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Preface

This volume contains the proceedings of the 17th IFHTSE Congress held at Kobe International Conference Center in Kobe, Japan from October 26 to 28, 2008, and was published as a special issue of "Netsu Shori" (heat treatment in Japanese) which is a journal of The Japan Society for Heat Treatment (JSHT).

Recently, world demand for iron based materials has increased tremendously, and global environment and natural resources issues are becoming more prevalent and important. Under such circumstances,



high quality, reliability and safety are certainly required for all metallic parts and products. Needless to say, the properties of metallic materials depend strongly on microstructure, and the microstructure is controlled by heat treatment technologies including phase transformations, thermo-mechanical processes and surface engineering technologies.

Following a long tradition of IFHTSE (International Federation for Heat Treatment and Surface Engineering) events, the 17th congress was held in Kobe. This is the first IFHTSE congress to be held in Japan since the one held in Kyoto in 1992. The congress is particularly meaningful because it is being held in commemoration of the 50th anniversary of the foundation of JSHT. The congress aimed to bring together delegates from industry and academia to discuss and exchange views on the latest developments in heat treatment technologies. Topics covered include bulk heat treatment, surface engineering technology, modeling and simulation of metallic materials.

In this congress, there were 168 oral presentations including 6 Educational lectures, 4 keynote lectures and 6 invited lectures, as well as 86 poster presentations. The number of participants was about 470 from 26 countries.

I am grateful to our colleagues from all over the world for their contributions to the 17th IFHTSE Congress. I would also like to express my thanks to members of the Organizing, Finance and Steering committees for their efforts toward making this congress a success.

Tadashi Maki Chairman of the Organizing Committee The 17th IFHTSE Congress

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