

Editorial: Heat transfer processes

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This special issue of Progress in Computational Fluid Dynamics, An International Journal presents the state of the art in the field of heat transfer processes.

The heat transfer maintains as a subject of central importance both in traditional and newly developing areas. New technologies rely more and more on advances in heat transfer and thermal sciences. The quality of many products is significantly affected by the heat and mass transfer. It is important therefore to understand all elementary processes; this is especially for products and technologies of mechanical, chemical, aerospace, materials, and energy sciences.

This special issue demonstrates how advanced mathematical, physical and numerical modelling of heat transfer can be used in the analysis of these processes. The sixteen papers contained in this special issue were reviewed and are classified in six categories:

- Turbulence (2 papers)
- Natural convection (3 papers)

- Numerical modelling (2 papers)
- Heat transfer in industrial systems (3 papers)
- Heat transfer in micro-channels (1 paper)
- Effects of strong magnetic field (5 papers).

These papers include recent major developments in both the fundamentals and applications, and provide valuable information both to researchers and students dealing with the heat and mass transfer.

Our grateful thanks go to all authors for their hard work, cooperation, patience and high quality contributions so that we can bring this special issue to completion.

We are grateful to all the reviewers from all over the world. We especially acknowledge their professional help for improvement of the content of accepted papers.

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