

Pandat Workshop

Pre-conference workshop by CompuTherm LLC at CALPHAD 2026

13:00–17:00, June 7, 2026

Overview

This pre-conference workshop introduces Pandat as an integrated CALPHAD platform for materials design and process simulation. Participants will learn how Pandat supports phase diagram calculations, thermodynamic analysis, precipitation and recrystallization modeling, diffusion simulation, and solidification analysis, with examples that emphasize practical workflows for research and accelerated materials development.

Who Should Attend

- Researchers, engineers, and industry practitioners using computational thermodynamics, alloy design, phase transformation, or process modeling.
- Graduate students, postdoctoral researchers, and new users seeking a practical introduction to Pandat.
- Current Pandat users interested in recent features and broader applications.

Prerequisites

No advanced Pandat experience is required. Basic familiarity with materials thermodynamics, phase diagrams, and heat-treatment or solidification concepts is helpful. Participants are encouraged to install the Pandat education version before the workshop:

[Pandat_2026_Education_Setup.exe](#)

Learning Outcomes

- Navigate the Pandat workspace and understand the roles of its major modules.
- Run and interpret core calculations for phase equilibria, thermodynamic properties, diffusion, precipitation, recrystallization, and solidification.
- Apply appropriate Pandat workflows to alloy design, processing, and microstructure-control problems.

Agenda

1. **Introduction** – development of Pandat software.
2. **Pandat overview** – interface, workflow, modules, and databases.
3. **Live demonstration** – Pandat simulation and result interpretation.
4. **Discussion** – questions, applications, and more.

Instructors

Dr. Shuanglin Chen: shuanglin.chen@computherm.com

Prof. Schmid-Fetzer: schmid-fetzer@tu-clausthal.de