Thermo-Calc Software

Computational Thermodynamics and Kinetics Seminar

Welcome to the Thermo-Calc Software User Group Meeting Hosted by Thermo-Calc Software, Sweden and Phase Diagram and Thermodynamics Committee (PDTC) of the Materials Research Society-Taiwan (MRS-T) on November 12-13, 2024.

This programme is preliminary, and may be updated before the Meeting.

PROGRAM Day 1, Nov. 12, Thermo-Calc User Group Meeting:

09:15 – 10:00 ***Registration***

10:00 – 10:15 **Welcome and Introduction**
Shan Jin, Thermo-Calc Software

10:15 – 10:45 **News from Thermo-Calc Software: Thermo-Calc, DICTRA, TC-PRISMA and Databases**
Shan Jin & Martin Xing, Thermo-Calc Software

10:45 – 11:15 ***Coffee/Tea Break***

11:15 – 11:40 **Computational Thermodynamics and Its Applications on Steel Making**
Shih-Kang Lin, National Cheng Kung University, Taiwan

11:40 – 12:05 **Investigation of the Solidification and Heat Treatment Properties of Advanced Alloys using Experimentally Verifiable Multiscale Thermodynamic and Kinetic Computational Approaches**
Te-Cheng Su, National Taiwan University, Taiwan

12:05 – 12:30 **Title TBD**
Tiger Tang, Weir Minerals Australia LTD, Australia

12:30 – 13:30 ***Lunch***

13:30 – 13:55 **Additive Manufacturing of High-Performance Multiphase High-Entropy Alloys**
Xipeng Tan, National University of Singapore, Singapore

13:55 – 14:20 **Application of Thermo-Calc in Aluminum Billet Casting, Extrusion and Post Processes**
Sam Chiang, Taiwan Hodaka Technology Co. Ltd., Taiwan

14:20 – 14:45 **Integration of High-Throughput CALPHAD and Machine Learning for Searching for EHEAs and Predicting Inconel-718 Properties**
YingZhi Zeng, Institute of High Performance Computing, Agency for Science, Technology and Research, Singapore

14:45 – 15:10 **Autonomous Simulation in the Loop: A TC-Python Application**
Zhonghan Zhang, Nanyang Technological University, Singapore

15:10 – 15:40 ***Coffee/Tea Break***

15:40 – 16:05 **Advanced Aluminium Alloy Development for Additive Manufacturing Assisted by Thermo-Calc**
Zhiheng Hu, SIMTech Singapore Institute of Manufacturing Technology, Singapore

16:05 – 16:30 **Investigation of Solidification and Homogenization Behavior of δ-ferrite in 304 SS Billet through DICTRA**
Sheng Yuan Cheng, Walsin Lihwa Corp., Taiwan

16:30 – 16:55 **Capabilities and Limitations of CALPHAD in Designing Thermal-Sprayed High-Entropy Alloy Coatings**
Ecio Bosi Junior, Swinburne University of Technology, Australia

16:55 – 17:20 **The Machine Learning Designs a New RHEA with Thermo-Calc and TC-Python Module**
Wei-Chih Lin, National Tsing Hua University, Taiwan

17:20 – 18:00 **Title TBD**
Shan Jin & Martin Xing, Thermo-Calc Software

18:30 **Dinner**
Location TBD

For more information about Thermo-Calc, please visit:

www.thermocalc.com

Thermo-Calc Software

PROGRAM Day 2, Nov. 13, Thermo-Calc Demonstration and Training:

08:30 – 9:00 ***Registration***

09:00 – 10:30 **Demonstration and Training: Thermo-Calc**
Shan Jin & Martin Xing, Thermo-Calc Software

10:30 – 11:00 ***Coffee/Tea break***

11:00 – 11:30 **Demonstration and Training: Property Models**
Shan Jin & Martin Xing, Thermo-Calc Software

11:30 – 12:30 **Demonstration and Training: Additive Manufacturing Module & Process Metallurgy Module**
Shan Jin & Martin Xing, Thermo-Calc Software

12:30 – 13:30 ***Lunch***

13:30 – 15:00 **Demonstration and Training: Diffusion Module (DICTRA)**
Shan Jin & Martin Xing, Thermo-Calc Software

15:00 – 15:30 ***Coffee/Tea break***

15:30 – 16:30 **Demonstration and Training: Precipitation Module (TC-PRISMA)**
Shan Jin & Martin Xing, Thermo-Calc Software

16:30 ***End***

REGISTRATION:
Please send your registration form for the meeting via E-Mail before October 15, 2024 to: Thermo-Calc Software AB, info@thermocalc.com. Please indicate any special requirements for food, such as allergies, vegetarian or non-dairy etc.

LOCATION: NTUH International Convention Center
No. 2, Xuzhou Road, Zhongzheng District 100, Taipei City, Taiwan
http://www.nthcc.com.tw/traffic/traffic01?lang=en

WELCOME!

For more information about Thermo-Calc, please visit:

www.thermocalc.com