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Recent Advance in Creep of Superalloys: From Microstructure to Mechanical Properties

Guest Editor:

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Message from the Guest Editor

This Special Issue is to collect original research work on the assessment of the durability of new and in-operation steels and alloys working under creep conditions. Works describing the influence of the microstructure state on the creep strength of modern steels and alloys that are intended for high temperature operation are desirable. It is advantageous to review the broadly understood subject of assessment of the durability of exploitation directed at testing steels and alloys, as well as their single and unmated welded joints. Topics concern both destructive and non-destructive research techniques. Studies should pay particular attention to the discussion of the methodology used in assessing the durability of the materials tested. Because the creeping qualities are mainly determined by the type of material microstructure, reference should be made to the microstructure and basic mechanical properties. Potential topics include, but are not limited to, the following:

- The development of modern steel and alloys for work in creep conditions
- The methods used in the forecast of operational durability and residual durability
- The assessment of the durability of welded joints

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Message from the Editor-in-Chief

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