



an Open Access Journal by MDPI

Cutting-Edge Additive Manufacturing Technologies for Construction Applications

Guest Editors:

Dr. Pshtiwan Shakor

School of Civil and
Environmental Engineering,
Faculty of Engineering and
Information Technology,
University of Technology Sydney,
Broadway, NSW 2007, Australia

Dr. Alireza Kashani

School of Civil and
Environmental Engineering,
Engineering Faculty, University of
New South Wales, Kensington,
NSW 2052, Australia

Deadline for manuscript
submissions:

closed (10 May 2022)

Message from the Guest Editors

Additive Manufacturing (AM) technologies are the most suitable technologies for construction applications in the fourth industrial revolution. These techniques such as extrusion printing, binder jetting (inkjet) printing, powder bed fusion, robocasting and smart dynamic casting are among the most usable printing techniques for construction applications. These techniques could be used to create 3D printing composite materials in the cast-in-situ or precast structures, this will be highly efficient to make a sustained environment. However, there are limited studies that could be found on this topic. This special issue could assist researchers, engineers and scientists to share their new conceptual, experimental, theoretical and numerical methods of AM technology in order to optimise the materials mix and process. Accordingly, selecting proper materials and AM technologies could be measured as a vital stage to increase the potential of 3D printing for construction applications.

Keywords: additive manufacturing; extrusion 3DP; binder jetting 3DP; powder bed fusion; construction materials; construction application; curing; post-processing



mdpi.com/si/90860



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)