## **Special Issue**

# Analyzing Structures Using Soft Computing Techniques, Numerical Modelling and Finite Element Analysis

## Message from the Guest Editors

We are delighted to invite original research articles as well as high-quality review papers for this Special Issue on "Analyzing Structures using Soft Computing Techniques, Numerical Modelling and Finite-Element Analysis". The goal of this Special Issue is to assemble the most recent research trends using numerical methods and soft computing in structural engineering. Contributions on the following topics (but not limited to this list) are welcome:

- A variety of soft computing applications in structural engineering (fuzzy logic, genetic algorithms, artificial neural networks, deep learning, machine learning and other computing methods);
- Numerical modelling and multiscale analysis (from nano- and micro- to meso- and macrolevels);
- Analysis of structures composed of different materials:
- Structural analysis using the finite-element method;
- Innovative and sustainable construction materials in structures:
- Earthquake engineering and structural dynamics;
- Building seismic response;
- Structural engineering based on performance;
- Structural inspection, repair and strengthening methods using numerical techniques;
- Analysis of smart materials and structures.

#### **Guest Editors**

Dr. Krishanu Roy

Dr. G. Beulah Gnana Ananthi

Dr. Zhiyuan Arthur Fang

## **Deadline for manuscript submissions**

closed (31 July 2023)



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## About the Journal

## Message from the Editor-in-Chief

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.

### Editor-in-Chief

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