



## Embrittlement Phenomena in Steel Metallurgy

Guest Editors:

**Dr. Christopher DiGiovanni**

CanmetMATERIALS, Natural Resources Canada, 183 Longwood Road South, Hamilton, Ontario L8P 0A5, Canada

**Dr. Ali Ghatei-Kalashami**

Department of Mechanical and Mechatronics Engineering, University of Waterloo, 200 University Avenue West, Waterloo, Ontario N2L 3G1, Canada

Deadline for manuscript submissions:

**closed (29 February 2024)**

### Message from the Guest Editors

Dear Colleagues,

We are pleased to announce a Special Issue of the MDPI journal *Metals* on "Embrittlement Phenomena in Steel Metallurgy". Embrittlement is a complex phenomenon that significantly affects the mechanical properties and structural integrity of steel, posing challenges in various industrial applications such as the construction, transportation, and energy sectors. This Special Issue will cover a wide range of embrittlement mechanisms, including liquid metal embrittlement, hydrogen embrittlement, temper embrittlement, and stress corrosion cracking.

We invite researchers from all relevant disciplines to contribute original research articles or critical reviews focusing on, but not limited to, the following topics:

- Responsible mechanisms
- Mitigation techniques
- Occurrence of embrittlement in manufacturing processes (welding, hot-stamping, galvanizing) or during service
- Crack growth modeling
- Novel test methods for embrittlement susceptibility and evaluation
- Characterization of metallurgical and embrittlement features





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## Editors-in-Chief

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Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

### Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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Metals Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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