

Preface

This volume of the journal “Defect and Diffusion Forum” presents to readers the special issue “Transfer Phenomena in Fluid and Heat Flows VII” which contains articles covering theoretical and practical aspects of modeling and numerical investigation of the diffusion in solid materials, diffusive convection, magnetohydrodynamic mixed convective flows and heat transfer phenomena in different media and engineering objects.

The presented results are of great importance in the study of different convective phenomena, moving fluids and also for practical designing in the field of modern micro- and nanoelectromechanical systems for the technical and biomedical use, various chemical and pharmacological technologies, cooling systems of electrical and electronic components and devices, thermal storage systems and micromixing technologies.

From this volume we start publishing articles on various aspects of heat and mass transfer in the processes of casting, combustion, and welding.

We hope that our special issue will be very interesting and useful for a wide audience of researchers and engineers from area of applied heat and mass transfer.

We would like to thank all who participated in the collecting of this special issue, authors for their valuable contributions and reviewers for their reports and important comments.

Dr. Stanislav Kolisnychenko

Editor