Special Issue

Probabilistic and Fuzzy Approaches for Estimating the Life Cycle Costs of Buildings

Message from the Guest Editor

The main topics of this Special Issue will be regarding approaches for estimating the life cycle cost of buildings. The construction sector is a major consumer of natural resources and cost. Life cycle cost (LCC) makes it possible for the whole life performance of buildings and other structures to be optimized. The introduction of the idea of thinking in terms of a building life cycle resulted in the need to use appropriate tools and techniques for assessing and analyzing costs throughout the life cycle of the building. Traditionally, estimates of LCC have been done based on historical analysis of data and have used deterministic models. The concepts of probability theory can also be applied to life cycle costing, treating the costs, and timings as a stochastic process. If any subjectivity is introduced to the estimates, then the uncertainty cannot be handled using the probability theory alone. The fuzzy sets theory is a valuable tool for handling such uncertainties. Possible improvements to the traditional approach models, using, for example, an analytical hierarchical model (AHP), are proposed.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

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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