



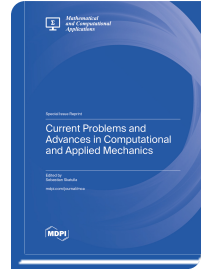
Special Issue Reprint

Current Problems and Advances in Computational and Applied Mechanics

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Advances in computational solid and fluid mechanics have led to significant developments in a large variety of fields, including engineering, physics, and medicine. Computational mechanics offers design flexibility, sophistication, and experimentation, enabling engineers to analyse complex design problems and optimisation solutions efficiently at reduced costs. This Special Edition illustrates the latest advances in computational solid mechanics, fluid mechanics, and coupled problems, and their application to practical engineering problems. This volume contains the scientific contributions presented at the 5th African Conference on Computational Mechanics (AfriComp5) which took place in Cape Town, South Africa, 2–4 November 2022. The articles comprise topics from the wide range of applied mechanics and mathematics including structural mechanics; fluid mechanics; fluid–structure interaction; biomechanics; damage and fracture mechanics; multi-scale mechanics; multi-physics; advanced numerical methods; optimisation and design; and big data and machine learning. Only original contributions were considered for inclusion. All articles were subjected to a full process of double-blind peer review. The review of manuscripts was undertaken by members of the Scientific Advisory Board and other identified leading experts, acting independently on one or more assigned manuscripts. The reader would find this Special to be a useful reference of the state of the art in a variety of areas spanning theoretical and applied mechanics.



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