



Call for papers for the special Issue on “Non-metallic Inclusions in Steel” of Journal of Iron and Steel Research International

Journal of Iron and Steel Research International (JISRI), started in 1994, is a monthly English international academic journal in metallurgical field. The journal is administrated by the China Iron and Steel Association and sponsored by the China Iron and Steel Research Institute Group (CISRI). It has been indexed by over 30 indexing journals or databases including SCI, EI, CA SEARCH, INSPEC, METADEX, Elsevier Bibliographic Databases, etc. Its impact factor of Journal Citation Reports (JCR) is 0.784 in 2016. The journal welcomes academic papers in many fields of fundamental and technological aspects of iron and steel and advanced engineering materials, including the properties, structure, characterization, modeling, processing, and environmental issues.

We are calling for papers for the coming special issue on “Non-metallic Inclusions in Steel” that is planned to be published in December 2017.

The ever-increasing demands for high quality have made steelmakers increasingly aware of the need for products to meet stringent “cleanliness” requirements. Non-metallic inclusions lead to rejections in the cast product, defects in rolled or forged products and poor properties or performance in the field. The size, number, composition and morphology of inclusions must be carefully controlled. Papers are invited on the following topics related to all aspects of inclusions in steel:

- Inclusions and steel properties;
- Downstream product defects related to inclusions;
- Thermodynamics and kinetics for the formation and control of inclusions in steel;
- Fundamentals of steel deoxidation;
- Nozzle clogging and related production problems
- Fundamentals of inclusion nucleation and growth from nano-size to mili-size;
- Inclusion control in any steel grades and any production steps including refining, foundry casting, ingot casting and continuous casting, rolling and annealing;
- Modification of inclusion shape and composition, such as alumina and Al_2O_3 -MgO spinel inclusions;
- Modeling of inclusions in molten steel including nucleation, growth, fluid-flow transport, and removal;

- Engineering of inclusions and precipitates for grain refinement and steel property improvement.

The guest editor of this special issue is Lifeng Zhang. Lifeng was born in 1972 and is the dean and a professor at the school of Metallurgical and Ecological Engineering, University of Science and Technology Beijing, China. He received his Bachelor degree of Metallurgical Engineering from Chongqing University in 1993 and Ph.D. degree of Metallurgical Engineering from University of Science and Technology Beijing in 1998. He has worked at Tohoku University (Japan), Technical University of Clausthal (Germany), University of Illinois at Urbana-Champaign (USA), Norwegian University of Science and Technology (Norway) and Missouri University of Science and Technology (USA). He was a professor at Norwegian University of Science and Technology and an associate professor at Missouri University of Science and Technology.

Manuscripts should be submitted to the following addresses **by August 30, 2017**:

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Or submit online by the following link:

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