Preface

This edition contains articles based on research results presented at the conference Concrete Structures and Technology 2024 (22-24 September 2024, Prague, Czech Republic).

Bridges are vital components of transportation infrastructure and enduring symbols of engineering achievement. This edition focuses on both the design and analysis of the longevity of these critical structures.

Chapter 1: Bridges provides an overview of bridge types, their structure, and the engineering principles that govern their design and erection. It also highlights the technical considerations that shape the principles of digitalisation in modern bridge building.

Chapter 2: Reliability Assessment and Health Monitoring of Bridge Structures explores the tools and methodologies used to evaluate structural integrity over time. Emphasizing the importance of safety, durability, and proactive maintenance, this chapter presents current practices in diagnostic technologies and reliability analysis.

This publication will be useful for construction engineers whose activity is related to the design, erection and exploitation of bridge structures.

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