

## **Computational Thermodynamics and Kinetics Seminar**

Welcome to the Thermo-Calc Software user group meeting in World Trade Center in Stockholm on June 11th, 2025.

## **PROGRAM:**

09.00 - 09.45	Registration and coffee with sandwich
09.45 – 10.00	Welcome and Introduction Dr. Anders Engström, Thermo-Calc Software
10.00 – 10.50	News from Thermo-Calc Software: Thermo-Calc, DICTRA, TC-PRISMA, AM-module and databases  Dr. Ralf Rettig and Reza Naraghi, Thermo-Calc Software
10.50 – 11.10	Development of recycling process of spent oil desulfurization catalysts: contribution of Thermo-Calc Dr. Christophe Ménnétrier, Erasteel, France
11.10 – 11.30	ICME for a green future Dr. Sedigheh Bigdeli, Höganäs, Sweden
11.30 – 11.45	Short break with fruits and water
11.45 – 12.05	Simulation-driven optimization of energy-efficient manufacturing of large steel products  Dr. Zhangting He, SWERIM, Sweden
12.05 – 12.25	Application of Thermo-Calc & DICTRA in understanding microstructural degradation of high temperature fuel cells & electrolysis cells  Prof. Ming Chen, Technical University of Denmark, Denmark
12.25 – 12.45	A multilength-scale approach to surface gradients in hardmetals  Dr. Martin Walbrühl, Sandvik Coromant, Sweden
12.45 – 14.00	Lunch
14.00 – 14.20	PBF-LB of a non-weldable Ni-base superalloy: Improved understanding of hot cracking using the AM module Lic. Eng. Ahmed Fardan, Chalmers, Sweden
14.20 – 14.40	Estimating cold cracking tendency of additively manufactured materials with CALPHAD Atte Antikainen, VTT, Finland
14.40 – 15.00	Columnar-to-Equiaxed Transition model for industrial application to additive manufacturing on Ni-based superalloys Clara De Monte, GKN Aerospace, Sweden
15.00 – 15.20	Accelerating multi-materials additive manufacturing using ICME  Dr. John Aristeidakis, QuesTek Europe, Sweden
15.20 – 15.50	Coffee break
15.50 – 16.10	Application of computational thermodynamics and kinetics to precipitation engineering Dr. Tao Zhou, KTH, Sweden
16.10 – 16.30	Homogenization heat treatment of Sanicron 28 Ulrika Borggren, Alleima, Sweden
16.30 – 16.50	Experimental studies and thermodynamic modeling of oxide systems – Cr-containing slags and REE recovery from P-rich slags Prof. Daniel Lindberg, Aalto University, Finland
16.50 - ≈18.00	Mingle with wine/bubbles and non-alcoholic options.

## **REGISTRATION:**

Please send your registration for the seminar via E-Mail before May 23 with your full name and address to: Thermo-Calc Software AB, <a href="mailto:info@thermocalc.com">info@thermocalc.com</a>. Please indicate if any special requirements for food are needed, such as vegetarian or non-dairy.

Seminar fee: 600 kr

**LOCATION:** World Trade Center (New York Hall)

Klarabergsviadukten 70, Stockholm

www.wtc.se

WELCOME!

For more information about Thermo-Calc, please visit:

www.thermocalc.com