

Wednesday May 14 – 10:50 → 12:30

Native Defects and Precipitates Evolutions in Single Crystal Alloys

Chairpersons : R. Singer & N. Bozzolo

10:50 - Microstructural Damage Evolution in Two Ni Based Superalloys Subjected to Different Mechanical Loading Conditions through Quantitative EBSD Measurements using CrossCourt Software

Erica Vacchieri¹, Alessio Costa¹, Simona Parodi², Stuart Richard Holdsworth³
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11:10 - Development of a New Freckle Criterion for Technical Remelting Processes

Bernd Böttger¹, Georg J. Schmitz¹, Franz-Josef Wahlers², Jutta Klöwer², Jürgen Tewes², Bodo Gehrmann²
¹Access, Aachen, DE, ²Outokumpu VDM GmbH, Werdohl, DE

11:30 - Origins of Misorientation Defects in Single Crystal Castings: a Time Resolved In Situ Synchrotron X-Ray Radiography Study

John Aveson¹, Guillaume Reinhart², Henri Nguyen-Thi², Nathalie Mangelinck-Noël², Neil D'Souza³, Howard Stone¹
¹University of Cambridge, Cambridge, GB, ²Aix-Marseille University, Marseille, FR, ³Rolls-Royce plc., Derby, GB

11:50 - Probing the Strain Distribution within a Single Crystal Superalloy during HT Testing

Alain Jacques¹, Mohamed Biskri¹, Thomas Schenk¹, Jean Philippe Chateau - Cornu¹, Pierre Bastie²
¹IJL, Nancy, FR, ²Université de Grenoble, Grenoble, FR

12:10 - Origin of Localised Rafting in Single Crystal Ni-Based Superalloy Turbine Blades before Service: a Tomography-Driven Diffraction Study

Stéphane Pierret¹, Thomas Etter², Alexander Evans³, Steven Van Petegem⁴, Helena Van Swygenhoven⁵
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