

## Special Issue

# Processing of Advanced High Strength Steel (AHSS)

### Message from the Guest Editor

To achieve effective weight reduction of steel structures from pressure vessels to car body parts, higher and higher strength steels with smaller wall thicknesses are being used. Therefore, the trend in steel manufacturing is to produce types of steel with higher and higher strengths, e.g., thermomechanically processed and quenched and tempered (Q&T) high-strength structural steels, dual and complex phase (DP and CP) steels, transformation and twinning induced plasticity (TRIP and TWIP) steels, and martensitic steel grades reaching nearly 2000 MPa of ultimate tensile strength.

Additionally, the needs of the chemical industry inspired steel manufacturers to develop high-strength corrosion-resistant steel grades, such as duplex (DSS), martensitic, precipitation-hardened (PH), and nitrogen-alloyed austenitic stainless steels. Studies of novel and conventional processing techniques are invited, addressing specific problems in the processing of AHSSs in order to support further industrial application. Additionally, studies on newly developed processing techniques for AHSS grades are invited, with the emphasis of possible industrial usage.

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### Guest Editor

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### Deadline for manuscript submissions

closed (31 March 2023)



## Metals

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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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