

AMAP – goes VIRTUAL

Detailed View (Day 1)

Registration/Open Doors

WELCOME

Welcome on behalf of AMAP

Welcome on behalf of Aluminum Engineering Center (aec)

Introduction to the new format (including Mural Room III)

Introduction Room I and II (Presentation Themes)

Session I: Alloy development and improved Properties

Keynote Speech:

Applied research for advanced aluminum materials for new applications.

Lectures: (15min. +10 each)

1) Predicting casting properties from casting through heat treatment.

2) Simulation of Microstructure and Yield Stress during Natural Aging and Artificial Aging in Al-Mg-Si Alloys.

3) Heat Treatment free HPDC AL Alloy.

4) Understanding the effect of deformation on the intergranular corrosion of Al-Mg-Si-Cu alloys.

Conclusion (20min.)

End Session I

12:45

13:00

13:00 Klaus Vieregge (Hydro)

13:10 Bernd Friedrich (IME RWTH Aachen University)

13:20 Axel Schulz / Franz Kubbillum (AS&P)

13:25 Axel Schulz / Franz Kubbillum (AS&P)

13:30 Technical Moderation Axel Schulz (AS&P)

13:30 Philippe Meyer (Novelis)

13:50 Marc Schneider, Fengxin Mao (Magma Gießereitechnologie)

14:15 Fabrice Wagner (IBF RWTH Aachen University), Christian Bollmann (Alvance), Thiemo Brüggemann (Hydro)

14:40 Dmitriy Fokin (Light Materials and Technologies Institute UC RUSAL)

15:05 Roland Müller-Jena (KKS RWTH Aachen University)

15:30 Moderation: Jürgen Hirsch (Hydro)

15:50

Room I

Detailed View (Day 1)

Room II

Session II: Melt Treatment + Melt Cleanliness

13:30

Technical Moderation Franz Kubbillum (AS&P)

Keynote speech:

Challenges in removal of dissolved and dispersed Impurities

Lectures (15min. +10 each)

1) Ultrasonic Particle Detector for non-metallic inclusions

13:50

Friederike Feikus (Foundry Institute RWTH Aachen University)

2) Technology of 3-dimentional visualization of non-metallic inclusions in aluminum alloys

14:15

Markus Heneka (RJL Micro & Analytic GmbH)

3) Melt cleaning and melt cleanliness analysis with Foseco technology

14:40

Wolfram Stets (Foseco)

4) The collaborative Research Center SFB 920 - Results of AI-filter development and their Implementation Potential

15:00

Christos G. Aneziris (TU Bergakademie Freiberg)

Conclusion (20min.)

15:30 Bernd Friedrich (IME RWTH Aachen University)

End Session II

15:50

Coffee Break

15:50

Online Quiz

Virtual MURAL ROOM Introduction

16:00 Franz Kubbillum (AS&P)

16:30 Axel Schulz (AS&P)

End of Day 1

Networking opportunity

17:30 Axel Schulz / Franz Kubbillum (AS&P)

open Participants

AMAP – goes VIRTUAL

Detailed View (Day 2)

OPEN DOORS

WELCOME BACK

Online quiz/games intermediate results part 1
Feedback Wall / Mural Room III /Lottery reminder

09:00

09:10

08:45 Axel Schulz und Franz Kubbillum (AS&P)
Klaus Vieregge (Hydro)
Franz Kubbillum (AS&P)
09:20 Axel Schulz (AS&P)

Session III: Green processing and Metal recycling

09:30

Technical Moderation Axel Schulz (AS&P)

Keynote speech:

Introduction – Aluminum Recycling in the Context of Process and Product Efficiency.

09:30

Georg Rombach (Hydro)

Lectures (15min. +10 each)

1) Life Cycle Assessment for E-Cars.

09:50

Dinesh Thirunavukkarasu (ika RWTH Aachen University)

2) A vision for a zero carbon aluminum.

3) Aluminum Recycling and Technology at TRIMET - a Technical Overview.

10:40

Jan Steglich (Trimet Aluminium SE)

4) From aluminum scrap melting furnace to recycling plant, 100 years of development.

11:05

Dominik Schröder (LOI tenova)

Conclusion (20min.)

11:30 Moderation: Georg Rombach (Hydro)

End Session III

11:50

Room I

AMAP – goes VIRTUAL

Detailed View (Day 2)

Room II

Session IV: Applications and Market

09:30

Moderation Franz Kubbillum (AS&P)

Keynote speech:

New applications of AI in mobility, packaging, architecture and electronics

09:30

Marius Baader (GDA)

Lectures (15min. +10 each)

1) Lightweight Solutions for Battery Trays and Structural Components.

09:50

Christoph Viechtbauer (Nemak Europe GmbH)

2) Aluminum instead of Copper in e-motors.

10:15

Maik Broda (Ford Werke - Presenter of an AMAP-funded pre-study)

3) The new HDF technology - New capital of sheet metal forming has been opened.

10:40

Peter Amborn (HoDforming GmbH)

4) Architecture: Sustainable Metal Construction.

11:05

Markus Kuhnhenne (Institute of Steel Construction RWTH Aachen University)

Conclusion (20min.)

11:30

Moderation: Marius Baader (GDA)

End Session IV

11:50

Coffee Break

Online Quiz

Feedback in Mural Room

Farewell

End of AMAP Forum

11:50

12:00

Franz Kubbillum (AS&P)

12:30

Axel Schulz (AS&P)

12:40

Klaus Vieregge (Chairman of the AMAP Advisory Board)

13:00