Advances and Trends in Mathematical Modelling, Design, Control and Identification of Modern Vibrating Energy Conversion Systems

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Message from the Guest Editors

The aim of this Special Issue is to introduce recent research contributions and trends in the fields of analysis, modelling, design, control, identification, and experimental instrumentation of energy conversion systems, where oscillations can be exhibited. The significant relevance of applied mathematics should be highlighted. In this context, novel experimental, theoretical and industrial studies related (but not limited) to wind energy, solar, chemical, electromechanical, electromagnetic energy conversion systems, including their components, and other applications of passive, semi-active, active and hybrid vibration control are welcome. Original research and review articles are welcome. Potential topics include, but are not limited to, mathematical modelling, vibration analysis and control, system identification, disturbance estimation, protection and control of modern power systems, power converters, power electronics, electric vehicles, battery energy storage systems, vibration isolation systems and other experimental and theoretical developments in which the presence of oscillations constitutes a relevant issue.

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Special Issue

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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