Editorial

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The first part of this issue of the *Journal of Thermal Spray Technology* features a selection of papers presented at the 5th International Workshop on Suspension and Solution Thermal Spraying 2011 (S2TS 2011) held in Tours (France), on October 3-5, 2011. The theme of this workshop was focused on the development and applications of nano-material coatings obtained by such thermal spraying processes as plasma or HVOF and so on. This meeting is organized every 18 months or so by the French Atomic Energy and Alternative Energy Commission (CEA), with the help of the major European Universities (French, German, Italian...) working in the field.

One main goal of the meeting is to favor discussions between on the one hand young students or researchers and experts in the field and on the other hand between academic researchers and industry. To encourage student participation, the S2TS Organizing Committee has set an affordable student registration rate. Like in theater, the meeting takes place with only one plenary session that lasts all day long.

Since the first workshop in 2007, the research field has moved on from the diagnosis and analysis of the process to potential industrial applications with, now, characterization of the coatings' microstructure.

Some presentations dealt with the analysis of the process but the majority of the papers were dedicated to coatings for applications, from thermal barriers to photo catalytic coatings. They showed that the potential of industrial applications is very promising. Results from the properties of dense and thin coatings with high spraying yields also show new perspectives that coarse powder spraying cannot reach.

The 2011 S2TS session incorporated a Round Table dedicated to the Present and Future of Solution and Suspension Thermal Spraying Applications. The main points discussed during the Round Table led by Dr. L. Bianchi from CEA and animated by five experts of the thermal spray field (D. Billière—Saint Gobain Coating Solution, France; R. Pontone—Tekna Plasma System, Canada; E. Cottler—Sulzer Metco, USA; R. Gadow—University of Stuttgart, Germany; and G. Montavon—University of Belfort Montbéliard, France) is contained in the Commentary included in this issue.

The experts have pointed out the necessity of collaborations between academia and manufacturers as well as the lack of coordination and financial support to improve the process into a mature and robust technology that could emerge to industry. It is hoped that this issue will be a useful and valuable help for further developments and research studies in Suspension and Solution Thermal Spraying.

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