Special Issue

Modelling, Assessing and Controlling Deterioration Process of Reinforced Concrete Structures

Message from the Guest Editors

The objective of this Special Issue is to present the latest research in the field of RC deterioration modeling, assessment and controlling. It will cover the models of RC deterioration processes (physical-law-based or measured-data-based), model-updating methods using inspection/monitoring data, durability assessment methods of RC structures in actual service environments, and maintenance planning to achieve the specified service life. In addition, it will strongly emphasize the novelty and applicability of the developed deterioration models and assessment methods, and in-depth comparisons with in situ data. Examples of topics of interest include but are not limited to the following:

- Models of RC deterioration processes in complex in-service environments
- Deterioration model updates using inspection/monitoring data
- Reliability methods developed for durability assessment of deteriorating RC structures
- Optimization of RC structure maintenance based on life-cycle performance target and cost
- Deterioration modeling of RC structures after maintenance/repair
- Quantitative durability design of RC structures for specified service lives

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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