Special Issue

Mortarless and Interlocking Structures: Towards Environmentally Friendly Construction

Message from the Guest Editors

Currently, construction methods use considerable amounts of cement, the production of which involves CO2 emission. Another environmental impact is related to the production of waste during structural repairs and especially at the demolition stage at the end of the structure life cycle. Therefore, recycling the waste presents a serious problem. One of the ways to mitigate these environmental impacts and turn to environmentally friendly construction is to use interlocking structures, whose building blocks have specially engineered contact surfaces to maintain structural integrity. This Special Issue invites papers that consider both classical interlocking (through keys and connectors) and topological interlocking based on the special geometry of the blocks together with the specially designed peripheral constraint. Papers considering the design of interlocking blocks, production methods, mechanics and dynamics of interlocking structures, as well as possible applications and the assessment of the environmental impact are welcome. **Keywords:** topological interlocking; osteomorphic blocks; vibrational damping; structural integrity; statics; dynamics; demountable structures.

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Deadline for manuscript submissions

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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.

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