iMAT
AARHUS UNIVERSITY CENTRE FOR
INTEGRATED MATERIALS RESEARCH

iMAT Student and Post Doc Seminar Day

8^{30} – 13^{50} March 1st 2024

AIAS Auditorium (1632-201)

Agenda

8^{30} – 9^{00} Coffee & Breakfast – Outside of the AIAS auditorium

Session One

9^{00} – 9^{10} **Welcome -** Ramin Aghababaei

9^{10} – 9^{30} **Jonas Hund**, Department of Mechanical and Production Engineering, AU

Modelling the behaviour of porous materials using a network approach

9^{30} – 9^{50} **Ihsan Ahmed Kolasseri**, Department of Physics and Astronomy, AU

High pressure studies on quantum spin liquid candidates

9^{50} – 10^{10} **Sage Fulco**, Mechanical Engineering & Applied Mechanics, University of Pennsylvania

Controlling Interfacial Toughness via Geometry and Architected Plasticity

10^{10} – 10^{30} **Sahar Esmizadeh,** Department of Mechanical and Production Engineering, AU

Investigating the Factors Influencing Dendrite Growth in Solid-State Lithium Battery Electrolytes

10^{30} – 10^{50} **Coffee Break**

Session Two

10^{50} – 11^{10} **Mahboubeh Motadayen,** Department of Electrical and Computer Engineering, AU

Sustainable Electronics: Biodegradable Materials and AI Integration

11^{10} – 11^{30} **Jens Moesgaard**, Department of Chemistry, AU

The Boson Peaks in Amorphous Phase-Change-Material

11^{30} – 11^{50} **Hemanshul Garg**, Department of Mechanical and Production Engineering, AU

Passive viscous flow selection via fluid-induced buckling

11^{50} – 12^{10} **Ping Hu**, Department of Mechanical and Production Engineering, AU

On control of delamination by width-varying interface

12^{10} – 12^{50} **Lunch** – AIAS Hall (1631-101)

Session three

12^{50} – 13^{10} **Magnus Nørgaard Kløve,** Department of Chemistry, AU

Machine-Learning Enhanced Structural Analysis of Nanomaterials

13^{10} – 13^{30} **Riad Sahli**, Department of Mechanical and Production Engineering, AU

Frictional contact of soft polymeric shells

13^{30} – 13^{50} **Nina Køllln Wittig**, Interdisciplinary Nanoscience Center, AU

Multiscale X-ray computed tomography in materials research