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# Mathematical Modeling using Differential Equations, and Network Theory

Guest Editor:

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Deadline for manuscript submissions: closed (31 December 2019)

#### Message from the Guest Editor

Dear Colleagues,

This special issue aims at collecting latest results on Differential/Difference Equations, Mathematics of Networks, and their applications into Electrical Power Systems, Materials, Energy, Macroeconomics, etc.

This Special Issue will accept high-quality papers having original research results, and its purpose is to bring together Mathematicians with Physicists, Engineers, as well as other scientists.

# Topics covered but not limited to:

- Differential/Difference equations
- Dynamical systems
- Mathematics of Networks
- Fractional calculus
- Modelling and Stability Analysis of Power Systems
- Discrete calculus
- Circuits Theory
- Signal Processing
- Materials Science
- Energy Systems
- Macroeconomics

Dr. Ioannis Dassios *Guest Editor* 





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# **Editor-in-Chief**

#### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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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