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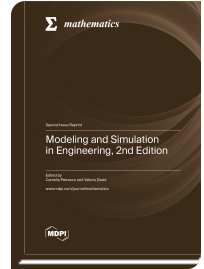


Special Issue Reprint

Modeling and Simulation in Engineering, 2nd Edition

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The Special Issue Modeling and Simulation in Engineering, belonging to the section Engineering Mathematics of the Journal Mathematics, publishes original research papers involving advanced simulation and modeling techniques. The present reprint, “Modeling and Simulation in Engineering 2nd Edition, 2023”, contains 13 papers accepted after peer review by recognized specialists in the field. The papers address different topics in engineering that use modeling, optimization as well as experimental and numerical methods. The subject of the papers addresses technical problems such as adaptive controller design for non-linear systems, simulation of light scattering produced by special paints, estimation of the magnetic field produced by overhead power lines, angle estimation using inertial measurement units, study of multiple transfer phenomena in viscous fluid flow, optimization of aircraft tail using numerical methods, the study of new types of adjustable speed drives, investigation of nano-fluid flow in different systems, metaheuristic methods applied for maximum power point tracking in photovoltaic systems, as well as theoretical topics such as the use of surrogate models in optimization problems and characterization of structured singular values. It is hoped that the papers selected for this Special Issue will attract a significant audience in the scientific community and will further stimulate research involving modelling and simulation in mathematical physics and in engineering.



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