

Preface

The special issue entitled “Transfer Phenomena in Fluid and Heat Flows XIII” of Defect and Diffusion Forum continues a series of themed volumes and presents a collection of works associated to heat transfer and fluid flow phenomena. These topics can be understood in a wider sense as classical diffusion-related topics. The continuous need for improved machines and higher efficiencies, as well as more detailed and accurate theoretical modeling approaches makes it necessary to showcase the latest trends on a regular basis with small intervals between the different volumes in this topical series.

The topics covered in this issue range from the context of alternative energy (e.g. special pumps, light bulbs, water waves), technical applications (e.g. additive manufacturing, cooling of braking systems, drying, batteries, combustion), mathematics and modeling (e.g. analytical and numerical solutions), to the basic of fluid flow (e.g. mixing, combined modes of heat and mass transfer, testing etc.).

We hope you enjoy the reading of this collection of these interesting works. By ending, we thank for all the hard work of authors and reviewers that made this topical volume in Defect and Diffusion Forum again possible.

Luiz Rocha,
Antonio F. Miguel
Andreas Öchsner