

Editorial

Fluid flow, thermodynamics and heat/mass transfer are central pillars of science and technology. They have been central to the development of our civilization because we use them to understand natural-world phenomena but also to move forward through incremental improvements in technology.

Nowadays, some long-standing fundamental problems remain unsolved while current developments are giving rise to many more of them. Therefore, advances in the understanding of fluid flow, thermodynamics and heat/mass transfer continue to be crucial in science as well as in almost all fields of engineering. They are usually part of applied mathematics, physics and engineering research, and can be involved in astrophysics, meteorology, geophysics, oceanography, biology, and much more, including the traditional branches of engineering (mechanical, civil and chemical engineering) and recent ramifications (bioengineering and bio-technology). Consequently, the tendency to become compartmentalized into subjects with different groups may leads to particular advancements being known only inside each area.

The special session “Fluid Flow, Energy Transfer and Design” held at the 9th International Conference on Diffusion in Solids and Liquids (DSL 2013) sheltered papers of different areas ranging from physics, mathematics and chemistry to engineering. It served as a link under which authors of different areas and backgrounds came together, and make their research accessible to the varied audience. In this sense worked to counter the possible divisive tendency.

This special issue is a fitting tribute to the different views since this is not a divisive tendency but the seethe of science that shapes the ever-changing landscapes of our research world.

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