



Maintaining Integrity, Performance and Safety of the Road Infrastructure through Autonomous Robotized Solutions and Modularization

Guest Editor:

Dr. Joaquín Martínez-Sánchez
CINTECX, Universidade de Vigo.
Applied Geotechnologies Group,
36310 Vigo, Spain

Deadline for manuscript
submissions:
closed (31 October 2025)

Message from the Guest Editor

InfraROB, a project funded by the European Commission's Horizon 2020 initiative, aims to mitigate risks to construction workers and road users by leveraging automation and robotics to replace repetitive tasks and minimize exposure to live traffic and construction machinery. The primary objectives include enhancing worker safety, optimizing transport network availability, reducing the cost of repetitive tasks, and ensuring the safety of road users.

Focusing primarily on roadbeds and pavements, InfraROB targets the most critical elements of road infrastructure by developing autonomous systems for repaving, crack and pothole repair, and line marking, specifically tailored to asphalt pavements, which comprise 90% of Europe's paved roads. Additionally, collaborative robotized safety systems, including safety cones and remotely piloted aircraft systems (RPASs), have been framed and will be deployed to enhance on-site safety. Another innovation consists of the creation of multifunctional precast concrete elements that serve both as roadside safety barriers and road construction elements, enhancing modularization in road design and construction.





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Pedro Arias-Sánchez

Applied Geotechnologies Group,
Department of Natural Resources
and Environmental Engineering,
School of Mining Engineering,
University of Vigo, 36310 Vigo,
Spain

Message from the Editor-in-Chief

You are invited to contribute a research article, review or short communication for consideration and publication in *Infrastructures* (ISSN 2412-3811). There is no restriction on the length of the papers. *Infrastructures* is published in open access format. The scientific community and general public have unlimited free access to the content as soon as it is published. *Infrastructures* is supported by the authors by the payment of article processing charges for accepted manuscripts. Please consider *Infrastructures* as an exceptional opportunity to publish your work.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, ESCI (Web of Science), Inspec, and other databases.

Journal Rank: JCR - Q2 (Construction and Building Technology) / CiteScore - Q1 (Building and Construction)

Contact Us

Infrastructures Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/infrastructures
infrastructures@mdpi.com