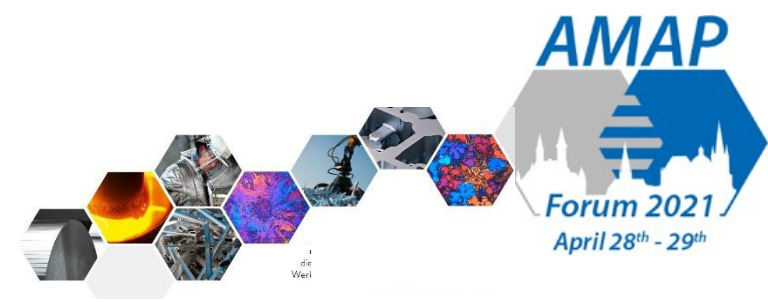


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# AMAP FORUM 2021

## OBJECTIVES



Communicate the latest Research Results from the four thematic Focus Areas:

- Alloy Development and improved Properties
- Melt Treatment & Melt Cleanliness
- Green Processing and Metal Recycling
- Applications and Market



Direct Feedback and possible Influence of the Participants on the Event with suitable digital Tools:

- Question & Answers
- Live Audience Survey
- Unlimited Break Out Rooms to ensure Networking among Participants at all Times

# INNOVATIONS IN ALUMINIUM



## WHAT

The AMAP Forum 2021 will be held completely digitally this year and thus meet member expectations within the Covid-19 guidelines.

Date: April 28th / 29th 2021

Location: MS Teams

Time: 12:45 - 05:30 p.m. / 08:45 a.m. - 01:00 p.m.

Requirements:

- Laptop or mobile device with stable access to the internet
- Registration via the registration process provided by AMAP - VIRTUAL

## DAY 1

**Registration (15min)**

**WELCOME (30 Min.)**

*Main Room*

**Session 1**

**Session 2 (120+20 Min.)**

*Room I*

*Room II*

**Interactive Session 1 (90 Min.)**

*Main Room*

## DAY 2

**WELCOME BACK (30 Min.)**

*Main Room*

**Session 3**

**Session 4 (120+20 Min.)**

*Room I*

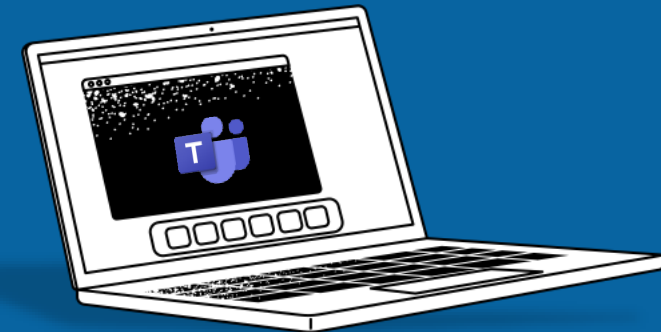
*Room II*

**Interactive Session 2 (60 Min.)**

*Main Room*

## SPECIALS

- Networking
- Q&A
- Quizzes
- Virtual Mural Room
- Active Spectatorship
- Live Chat



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# Digital Event Rules



- If you are currently not speaking, **please mute your microphone**
- If there is no open conversation going on, **please raise your hand (feature)**
- If possible, **please turn on your camera**
- If you have any questions, **please put them in the chat**
- If you currently have an active role, **please let us know if you leave the screen**

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# Agenda overview Day 1 + session

April 28th, 2021

Open Doors (15 MIN.)  
WELCOME (30 MIN.)

## MAIN ROOM

Welcome on behalf of AMAP  
Welcome on behalf of Aluminum Engineering Center  
Introduction to the new format and Mural Virtual Room  
Introduction Room I and II

## ROOM I

SESSION 1 (120+20 MIN.)

### ROOM I

Thematic focus: Alloy development and improved properties  
Keynote speech  
4 lectures (1-4) including discussion

## ROOM II

SESSION 2 (120+20 MIN.)

### ROOM II

Thematic focus: Melt Treatment + Melt Cleanliness  
Keynote speech  
4 lectures (1-4) + including discussion

## ROOM III

ALWAYS accessible

### MURAL ROOM

- Presentation of Membership Companies and Institutes
- Additional Information and Links
- How to become Member within AMAP
- Feedback Wall

INTERACTIVE SESSION (90 MIN.)

## MAIN ROOM

- Q&A
- Online Quiz
- Introduction Interactive Room Mural
- Survey

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# Agenda overview Day 2 + session

April 29<sup>th</sup>, 2021

WELCOME BACK (30 MIN.)

MAIN ROOM

Online quiz/games intermediate results  
(Feedback in Room III - Mural)

ROOM I

SESSION 3 (120+20 MIN.)

ROOM I

Thematic focus: Green processing  
and metal recycling  
Keynote Speech  
4 lectures (1-4) + including  
discussion

ROOM II

SESSION 4 (120+20 MIN.)

