

Joint Workshop on Nucleation

4TU.High-Tech Materials & Materials Innovation Institute (M2i)

Utrecht, De Witte Vosch, 1 April 2019

Programme

Keynote lecture by

A. Lindsay Greer

[Professor of Materials Science,](#)

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Nucleation is among the most fascinating processes in materials science, whereas it is crucial for the production and behaviour of all materials. Taking place at the smallest length and time scales, experimental observation is challenging. Theoretical frameworks have been proposed through recent decades, but predictive power is limited for many aspects of nucleation.

This workshop aims to bring scientists with interest and expertise on nucleation throughout the different types of materials and processes together for an exchange of ideas and observations, looking for the crucial characteristics of nucleation.

10.00	Welcome and coffee
10.25 - 10.30	Introduction Prof.dr.ir. Jilt Sietsma (scientific director 4TU.HTM) Materials Science and Engineering, 3mE, Delft University of Technology
10.30 - 11.00	Prof.dr. Andre ten Elshof (University of Twente) <i>Nucleation of BaTiO₃ ternary oxide nanoparticles at room temperature</i>
11.00 - 11.30	Dr. Joost Duvigneau (University of Twente) <i>Foam cell nucleation</i>
11.30 - 12.00	Hanglong Wu MSc (Eindhoven University of Technology) <i>Using Liquid Phase Electron Microscopy to study Nucleation</i>
12.00 – 13.00	Lunch
13.00 – 13.45	Prof. A. Lindsay Greer (University of Cambridge) <i>Nucleation of Solidification as an Athermal Process</i>
13.45 -14.00	<i>Questions & discussion</i>
14.00 - 14.30	Dr.ir. Erik Offerman (Delft University of Technology) <i>Preferential Nucleation during Polymorphic Transformations in Steel</i>
14.30 - 15.00	Dr.ir. Niels van Dijk (Delft University of Technology) <i>Experimental X-ray studies on nucleation phenomena in solids</i>
15.00 – 15.30	Tea Break
15.30 - 16.00	Simone Dussi PhD (Wageningen UR) <i>Nucleation of nothing: how disordered materials break</i>
16.00 - 16.30	Prof.dr.ir. Gerrit Peters (Eindhoven University of Technology) <i>Flow induced nucleation in polymers</i>
16.30 - 17.30	Closure & Drinks