

Preface

This volume contains the proceedings of the International Thermal Spray Conference 2007 (ITSC 2007) held in Beijing, China, May 14–16, 2007. The theme of the conference focused on global coating solutions, a reference to both the broad range of applications where thermal spray coatings are being employed to improve performance, and the international scope of activity in the thermal spray field. More than 200 papers covering the full spectrum of subjects in the area of thermal spray are presented in this volume. The contributions feature a broad range of topics, including recent progress in the basic science of spraying, diagnostics, process control, particle impact, microstructure, and properties; results on degradation mechanisms, testing and performance evaluation; and developments in new materials, processes, equipment and applications. In short, this collection of papers presents a snapshot of the current state of advancement of the thermal spray field.

The submissions contained within this volume have all passed through a formal review process. All abstracts were reviewed by the ITSC-2007 Program Organizing Committee. The persons who sit on the Program Organizing Committee are listed in these proceedings. At this initial stage, the 200-word abstracts were assessed by a committee of international experts. The abstracts were checked for overall scientific and engineering content so that a decision could be made concerning whether the corresponding author could be invited to submit a full manuscript. It was necessary for such manuscripts to follow strict guidelines in regard to format, editorial style, quality, and standard of scientific and technical content. The prime restriction placed on the authors was to maintain their contribution to within six pages. All manuscripts were reviewed by the team of editors with regard to scientific and technical content. On this basis, a decision was made concerning the acceptance or rejection of the manuscript. In summary, all of the papers within the ITSC-2007 Proceedings were reviewed according to established, high-quality guidelines.

Many individuals have contributed to the successful completion of this work. We thank the authors for choosing this venue to share their research results and insights with their peers. We are indebted to Fernande Lachance of the Industrial Materials Institute, National Research Council of Canada for her tireless efforts in addressing issues related to formatting and patiently working with us to process the 1180 pages of text, tables and figures. And finally, completion of this work would not have been possible without a strong commitment from our employers, the National Research Council of Canada, The University of Auckland, GE Global Research, Xi'an Jiaotong University and the University of Limoges, to support this endeavor by providing the resources required to accomplish this task.

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