ROOM II

Thematic focus: Application and  
market  
Keynote Speech  
4 lectures (1-4) + including discussion

ROOM III

ALWAYS accessible  
MURAL ROOM

- Presentation of Membership Companies and Institutes
- Additional Information and Links
- How to become Member within AMAP
- Feedback Wall

INTERACTIVE SESSION FAREWELL  
(60 MIN.)

MAIN ROOM

- Q&A
- Online Quiz
- Survey
- Feedback Room Mural
- Farewell

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## Detailed View (Day 1)

<b>Registration/Open Doors</b>	<b>12:45</b>	
<b>WELCOME</b>	<b>13:00</b>	
Welcome on behalf of AMAP	13:00	Klaus Vieregge (Hydro)
Welcome on behalf of Aluminum Engineering Center (aec)	13:10	Bernd Friedrich (IME RWTH Aachen University)
Introduction to the new format (including Mural Room III)	13:20	Axel Schulz / Franz Kubbillum (AS&P)
Introduction Room I and II (Presentation Themes)	13:25	Axel Schulz / Franz Kubbillum (AS&P)
<hr/>		
<b>Session I: Alloy development and improved Properties</b>	<b>13:30</b>	Technical Moderation Axel Schulz (AS&P)
<b>Keynote Speech:</b> Applied research for advanced aluminum materials for new applications.	13:30	Philippe Meyer (Novelis)
<b>Lectures:</b> (15min. +10 each)		
1) Predicting casting properties from casting through heat treatment.	13:50	Marc Schneider, Fengxin Mao (Magma Gießereitechnologie)
2) Simulation of Microstructure and Yield Stress during Natural Aging and Artificial Aging in Al-Mg-Si Alloys.	14:15	Fabrice Wagner (IBF RWTH Aachen University), Christian Bollmann (Alvance), Thiemo Brüggemann (Hydro)
3) Heat Treatment free HPDC AL Alloy.	14:40	Dmitriy Fokin (Light Materials and Technologies Institute UC RUSAL)
4) Understanding the effect of deformation on the intergranular corrosion of Al-Mg-Si-Cu alloys.	15:05	Roland Müller-Jena (KKS RWTH Aachen University)
<b>Conclusion</b> (20min.)	15:30	Moderation: Jürgen Hirsch (form. Hydro)
<b>End Session I</b>	<b>15:50</b>	

Room I

## AMAP – goes VIRTUAL

# 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

13:30

Bernd Friedrich (IME RWTH Aachen University)

#### 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-dimensional 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 Al-filter development and their Implementation Potential

15:00

Christos G. Aneziris (TU Bergakademie Freiberg)

#### Conclusion (20min.)

15:30

Moderation: Bernd Friedrich (IME RWTH Aachen University)

#### End Session II

15:50

#### Coffee Break

15:50

Online Quiz

16:00

Franz J. Feikus (Nemak Europe GmbH), Franz Kubbillum (AS&P)

Virtual MURAL ROOM Introduction

16:30

Axel Schulz (AS&P)

#### End of Day 1

17:30

Axel Schulz / Franz Kubbillum (AS&P)

Networking opportunity

open

Participants

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## Detailed View (Day 2)

### OPEN DOORS

### WELCOME BACK

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

08:45 Axel Schulz und Franz Kubbillum (AS&P)  
09:00 Klaus Vieregge (Hydro)  
09:10 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.

10:15 Jerome Lucaes (Rusal)

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



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## Detailed View (Day 2)

Room II

### Session IV: Applications and Market

#### Keynote speech:

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

#### Lectures (15min. +10 each)

- 1) Lightweight Solutions for Battery Trays and Structural Components.
- 2) Aluminum instead of Copper in e-motors.
- 3) The new HDF technology - New chapter of sheet metal forming has been opened.
- 4) Architecture: Sustainable Metal Construction.

#### Conclusion (20min.)

#### End Session IV

#### Coffee Break

- Online Quiz
- Feedback in Mural Room
- Farewell

#### End of AMAP Forum

09:30	Moderation Franz Kubbillum
09:30	Marius Baader (GDA)
09:50	Christoph Viechtbauer (Nemak Europe GmbH)
10:15	Maik Broda (Ford Werke - Presenter of an AMAP-funded pre-study)
10:40	Peter Amborn (HoDforming GmbH)
11:05	Markus Kuhnhenne (Institute of Steel Construction RWTH Aachen University)
11:30	Moderation: Marius Baader (GDA)
11:50	
11:50	
12:00	Franz J. Feikus (Nemak Europe GmbH), Franz Kubbillum (AS&P)
12:30	Axel Schulz (AS&P)
12:40	Klaus Vieregge (Chairman of the AMAP Advisory Board)
13:00	

