

# Editorial



Basil Marple



Arvind Agarwal



Margaret M. Hyland



Yuk-Chiu Lau



Chang-Jiu Li



Rogerio S. Lima



Ghislain Montavon

This special issue of the *Journal of Thermal Spray Technology* features a selection of papers presented at the International Thermal Spray Conference 2010 (ITSC 2010) held in Singapore, May 3-5, 2010. The theme of the conference, "Global Solutions for Future Applications," focused on both the opportunities and the challenges in the field of thermal spray. Finding coating solutions to address a wide range of industrial needs that are encountered around the globe will enable this field to grow and expand into new areas. This will be aided by the development of new equipment, materials, and processes for engineering surfaces required in different and more-demanding applications.

This conference carried on the tradition of international thermal spray events that have played a vital role in promoting and advancing this field. The ITSC, held on an annual basis, is organized jointly by the ASM Thermal Spray Society (TSS), the German Welding Society (DVS), and the International Institute of Welding (IIW). The venue rotates on a 3-year basis among locations in Asia, Europe, and North America. It brings together key players, including researchers, developers, manufacturers, and end-users, representing the full range of activity in this area. The gathering provides an opportunity for hearing about cutting-edge research; identifying new applications and market opportunities; learning about current technical challenges and future needs; finding solutions for existing problems; generating ideas for orienting future research programs; and obtaining information on a wide array of the latest technology, materials and equipment available in the field. In addition, the event encourages and facilitates networking, which can lead to the development of closer ties between the various players and foster the initiation of research collaborations and the formation of business partnerships.

This volume contains 43 papers drawn from the nearly two hundred appearing in the Proceedings of ITSC 2010 published in CD-ROM format by DVS. Authors of the selected papers were invited to submit manuscripts to the JTST where they passed

through the full peer review process required for publishing peer reviewed papers in this journal. These papers represent a cross section of the topics covered at the conference and provide insight into the latest developments and current trends in the thermal spray field. We hope this expanded JTST issue serves as a valuable reference source.

***Guest Editors***

**Basil R. Marple**

National Research Council of Canada  
Quebec, Canada

**Arvind Agarwal**

Florida International University  
Miami, FL, USA

**Margaret M. Hyland**

University of Auckland  
Auckland, New Zealand

**Yuk-Chiu Lau**

GE Energy  
New York, USA

**Chang-Jiu Li**

Xi'an Jiaotong University  
Xi'an, Shaanxi, China

**Rogerio S. Lima**

National Research Council of Canada  
Quebec, Canada

**Ghislain Montavon**

LERMPS  
Belfort, France