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Shape Memory Alloys for Civil Engineering

Guest Editors:

Dr. Cheng Fang

Department of Structural Engineering, College of Civil Engineering, Tongji University, Shanghai 200092, China

Prof. Dr. Canxing Qiu

Faculty of Architecture, Civil And Transportation Engineering, Beijing University of Technology, Beijing 100124, China

Dr. Yue Zheng

Department of Bridge Engineering, Tongji University, Shanghai 200092, China

Deadline for manuscript submissions:

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Message from the Guest Editors

Dear Colleagues,

Shape memory alloys (SMAs) are capable of recovering large strains, either spontaneously or by heating, depending on their thermal-mechanical state. Since the early development in the 1960s, SMAs have been successfully applied in the medical, aerospace, robotic, and automobile industries. The consideration of SMA as emerging materials for civil engineering started in the 1990s, and great research progress has been made since then. This Special Issue plans to give an overview of the most recent advances in the field of SMA research and applications in civil engineering. It aims to help remove knowledge barriers across disciplines, and sheds considerable light on the opportunity of commercializing SMA products in the construction industry.

Potential topics include, but are not limited to:

- Advanced modelling of SMA;
- Heat treatment strategies for SMA;
- SMA-based self-centering structural elements, devices and members;
- SMA for structural retrofitting;
- Performance-based design of structural systems incorporating SMA;
- Development and application of new classes of SMA;
- New SMA elements and devices.



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Prof. Dr. Cheng Fang

Prof. Dr. Canxing Qiu

Dr. Yue Zheng

Special Issue



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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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