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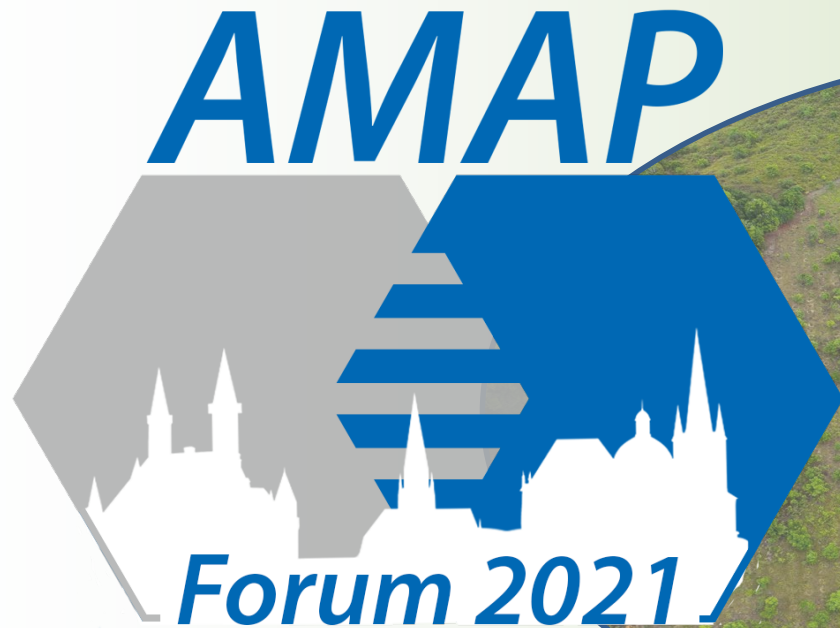
## Digital Tools



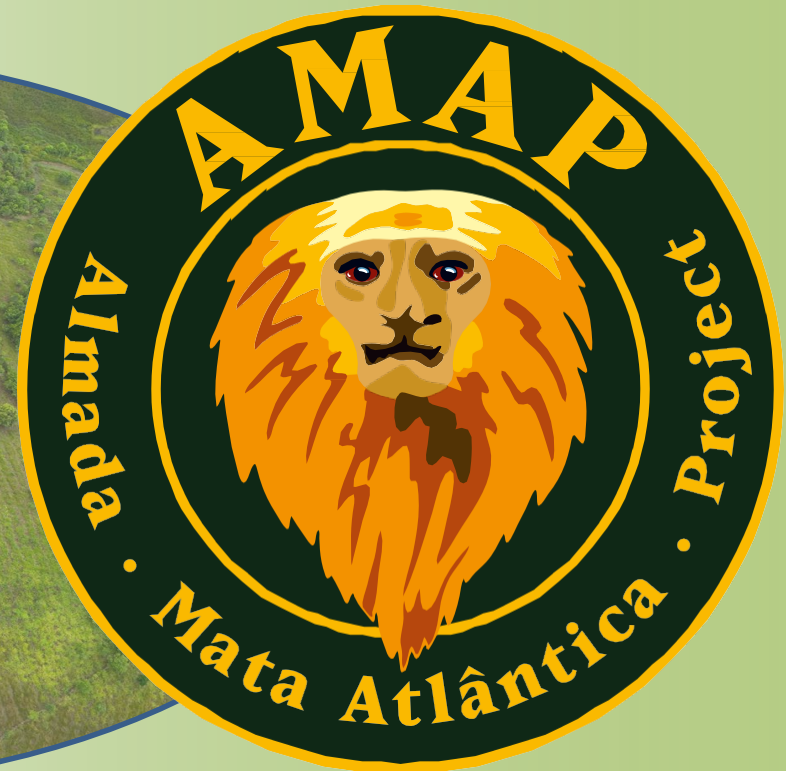
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Seed-Funding-Project:

AMAP<sub>GmbH</sub> supports AMAP<sub>e.V.</sub>



April 28<sup>th</sup> - 29<sup>th</sup>



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# Seed-Funding-Project: AMAP<sub>GmbH</sub> supports AMAP<sub>e.V.</sub>

In cooperation with AMAP Brazil, the winner of the Quiz will become a tree sponsor in the brazillian rainforest

**1st Price:** Sponsorship of 10 Trees

**2nd Price:** Sponsorship of 5 Trees

**3rd Price:** Sponsorship of 2 Trees



*You will receive a tree sponsorship certificate issued to your name, including:*

- Identification number of your tree
- GPS coordinates of the reforestation area
- Frequent information about your reforestation area

With your tree sponsorship you help AMAP Brazil not only to plant a Mata Atlântica seedling, but also securing the reforestation area in the long term through care measures, promoting species conservation projects and supporting the expansion of protected areas for the conservation of the Mata Atlântica by acquiring land.

