



COMPUTERS & STRUCTURES

Solids • Structures • Fluids • Multiphysics

AUTHOR INFORMATION PACK

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DESCRIPTION

Computers & Structures publishes advances in the development and use of **computational methods** for the solution of problems in **engineering** and the **sciences**. The range of appropriate contributions is wide, and includes papers on establishing appropriate mathematical models and their numerical solution in all areas of **mechanics**. The journal also includes articles that present a substantial review of a field in the topics of the journal.

With the modern use of **computers** and numerical methods to model and solve problems, the traditional boundaries between the fields of solid/structural mechanics and fluid mechanics hardly exist any longer, and multiphysics problems are solved that involve all aspects of mechanics. The word 'structures' must therefore now be interpreted in a broad sense including **solids, fluids** and **multiphysics**.

Computers & Structures publishes papers in these fields that either present novel and quite general techniques, or offer substantial new insights into important methods. If a paper presents novel techniques, some comparison with known advanced methods is necessary. If a paper is to provide substantial new insights into advanced methods, then this can be achieved by strong numerical experiments, some mathematical analysis, and/or comparisons with well-designed physical test data. In either case, the paper must contribute to advancing the state of the art.

The focus of *Computers & Structures* is on having an impact on the practice of simulations in mechanics as found in many industries and research endeavours, including the fields of engineering, such as civil and environmental, mechanical, biomechanical, automotive, aeronautical, and ocean engineering, and including the various fields of the sciences.

In these areas, papers are sought on the automatic solution of mathematical models of 'structures' in the broadest sense, possibly including phenomena of multiphysics, multiscale, and uncertainties. Also, papers presenting algorithms for **optimization** and the **simulation** of complete **life cycles** of systems are sought.

Established in 1971, and with online [submission](#) and review launched in 2006, *Computers & Structures* is indispensable for researchers and practitioners in academic, governmental and industrial communities.

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