COMPUTERS & FLUIDS
An International Journal

AUTHOR INFORMATION PACK

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DESCRIPTION

Computers & Fluids is multidisciplinary. The term 'fluid' is interpreted in the broadest sense. Hydro- and aerodynamics, high-speed and physical gas dynamics, turbulence and flow stability, multiphase flow, rheology, tribology and fluid-structure interaction are all of interest, provided that computer technique plays a significant role in the associated studies or design methodology.

Applications will be found in most branches of engineering and science: mechanical, civil, chemical, aeronautical, medical, geophysical, nuclear and oceanographic. These will involve problems of air, sea and land vehicle motion and flow physics, energy conversion and power, chemical reactors and transport processes, ocean and atmospheric effects and pollution, biomedicine, noise and acoustics, and magnetohydrodynamics amongst others.

The development of numerical methods relevant to fluid flow computations, computational analysis of flow physics and fluid interactions and novel applications to flow systems and to design are pertinent to Computers & Fluids. Benchmark solutions are also within the scope of the journal and will be published in dedicated issues.

Policy statement on validation and numerical accuracy:

Computers & Fluids will reject all manuscripts that do not report results with the required assessment of accuracy. The following items should be discussed and supported by adequate data and/or references:

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Statement of code verification activities: numerical implementation of the numerical schemes and algorithms should have been verified, e.g. using analytical solutions, manufactured solutions or highly accurate benchmark solutions.

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Authors are free to propose benchmark solutions. In the case several submitted papers under review deal with the very close test cases, authors will be asked to converge on a set of test cases and to re-submit a common paper.

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INTRODUCTION
Computers & Fluids is multidisciplinary. The term 'fluid' is interpreted in the broadest sense. Hydro- and aerodynamics, high-speed and physical gas dynamics, turbulence and flow stability, multiphase flow, rheology, tribology and fluid-structure interaction are all of interest, provided that computer technique plays a significant role in the associated studies or design methodology. Applications will be found in most branches of engineering and science: mechanical, civil, chemical, aeronautical, medical, geophysical, nuclear and oceanographic. These will involve problems of air, sea and land vehicle motion and flow physics, energy conversion and power, chemical reactors and transport processes, ocean and atmospheric effects and pollution, biomedicine, noise and acoustics, and magnetohydrodynamics amongst others. The development of numerical methods relevant to fluid flow computations, computational analysis of flow physics and fluid interactions and novel applications to flow systems and to design are pertinent to Computers & Fluids.

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