

Editorial



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This special issue of the *Journal of Thermal Spray Technology* features a selection of papers presented at the International Thermal Spray Conference 2015 (ITSC 2015) held in Long Beach, California, USA, May 11-14, 2015, which was co-located with AeroMat and Microstructural Characterization of Aerospace Materials and Coatings. This conference is co-organized by the ASM International Thermal Spray Society (TSS), the German Welding Society (DVS), and the International Institute of Welding (IIW).

This conference focused on the challenges and opportunities in the thermal spray field to link research with practice, by examples of thermal spray coating applications, across a wide range of markets. The topics of the sessions addressed a broad range of fundamental and applied aspects of the science and engineering of thermal spraying. They covered applications such as advanced coatings for the aerospace industry, automotive and heavy duty truck industries, energy production, medical industry, electronics and semi-conductor industries, wear and corrosion, as well as innovative thermal spray processes, such as suspension and solution plasma spray, vapor deposition by low pressure plasma spray, and cold spray.

This ITSC event is the foremost international conference in the thermal spray field and brings together researchers, engineers, manufacturers, and suppliers from all around the globe. It is held annually in cities in North America, Europe, or Asia and includes oral presentations, poster sessions, and an exhibition of thermal spray suppliers of equipment, consumables, and services. It also features a special session aimed toward assisting the career development of young professionals and to get the next generation more actively involved in the thermal spray field. The conference provides a unique, interactive forum for exchanging ideas, sharing new knowledge and technical know-how, and establishing relationships with international researchers and entrepreneurs.

This special issue contains 39 papers selected from the more than 180 appearing in the proceedings of ITSC 2015, published by ASM International. All the articles in this issue have passed through the full peer review process of this journal. They represent a sampling of the topics covered at the conference and provide insight into ongoing developments and important existing and emerging applications in thermal spray.

We expect that this volume will serve as a valuable reference source for scientists and engineers and will help them to develop specific thermal spray processes and coatings to address the wide range of industry needs.

In closing, we would like to thank the nearly 80 reviewers for their high-quality and diligent reviews and the authors for their contributions and thoughtful responses to the reviews.

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