

Preface

Heat transfer in solids and fluid flow seems to pervade all aspects of our life with innumerable applications in engineering and industrial processes. Despite decades of high quality research, this complex phenomenon still constitutes many challenges. The special issue on “New Development for Heat Transfer in Solids and Fluid Flow” of the journal “Defect and Diffusion Forum” addresses a number of pertinent issues related to novel analytical and numerical modelling of various problems with respect to heat transfer in solids and fluid flow. Papers presented cover exothermic kinetics in solids, nanofluids and hybrid nanofluids dynamics, natural convection, forced convection, mixed convection, magnetohydrodynamics, biotransport, porous media flow and entropy generation analysis.

The obtained results are very significance in the study of nonlinear heat transfer in solids and fluids flow with wide applications in area of materials development, thermal storage, biomedical, solar heating, nuclear system cooling, micromixing technologies, military equipment storage, cooling of electrical and electronics components, product management, power production, pollution control and safety assessment.

It is our hope that this special issue will stimulate and help a wide audience of researchers, engineers and educators from various fields of human activity.

Our appreciation goes to all the participants for their excellent contribution toward the success of this special issue, especially the reviewers for their constructive comments and the authors for their outstanding work.

Professor Oluwole Daniel Makinde
Editor