

Preface

It is now very well recognized that the mass and thermal transport properties of engineering materials underpin much of the advance in the development of new materials and the improvement of existing materials. Whether it be the ongoing enhancement of the engineering properties of materials, the materials processing, the in-service longevity of materials or the recycling of materials, mass and thermal transport very frequently play direct and essential roles. This volume of Diffusion Foundations is entitled *Advances in Mass and Thermal Transport in Engineering Materials*. The volume was designed to capture a very wide cross-section of research in the area in both experimental and modelling of mass and thermal transport and at both basic and applied levels.

The in-depth papers that have been collected range, for example, from atom motion following nuclear transmutation in certain intermetallic to thermal desorption, from an enhanced oil recovery process to the development of new wrought magnesium alloys, from the modelling of thermal transport in hafnium dioxide to interdiffusion experiments in cobalt-antimony alloys. We wish to thank the authors for their contributions and also the referees for their efforts.

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