication hinder effective collaboration. Here, a massive acceleration along the entire research and innovation chain from low TRL to high TRL plays a key role.
Improved interaction mechanisms are essential, including matchmaking platforms that connect partners and build trust. Intermediary actors, such as research and technology organisations and industry clusters, play a critical role and should be more effectively utilised. Long-term collaboration, based on stable teams and relationships, is vital for enabling co-creation and innovation.
Industry-led research environments can further strengthen alignment by exposing researchers to real-world conditions and scale-up challenges. Increased mobility, including industrial sabbaticals and applied programmes such as Industrial PhDs, would enhance knowledge exchange.
Finally, stronger European networks and better access to research infrastructure are essential to reduce barriers and accelerate innovation.

Panel 4: Regional, national and European ecosystems - how to work seamlessly together.
Collaboration across regions is essential to advancing circularity and strengthening the advanced materials ecosystem. Initiatives such as the collaboration between the Graphene Flagship & SIO Grafen, and IAM-I & IAM4Sweden, demonstrate the value of linking national and European efforts to enhance integration and ecosystem development. Broader transnational cooperation further reduces barriers for industry participation and supports innovation uptake.
Seamless value chains across regional, European, and global levels are critical for competitiveness and market deployment. This requires trust-based collaboration and mechanisms to connect stakeholders and align efforts across sectors and geographies.
However, the field remains highly complex, involving diverse actors, materials, and applications. Fragmented incentives make it difficult to navigate and identify opportunities, highlighting the need for stronger collaboration and clearer communication, particularly toward policymakers.
Looking ahead, closer links between advanced materials and fields such as artificial intelligence present opportunities to accelerate innovation. Continued focus on trust, integration, and communication will be key to future progress.

<u>Summary of presentations:</u>

Sofie Norager, European Commission, Senior Expert, DG R&I.
Two years after the European Commission's communication on Advanced Materials, significant progress has been achieved and further initiatives are underway. Key milestones include the establishment of the Technology Council (November 2024), the launch of IAM4EU-related Horizon Europe topics (May 2025), and the adoption of the revised Safe and Sustainable by

Design framework (March 2026). Upcoming developments include the Advanced Materials Act and continued negotiations on ECF and FP10.
The Commission aims to accelerate innovation by shortening the path from research to industrial application, increasing investment, and strengthening production and use of advanced materials across priority sectors such as energy, mobility, construction, electronics, and health.
Supporting initiatives include the Advanced Materials Academy, Materials Commons for Europe, and IAM-I. Additional efforts through the European Innovation Council and public procurement seek to scale solutions and stimulate market growth. Ongoing stakeholder engagement and policy development remain essential to advancing this agenda.

Elisabeth Sagström-Bäck, Programme Director, SIO Grafen.
The European Commission's focus on Advanced Materials has significantly increased national interest in Sweden, notably leading to the development of a Strategic Compass for Advanced Materials. SIO Grafen, one of Sweden's 17 strategic innovation programmes, aims to position the country as a leader in industrial 2D materials. Since 2014, it has mobilised €50 million, supported over 220 projects, engaged 250 organisations, many SMEs, and enabled around 20 startups. It also hosts the annual Swedish Graphene Forum. Additionally, IAM4Sweden, inspired by IAM4EU, serves as a national platform to coordinate stakeholders and align Sweden with European developments in advanced materials.

Eva Schillinger, Secretary General, IAM-I.
IAM4EU is a European partnership under Horizon Europe, with a €250 million budget over three years, aimed at advancing innovative advanced materials. Co-led by IAM-I, the Innovative Advanced Materials Initiative, and the European Commission, it focuses on three pillars: advanced materials and associated technologies, cross-enabling tools and methods, and ecosystem enablers. Addressing Europe's fragmented landscape, it seeks to accelerate market uptake through a holistic approach.
IAM-I has 309 members across 31 countries in 2026. Its seven working groups and four task forces support key areas such as digitalisation, circularity, and policy. Strategic priorities include shaping the Advanced Materials Act, securing future funding, supporting startups, and expanding ecosystem integration.

Andreas Falk, BioNanoNet (BNN), InnoMatSyn.
The EU-funded project InnoMatSyn aims to strengthen collaboration across regional, national, and European initiatives in advanced materials. It addresses key barriers, geographical, economic, financial, and political, by connecting stakeholders and fostering coordinated action. With 14 partners and over 100 mapped initiatives, the project facilitates knowledge sharing, funding alignment, and strategic cooperation.
Its FAME-Ecosys event series brings together countries and regions to promote cross-border collaboration and accelerate the uptake of advanced materials. Outcomes include identifying common strategies, leveraging strengths, and overcoming barriers to innovation. Results will contribute to shaping the European advanced materials landscape and inform the upcoming Advanced Materials Act.

A strategic compass for Advanced Material in Sweden, presented by IAM4Sweden.

A concise and comprehensive national document on Advanced Materials was developed in Sweden during the fall of 2025, to guide future efforts. Financed by SIO Grafen and co-created with ten national platforms, it involved 200 experts from industry, academia, public authorities. The initiative aims to support long-term economic, ecological, and social sustainability, strengthen national development, shorten time-to-market, enhance circularity, and build resilient value chains. Key needs identified include improving the innovation chain from research to industrial production, scaling-up capabilities, standardisation, regulatory clarity, testing infrastructure, and skills supply.
The 2035 vision emphasises security of supply, robust value chains, circularity, and industrialisation. Three strategic proposals include establishing a national collaboration arena, implementing long-term funding programmes, and strengthening skills provision through initiatives such as a national PhD network.

Mentimeter Survey! Summary below of answers from 50 people in room and online:

Participant profile
Participants mainly represent academia and RTOs, followed by industry and public stakeholders. Most organisations operate at national and European levels, with broad representation across European countries.

Priority sectors for AdMa in next 5 years
Advanced materials are expected to be most relevant in sectors such as defence, energy, electronics, mobility, and health, as well as emerging areas including AI, quantum technologies, and advanced manufacturing.

Key needs regarding funding
- Increased access to funding, particularly for scale-up
- Stronger alignment between national and EU funding
- Reduced co-financing requirements
- More support for pilot lines, testing, and demonstration
- Support for commercialization, especially reaching the first customer

Strong value chains require
- Closer collaboration between academia and industry
- Risk-sharing and long-term partnerships
- Improved scale-up capabilities
- Stronger networks and cross-sector collaboration

Reducing Time-to-Market
- Industry and end-users should be involved early
- Academic incentives should better reward collaboration
- IP processes need to be faster and clearer
- Greater understanding of value chains and market needs is required

Strengthening collaboration between regions/countries
- Building European hubs and platforms (e.g. IAM-I)
- Harmonising funding rules across countries
- Increasing cross-border funding

- Supporting matchmaking and mobility
- Reducing language and structural barriers

Want more information about the meeting? Contact: Jonas Löfvendahl