Special Issue

Advances in Life Cycle Management of Civil Engineering

Message from the Guest Editors

Lifecycle Management (LCM) for civil engineering is key to ensuring the long-term value and sustainability of engineerings. However, the global construction industry is currently undergoing a rapid development phase, with incessant innovations in technology, management, and materials presenting new challenges to civil engineering. Researching innovative strategies and tools for LCM is crucial in enhancing project management efficiency, reducing resource consumption, lowering environmental pollution, ensuring structural safety, optimizing the overall cost of projects (particularly long-term costs), and responding to global challenges (such as accelerated urbanization, climate change, and resource scarcity). This special issue aims to gather experts from academia and industry to share their novel methods, strategies, and practical experiences in advancing more efficient, safe, environmentally friendly, and sustainable development in civil engineering. We hope that these contributions will offer new perspectives and solutions for optimizing management at all or specific stages of a project's lifecycle. Both research and review papers are welcome.

Guest Editors

Prof. Dr. Junwu Wang

Dr. Han Wu

Dr. Zhangsheng Liu

Deadline for manuscript submissions

closed (30 June 2024)



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About the Journal

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

Editor-in-Chief

Prof. Dr. David Arditi

Construction Engineering and Management Program, Department of Civil, Architectural, and Environmental Engineering, Illinois Institute of Technology, 3201 South Dearborn Street, Chicago, IL 60616, USA

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