

PROGRAM



All lectures will be held in english. Program is subject to change.

25th April 2024

08:30 a.m. **Registration / Open Doors**

09:00 a.m. **Welcome & Introduction**
Speaker: Frederik Linke, Nemak/AMAP Chairman

KEYNOTE SESSION

09.15 a.m. – 12.30 p.m.

09:15 a.m. **KEYNOTE**
Global Trends and Challenges for the Aluminium Industry – Environment, Technology, Society
Speaker: Timm Lux & Nicole Voigt, Boston Consulting Group

09:45 a.m. **KEYNOTE**
Decarbonization Scenarios for European Rolled Aluminium
Speaker: Dirk Inghels, Vrije Universiteit Amsterdam/Aluminium Duffel

10:15 a.m. **KEYNOTE**
Economic Policy Prospects for the Aluminium Industry in Germany/ Europe
Speaker: Marius Baader, Aluminium Deutschland

10:45 a.m. Coffee Break

11:15 a.m. **PANEL DISCUSSION with Keynote Presenters**
'Automotive in Transformation and its Impact on Aluminium'
Moderation: Klaus Vieregge

Panel: Timm Lux & Nicole Voigt, Boston Consulting Group
Dirk Inghels, Vrije Universiteit Amsterdam/Aluminium Duffel
Marius Baader, Aluminium Deutschland

12:30 a.m. Lunch Break

SESSION: ALUMINIUM CASTING AND MELT TREATMENT

02.00 p.m. - 03.30 p.m.

02:10 p.m. **Interactions of Non-metallic Inclusions in Molten Aluminium and Opportunities for Enhanced Removal**
Speaker: Cong Li, IME RWTH Aachen

02:30 p.m. **Aluminum Wheel Castings with Nucleant 1582: Grain Refining Flux**
Speaker: Derya Dispinar, Foseco

02:50 p.m. **Challenges of Alloy Application in Mega-Casting**
Speaker: Hai Zhang, Weiqiao

03:10 p.m. **3D Printing of Die Casting Tooling**
Speaker: Magdalena Nowak-Coventry, Toyota

03:30 p.m. Coffee Break

SESSION: SUSTAINABILITY AND CIRCULARITY IN THE VALUE CHAIN

04.00 - 05.30 p.m.

04:10 p.m. **Techno-economic Potential for the Decarbonization of Aluminium Processes – a Case Study**
Speaker: Christian Schwotzer, IOB RWTH Aachen

04:30 p.m. **Sustainable battery housing concepts**
Speaker: Sebastian Spohr & Michael Funcke, IKA RWTH Aachen

- 04:50 p.m. **Research Activities in the EU-funded Project HylnHeat**
Speaker: Galyna Laptyeva, Speira
- 04:10 p.m. **Wrap-up of Day 1**
- 05:30 p.m. **Networking opportunity with Evening Buffet**
- 09:00 p.m. **End of Day 1**

26th April 2024

- 08:30 a.m. **Registration / Open Doors**
- 09:00 a.m. **Welcome & Introduction**
Speaker: Frederik Linke, Nemak/AMAP Chairman

SESSION: INNOVATIONS IN METALLURGICAL PROCESS AND PRODUCTION TECHNOLOGY

09.15 a.m. - 10.45 p.m.

- 09:25 a.m. **Gas-based Hot Sheet Metal Forming of High-strength Aluminium**
Speaker: Emad Scharifi, IBF RWTH Aachen
- 09:45 a.m. **Inline Measurement of Surface Roughness and Oilfilm Thickness – Smart Press Shop Uses Decisive Parameter Data in Strip Forming**
Speaker: Martin Fieweger, AMEPA
- 10:05 a.m. **Use of Additively Manufactured Insert Structures for Aluminium Die Casting and the Possible Use of Process and Material Data for Optimization**
Speaker: Lukas Bruckmeier, GI RWTH Aachen
- 10:25 a.m. **Ultrasound Melt Cleanliness Detector - Industrial case studies**
Speaker: Ilona Kieliba, Nemak

10:45 a.m. Coffee Break

SESSION: DIGITALIZATION AND MODELLING

11.15 a.m. - 12.25 a.m.

- 11:25 a.m. **Digitalization and Modelling of Metal Forming Processes**
Speaker: Emad Scharifi, IBF RWTH Aachen
- 11:45 a.m. **Quality Improvement of Aluminium DC casting with Virtual Experiments**
Speaker: Erik Hepp, MAGMA
- 12:05 a.m. **Physical and Numerical Modelling of Aluminium Melt Processing**
Speaker: Moritz Eickhoff, IOB RWTH Aachen

SESSION: QUIZ & CLOSING

12.25 a.m. - 01.00 p.m.

- 12:25 a.m. **Final Plenum – Quiz with all participants**
Moderation: Dominic Feldhaus
- 12:50 a.m. **Closing of the conference**
Speaker: Frederik Linke, Nemak/AMAP Chairman
- 01:00 p.m. **Lunch Break**
- 02:00 p.m. **End of Day 2**
- 04:30 p.m. **EXCURSIONS to RWTH Aachen**
Option 1: IME + ibf or
Option 2: IOB + IMM or
Option 3: ika