



Microbial Bio-Grouting for Underground Constructions: Emerging Technologies for Sustainable Submarine Engineering

Guest Editors:

Dr. Chuangzhou Wu

Institute of Port, Coastal, and Offshore Engineering, Ocean College, Zhejiang University, Zhoushan 316021, China

Dr. Lei Wang

Civil Engineering, Zhengzhou University, Zhengzhou 450000, China

Deadline for manuscript submissions:

closed (30 June 2023)

Message from the Guest Editors

Dear Colleagues,

With increasing population and civil infrastructure demands worldwide, the availability of suitable soil sites for construction continues to decrease and ground improvement is now an integral part of modern development. Microbial-induced calcite precipitation (MICP) uses naturally occurring bacteria to bind soil particles together through calcium carbonate (CaCO_3) precipitation to increase the strength of soil.

MICP is a cross-disciplinary subject that includes biological, chemical and geotechnical knowledge. It is closely related to subject areas of sustainability, as MICP has great potential for energy saving and CO_2 emission. The aim of the Special Issue is to provide a space for scientists to present their new research findings or advances on MICP, and also a good chance to communicate with each other, in order to promote the development of MICP.

Applications of MICP:

- Biocementation of sands to enhance bearing capacity and liquefaction resistance
- Sequestration of carbon
- Soil erosion control
- Remediation of soil and groundwater

We look forward to receiving your contributions.

Dr. Chuangzhou Wu and Dr. Lei Wang
Guest Editors

Special Issue





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Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and
Applied Science, University of
Ontario Institute of Technology,
Oshawa, ON L1G 0C5, Canada

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Sustainability Editorial Office
MDPI, Grosspeteranlage 5
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