

## Computational Thermodynamics and Kinetics Seminar

Welcome to the Thermo-Calc Software user group meeting in Four Points by Sheraton Josun Seoul Station, 20F SEMINAR ROOM in Seoul on November 20<sup>th</sup>, 2025.

### PROGRAM:

**09.00 – 09.45** *Registration and coffee with cookies*

**09.45 – 10.00** **Welcome and Introduction**

*Dr. Johan Bratberg, Thermo-Calc Software*

**10.00 – 10.25** **Integration of CALPHAD thermodynamic data with deep learning for generalized prediction of high-temperature compression behavior**

*Dr. Seonghwan Kim, Thermo-Calc Software Korea*

**10.25 – 10.50** **Application of the Additive Manufacturing module and MICRESS to mitigate solidification cracking in superalloy welds**

*Prof. Eunjoon Chun, Pukyong University*

**10.50 – 11.10** *Short break*

**11.10 – 12.00** **News from Thermo-Calc Software: Thermo-Calc, DICTRA, TC-PRISMA, AM module and databases**

*Dr. Johan Bratberg, Thermo-Calc Software*

**12.00 – 13.30** *Lunch*

**13.30 – 13.55** **Calculation of thermodynamic quantities using TC-Python**

*Dr. Jae-Sang Lee, POSTECH GIFT*

**13.55 – 14.20** **Phase field modelling of thermodynamic stability of hydride on Zr matrix**

*Prof. Kunok Chang, Kyung Hee University*

**14.20 – 14.55** **Data driven prediction of thermodynamic properties for phase field modelling of aluminium alloy solidification**

*Dr. Jiwon Park, KIMS*

**14.55 – 15.20** **Phase field and mean field modelling of phase transformations in additively manufactured IN738LC Ni-based superalloy**

*Prof. Kyoung-Doc Kim, POSTECH GIFT*

**15.20 – 15.50** *Coffee break*

**15.50 – 16.20** **Thermo-Calc Software's Additive Manufacturing module – Introduction and application examples**

*Dr. Seonghwan Kim, Thermo-Calc Software Korea*

WELCOME!

*For more information about Thermo-Calc, please visit:*

**[www.thermocalc.com](http://www.thermocalc.com)**