

Monday 13 December 2021(Central European Time)

8:40 – 8:55 Logging in

8:55 -9:00 Opening by organizers

9:00 – 9:55 Opening invited lecture

David Dingley, University of Bristol:

“Continuing advancements in EBSD based materials characterisation”

9:55 – 10:55 Session 1 (chairperson: Grzegorz Cios)

9:55-10:07 **Benoit Beausir**, Universite de Lorraine (Metz)

“ATEX - Analysis Tools for Electron and X-ray diffraction, free software”

10:07-10:19 **Clément Ernould**, Universite de Lorraine (Metz)

“A novel homography-based approach for high-angular resolution in the SEM”

10:19-10:31 **Łukasz Madej**, AGH-UST (Krakow)

“EBSD based full-field numerical modeling of microstructure evolution”

10:31-10:43 **Adam Grajcar**, Silesian University of Technology (Gliwice):

“EBSD characterization of advanced high-strength multiphase steel microstructures”

10:43-10:55 **Andreas Leineweber**, TU Freiberg:

“Challenges in EBSD analysis of intermetallics with complicated crystal structures”

10:55 – 11:10 Coffee break

11:10 – 12:05 Invited lecture

Cyril Langlois, Institut National des Sciences Appliquées (Lyon)

“eCHORD principle and developments towards low voltage orientation mapping”

12:05 – 13:05 Session 2 (chairperson: Wojciech Polkowski)

12:05 -12:17 **Antoine Guitton**, Universite de Lorraine (Metz):

“Electron Channeling Contrast Imaging reveals polycrystalline plasticity”

12:17-12:29 **Jochen Bruckbauer**, University of Strathclyde:

“Observation of novel orientations in an AlN thin film using EBSD”

12:29-12:41 **Ryan McDermott** , University of Strathclyde:
“Investigation of EBSD post-processing techniques for aluminium-Nitride thin films grown on nano-patterned sapphire”

12:41-12:53 **Kieran Hiller** , University of Strathclyde:
“Imaging Techniques for Quantitative Defect Analysis in EBSD”

12:53-13:05 **Vincent Taupin**, Université de Lorraine (Metz):
“HR-EBSD analysis of elastic strains of a threading screw dislocation in GaN and comparison with field dislocation mechanics modelling”

13:05 – 14:05 Lunch break

14:05 – 15:00 Invited lecture
Aimo Winkelmann, AGH-UST (Krakow),
“Kikuchi pattern formation: physical principles, simulations and applications”

15:00 – 16:12 Session 3 (chairperson: Katarzyna Berent)

15:00-15:12 **Håkon Wiik Ånes**, Norwegian University of Science and Technology (Trondheim):
“Processing and analysis of EBSD patterns with the Python package kikuchipy”

15:12-15:24 **Etienne Brodu**, KU Leuven:
“Two new pattern acquisition and post-processing methods to overcome the spatial resolution limit of EBSD”

15:24-15:36 **Magdalena Bieda-Niemiec**, Institute of Metallurgy and Materials Science PAS (Krakow):
“Orientation Microscopy in TEM and SEM – case studies in materials science”

15:36-15:48 **Grzegorz Cios**, AGH-UST (Krakow):
“Resolving martensite tetragonality in high-carbon steels with EBSD”

15:48-16:00 **Cyril Cayron**, École Polytechnique Fédérale de Lausanne:
“The gradients of orientations in martensite of low-carbon steels”

16:00-16:12 **Krzysztof Radwański**, Łukasiewicz Research Network – Institute for Ferrous Metallurgy (Gliwice):
“The application of EBSD in studies of multiphase steels structures”

16:12-16:24 Coffee break

16:24 – 17:10 Session 4 (chairperson: Tomasz Tokarski)

16:24-16:36 **Tuomo Nyysönen**, Swerim AB (Kista):
“Twinning considerations in prior austenite reconstruction”

16:36-16:48 **Ralf Hielscher**, TU Freiberg:
“A new approach to parent grain reconstruction”

16:48-17:00 **Robert Chulist**, Institute of Metallurgy and Materials Science
PAS (Krakow):
“Martensitic phase transitions and orientation relationships in NiMnGa-based
shape memory alloys”

17:00-17:05 (5 minutes) **Christian Grenier Romero**, Granada University:
“Microstructure and crystallography of bryozoan shells determined by EBSD”

17:05-17:10 (5 minutes) **Martyna Strąg**, Military Institute of Armament
Technology (Zielonka): “Orientation-dependent mechanical behavior of
prismatic calcitic layer forming selected bivalve shells”

17:10 – 18:05 Invited lecture,
Marie Agathe Charpagne, University of Illinois (Urbana-Champaign):
“New insights on materials structure and properties using multi-modal data
merging in 3D EBSD”

18:05 – 18:10 End of day 1