



Full Program

8:45 Welcome

Director of Aarhus University Centre for Integrated Materials Research (iMAT) Prof. Jeppe V. Lauritsen.

9:00-11:30 Morning session

9:00-10:00

1. **Dr. Ugo Lafont**, European Space Agency

The key role of non-metallic materials in the development of sustainable and more efficient technologies for space application

Dr Ugo Lafont gained his PhD from university of Montpellier in 2003 in the field of Physics and Chemistry of Condensed Matter. He engaged into a 9 years academic career at the Delft University of Technology in the Netherlands focussing his research on nanomaterials, smart materials and related composites. Since 2013, he is working at the European Space Agency as non-metallic Materials and process engineer with a strong focus on space environment effect on materials, polymers and composites, graphene based materials, sustainable materials and additive manufacturing (3D and 4D printing). He is providing support for space mission and implementing development of new technologies with European stake holder from academic research to industrial product development in his field of expertise.

2. **Philippe Lovejoy-Courrier**, Senior Specialist, Business Development Aerostructures TERMA A/S

Affordable Composites Aerostructures

Philippe first joined Terma in 2004 as a composite designer but quickly progressed into manufacturing technology working both prepreg and RTM projects.

Worked as an independent consultant from 2009 to 2014 within aerospace, radar technology and automotive projects before re-joining Terma in 2014.

Since 2014 worked extensively within development and optimization of both composite and metal manufacturing.

Joined Aerostructures business development in 2024 with emphasis on technical customer support.

10:00-10:30 Juice/fruit break



10:30-11:30

3. **Andreas Brunsgaard**, CEO Danish Graphene

Industrializing the wonder material of the 21st century

Graphene has been researched extensively in the past 20 years and the promise of graphene revolutionizing all industries has captivated many industry professionals. Despite the potential of the material not many industry applications have manifested, and many companies have spent a lot of resources on implementing graphene with little to no success. Danish Graphene is approaching the industry in a new way and effectively developing industry solutions for construction, energy storage, and space hardware.

4. **Prof. Erik Lund**, Department of Materials and Production, Aalborg University

Structural optimization of lightweight structures with focus on laminated composites

Erik did his PhD on structural optimization in 1991-94 and has been professor within Computational Mechanics and Design Optimization since 2007 at AAU. Research focus is on analysis and optimization of laminated composite structures like wind turbine blades.

11:30-13:00 Lunch



13:00-15:30 Afternoon session

5. **Prof. Małgorzata (Gosia) K. Włodarczyk-Biegun**, Zernike Institute for Advanced Material/Silesian University of Technology

Talking to Cells: Lightweight Materials for Advanced Tissue Engineering

Gosia is an Associate Professor at the Silesian University of Technology (Poland) and an Assistant Professor at the University of Groningen (Netherlands). She leads the Biofabrication and Bio-inspired Materials Group, focusing on 3D (bio)printing for hierarchical tissue regeneration and the development of bioinks with tunable, bio-instructive properties. She holds Master's degrees in Biomedical Engineering and Psychology and earned her PhD in Biomedical Engineering from Wageningen University (2016), where she worked on recombinant proteins for biomedical applications. She later specialized in biofabrication as a postdoctoral researcher at INM-Leibniz Institute for New Materials (Germany, 2016–2020). Gosia has received multiple prestigious grants, including an ERC Starting Grant (2024) for developing new printable materials, as well as national grants in the Netherlands and Poland to investigate the influence of printed scaffold designs on cell performance and tissue development. In 2025, she was recognized with an award for internationalizing Polish universities. Her work has been widely recognized, including the UNESCO-L'Oréal For Women in Science Prize (2018) for excellence in research while balancing motherhood. She actively contributes to international collaboration in biofabrication and polymer-based biomaterials.

6. **Prof. Henrik Birkedal**, Interdisciplinary Nanoscience Center, Aarhus University

Biological hierarchical materials with an emphasis on bone

Henrik Birkedal is a professor of chemistry at Aarhus University. His research interests revolve around biological and bioinspired materials. He is a specialist in X-ray methods to study the structure of materials, including synchrotron X-ray methods such as tomography, X-ray diffraction and fluorescence. He leads the X-ray imaging infrastructure, AXIA (axia.au.dk).

14:00-14:30 Coffee/cake break and picture outside of Navitas



14:30-15:30

7. **Dr. Claus Ibsen**, R&D Director, Vestas Aircoil A/S

Lightweight structures replacing traditional black smith approaches in heat exchanger design

Claus refers to himself as to an expert in heat exchanger design which from a multidisciplinary perspective aims for advancements in sustainability in cooling technologies for industrial applications. He contributed to multiple national and international projects within advanced materials, manufacturing and sustainability.

8. **Prof. Lykke Margot Ricard**, South Denmark University, Innovation and Design Engineering

Sustainability: challenges and opportunities in materials and design

Lykke Margot Ricard is an Associate Professor and Head of the Unit for Innovation and Design Engineering (IDE) at the University of Southern Denmark (SDU). The unit's research focuses on sustainable innovation, design, technology development, sociotechnical systems, and EU policy. The design potential for circular economy includes design for longevity, assembly/disassembly, and material-driven design, as some design innovation strategies are applied in industry.



15:30-16:45 Discussion Panel/Snack & Chat/Networking

Discussion Panel Subject *Future of Lightweight Materials & Lightweight Future*

Panel leaders:

- Dr. Ugo Lafont (European Space Agency, materials for nowadays and future space explorations);
- Prof. Lykke Margot Ricard (SDU, Innovation and Design Engineering);
- Dr. Nikolaj Zangenberg (Danish Technological Institute, Director of Big Science Denmark, EU actions within advanced, future materials);
- Prof. Jesper de Claville (Aalborg University, Expert in United Nations Global Goals).

16:45 Closing

Date & Location

12 March 2025, Navitas Bldg., Inge Lehmanns Gade 10, Aarhus C, Denmark.

Registration

To register for SLiMS 2025 please use the following link:

<https://danish.events/symposiumlightweightmaterialsandstructuresmarch2025>

(Deadline for registrations: 6th March 2025)

Contact

For any questions in relation to the event please contact:

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For non-IDA members: Your information will be deleted and not used for anything.