

### FEBRUARY 14-18 DOWNTOWN NASHVILLE, TENNESSEE MUSIC CITY CENTER

Connecting the Global Minerals, Metals, and Materials Community.



# Thermodynamic Applications, Optimizations, and Simulations in High-Temperature Processes: An EPD Symposium in Honor of Christopher W. Bale's 70th Birthday

A thermodynamic analysis of high-temperature industrial processes is essential to understanding the complex chemical equilibria involved, to improving the performance of existing processes and to developing new processes. Major advances in thermodynamic software and the development of large evaluated optimized databases have made it possible to carry out such analyses and process optimizations efficiently in terms of both time and cost. Christopher Bale, professor at École Polytechnique de Montréal, has devoted his entire career to the development of *FactSage*, a thermodynamic software/database package used widely in hightemperature processes, and to the education of the industrial and academic communities in the applications of thermodynamic calculations to industrial high temperature processes. In this symposium, papers are invited on applications of thermodynamic software and databases such as *FactSage*, *HSC Chemistry*, *MTData*, *Thermo-Calc*, *Pandat*, etc., to high-temperature processes. Papers on experimental thermodynamic studies are also welcome.

#### Topic areas include:

- Pyrometallurgical processing fundamentals: ferrous and nonferrous metallurgy
- Process simulation
- Refractories, ceramics, and glasses
- Combustion and energy
- Solidification
- High-temperature corrosion
- Nuclear and other applications
- Recycling and environmental engineering

This symposium will be a prestigious event, expected to attract industrial and academic leaders in the field of high-temperature processes to stimulate discussion and facilitate industry networking.

#### Organizers include:

In-Ho Jung, McGill University (Canada) Arthur Pelton, École Polytechnique de Montréal (Canada) Patrice Chartrand, École Polytechnique de Montréal (Canada)

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