



Assessment of the Strength of Materials and Structure Elements

Guest Editors:

Prof. Dr. Ihor Dzioba

Faculty of Mechatronics and
Mechanical Engineering, Kielce
University of Technology, Av.
1000-An. of Polish State 7, 25-314
Kielce, Poland

Dr. Sebastian Lipiec

Faculty of Mechatronics and
Mechanical Engineering, Kielce
University of Technology, Av.
1000-An. of Polish State 7, 25-314
Kielce, Poland

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Message from the Guest Editors

Dear Colleagues,

In this Special Issue, we intend to include a number of articles presenting methods for assessing the material condition of structural components made of steel, including after long-term service. This issue is important because structural components exhibit pronounced microstructural anisotropy, resulting in variations in mechanical properties, which, in turn, affect the strength and integrity of structural components. Long-term operation at elevated temperatures and/or exposure to corrosive or hydrogen-forming environments leads to material degradation, reduced strength properties and fracture toughness, which can result in failure. Currently, various methods based on experimental studies of material characterization, microstructural determination, acoustic emission, numerical modelling and other techniques are used to assess material condition.

In our Special Issue, we invite authors to publish their original research and analysis results on the assessment of current material conditions and the residual resurgence of structural elements estimated from experimental and numerical studies.





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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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