

Session Program

13-17 Sept 2021

**EUROPEAN CONGRESS AND EXHIBITION ON
ADVANCED MATERIALS AND PROCESSES -
EUROMAT 2021**

***B3_High-temperature alloys and
intermetallic, titanium aluminides***

Virtual

Wednesday 15 September

15:30

B3_High-temperature alloys and intermetallic, titanium aluminides: B3_1_TiAl for high-temperature applications I

Session | Location: Room 5

15:30–15:50

Effect of Ta and Si additions to TiNbAl (β +O) alloys for high temperature application

Speaker

Dr Philippe Vermaut

15:50–16:10

Interaction mechanisms between crack tips and twin-boundaries in lamellar γ titanium aluminide alloys from atomistic simulations

Speaker

Dr Anupam Neogi

16:10–16:30

Influence of the Si content on microstructure evolution and phase transformations in intermetallic γ -TiAl based alloys

Speaker

Mr Michael Musi

16:30–16:50

Micromechanical fracture characterization of an intermetallic light-weight TiAl alloy

Speaker

Dr Michael Burtscher

16:50–17:10

Experimental investigations of phase equilibria in ternary Ti-Al-Mo and Ti-Al-W alloys

Speaker

Mr Benedikt Distl

17:10

17:30

B3_High-temperature alloys and intermetallic, titanium aluminides: B3_2_TiAl for high-temperature applications II

Session | Location: Room 5

17:30–17:50

Microstructure and phase stability of TiAlW - X (beta-stabilizers) - Y (Si, C, B) alloys

Speaker

Dr Zhao Huvelin

17:50–18:10

Thermo-optical characterization of TiAl intermetallics

Speaker

Dr Leire Usategui Frías

18:10-18:30

Characterization of Laves phase in an intermetallic γ -TiAl based alloy via high-energy X-ray diffraction

Speaker

Gloria Graf

18:30-18:50

Impact of copper as alloying element on iron aluminides ductility

Speaker

Hélène Quehen

18:50

Thursday 16 September

09:50

B3_High-temperature alloys and intermetallic, titanium aluminides: B3_3 Superalloys for high-temperature applications I

Session | Location: Room 5

09:50-10:10

Grain Boundary Carbides in γ' -Strengthened Ni-based Superalloys

Speaker

Mr Bernd Schulz

10:10-10:30

Heterogeneous phase equilibria in the Mo-Si-Ti system

Speaker

Mr Andreas Czerny

10:30-10:50

Evolution of nanoscale precipitates during ageing in a Ni-based superalloy

Speaker

Mr Vitor Vieira Rielli

10:50-11:10

Combining Experiments and Atom Probe Tomography - Informed Simulations on gamma prime Precipitation Strengthening in the Polycrystalline Ni-Base Superalloy A718Plus

Speaker

Mr Andreas Kirchmayer

11:10

11:50

B3_High-temperature alloys and intermetallic, titanium aluminides: B3_4 Superalloys for high-temperature applications II

Session | Location: Room 5

11:50-12:10

Microstructure characterizations and cracking behaviour of cobalt-based superalloys during directed energy deposition

Speaker

Mr Thibaut Froeliger

12:10-12:30

Microstructural-Property gradients in Ni-based Superalloys additively manufactured by electron beam powder bed fusion

Speaker

Mr Lim Bryan

12:30-12:50

Behavior of Ni-base Alloys Forming Chromia and Alumina Scales in Aggressive Metal Dusting Environments

Speaker

Clara Schlereth

12:50-13:10

Recrystallization of Nickel base single crystal superalloy CMSX-4 during heat-treatment following solidification**Speaker**

Emile Hazemann

13:10-13:30

Effect of the Y addition on the microstructural evolution and mechanical performance of superalloy 718**Speaker**

Ms Rosa Maria Sales Silveira

13:30

14:40

**B3_High-temperature alloys and intermetallic, titanium aluminides:
B3_5 Steels for high-temperature applications****Session** | **Location:** Room 5

14:40-15:00

Experimental and simulation studies of residual stresses in T91 welded tubes**Speaker**

Mr Ranjeet Kumar

15:00-15:20

Oxidation Behavior Of An Alumina Forming Alloy - Influence Of Sulfur Traces In The Alloy**Speaker**

Dr Samuel Jouen

15:20-15:40

Development of 15%Cr steels with superior creep resistance for power plants**Speaker**

Dr Mohammad reza Ahmadi

15:40

15:40

**B3_High-temperature alloys and intermetallic, titanium aluminides:
B3_6 Ti-alloys for high-temperature applications****Session** | **Location:** Room 5

15:40-16:00

Effect of molybdenum content on phase transformations in binary Ti-Mo alloys**Speaker**

Mrs Veronika Valešová

16:00-16:20

Impact of alloying elements on microstructure and tensile properties of near- α titanium alloys from room to high temperature**Speaker**

Thibaut Armanni

16:20