A new book entitled “Laser Scanning: An Emerging Technology in Structural Engineering” has been published in the ISPRS Book Series. This book is edited by Belén Riveiro (School of Industrial Engineering, University of Vigo, Spain) and Roderik Lindenbergh (Dept of Geoscience and Remote Sensing, Delft University of Technology, The Netherland).

This book provides an overview on the evolution of laser scanning technology and its noticeable impact in the structural engineering domain. It provides an overview of state-of-the-art algorithms, different best practices and most recent processing tools in connection to particular applications. The whole book consists of 15 chapters as follows:

- Chapter 1 Introduction
- Chapter 2 Multispectral terrestrial Lidar: state of the art and challenges
- Chapter 3 Multiplatform mobile laser scanning
- Chapter 4 Introduction to mobile mapping with portable systems
- Chapter 5 Indoor modelling with laser scanning
- Chapter 6 Geometric point cloud quality
- Chapter 7 Semantic segmentation of dense point clouds
- Chapter 8 Laser scanning for operational multiscale structural monitoring
- Chapter 9 A smart point cloud infrastructure for intelligent environments
- Chapter 10 Integration of TLS and sonar for the modelling of semi-immersed structures
- Chapter 11 Integral diagnosis and structural analysis of historical constructions by terrestrial laser scanning
- Chapter 12 Laser scanning for bridge inspection
- Chapter 13 Laser scanning data for inverse problems in structural engineering
- Chapter 14 Construction site monitoring based on laser scanning data
- Chapter 15 Integrated modelling and management information system (MMIS) for SCAN-to-BIM projects


Reported by Prof. Zhilin LI, ISPRS Book Series Editor