Call for papers

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Thermodynamic and Process Modeling Tools for Material Production Processes

Optimizing metallurgical production processes can help reduce energy and material consumption and increase recycling rates. Computational approaches are powerful tools for process development and optimization. Thermodynamic modeling, such as CALPHAD-based, can increase the accuracy of the thermodynamic predictions for new, complex, and often multicomponent systems. Process simulators or kinetic process models are usually combined with thermodynamic assessments to evaluate an existing process or to support the development of a new one. Articles focusing on using such computational tools for enhancing recycling, decreasing waste, and optimizing processes are welcome. Articles addressing limitations and potential improvements are encouraged.

Original research papers should be 3,000-9,000 words with up to 12 figures maximum; review papers should be 6,000-11,000 words with up to 20 figures maximum.

Detailed author instructions are available at: http://www.tms.org/AuthorTools/

Keywords for this topic: Pyrometallurgy; Recycling; Thermodynamic modeling; Process simulation; Process optimization

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