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Cutting-Edge Additive Manufacturing Technologies for Construction Applications

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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

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Message from the Editor-in-Chief

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