



Consortium Meeting SFI PhysMet May 31st 2022

Scandic Lerkendal Hotel. Room: Mesanin 2

PROGRAM

08:45 - 13:00Consortium meeting part 1: Scientific highlights Presentations from the five SFI PhysMet research areas, RAs08:45 - 09:25Highlights from RA 1 Multi-scale material analyses - Overview of activities in RA1 by Randi Holmestad, NTNU - Additions of V and Ti to 6xxx Al alloys by Calin Marioara, SINTEF - TEM studies of Al welding wires for WAAM by Tor Inge Thorsen, NTNU09:25 - 09:40Short presentation of the new PhD project in Research Area 2 by Xuezhou Wang, NTNU09:40 - 10:00Break
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09:40 -10:00 Break
10:00 – 10:40 Highlights from RA 2 Scale and process bridging methodologies
- Overview of project activities in RA2 by Yanjun Li, NTNU
- Thermodynamic predictions on the eta' system using the temperature dependent effective
7 minutes each potential technique by Ole Martin Løvvik, SINTEF
- KMC simulation of the atom clustering in Al-Sc alloy by Astrid Marthinsen, SINTEF
- Predicting the solidification grain size of additive manufacturing and welding of aluminium alloys by Yijiang Xu, SINTEF
- Parameterization of multi-component kinetic phase diagrams by Qiang Du, SINTEF
10:40 – 11:20 Highlights from RA 3 Sustainable and high-performance material development
10:40-10:50 -Overview of activities in RA3 by Marisa Di Sabatino, NTNU
10:50-11:00 -Highlights from PhD students by Andreas Voll Bugten and Magnus Reiersen
11:00-11:20 - Highlights of SINTEF activities in RA 3 by Astrid Marthinsen, Magnus Reiersen and Qiang Du
11:20 – 11:40 Break
11:40 –12:20 Highlights from RA 4 Innovative processing and joining methods
11:40-11:45 -Motivation and Introduction by Magnus Eriksson, SINTEF
11:45-12:00 - Novel aluminium welding wires by Jens C. Werenskiold, NTNU
12:05:12:20 - High-efficiency laser-arc hybrid welding: challenges and solutions by Ivan Bunaziv, SINTEF
12:20 – 13:00 Highlights from RA 5 Data, sharing and digital platforms
- Presentation of ongoing activities in RA5 – Jesper Friis, SINTEF
7 minutes each - Sample database with QR codes by Sylvain Gouttebroze, SINTEF
- Web-app for ontology visualisation by Sylvain Gouttebroze, SINTEF
- Use of AiiDA by Astrid Marthinsen, SINTEF
- Interest and themes for RA5-seminars by Stephane Dumoulin, SINTEF
13:00 - 14:00 Lunch

14:00 – 17:00 Consortium meeting part 2: Materials Challenges for a Sustainable Future	
14.00-14:30 14:30-15:00	 Challenges and needs for the metal end-users in Norway. Invited talks: Title to be decided Guro Thue Unsgård, Senior Environmental Consultant, Norconsult Shifting marketsWhat does this mean for an industry going from one off production to hundreds by Stian Hauger, Head of Technology, Aker Solution
15:00 - 15:30	Break
15:30 – 17:00	Discussion in groups. Topics to be discussed: - Common topics for future development - What competence do we need? - How can partners in SFI PhysMet contribute? Plenary discussion and conclusion of the meeting
17:30	Dinner at Scandic Lerkendal Restaurant