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SÉMINAIRE

Lundi 31 mai, 10h30

*Salle de conférence, Bâtiment 15
Campus Boucicaut, 140 rue de Lourmel, 75015 Paris*

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MICROSTRUCTURAL STUDY OF THERMAL SPRAY COATINGS AND THE SPLAT-SUBSTRATE INTERFACE BY ELECTRON MICROSCOPY

Thermal spray coatings are produced by spraying the coating material, usually in powder form, through a flame (plasma, oxygen-fuelled, etc.) and onto a substrate. Widely used in several industries, partly because of their flexibility (almost any polymer/ceramic/metallic material can be sprayed onto any ceramic or metallic substrate), the processes by which they form, and notably the interaction between the coating and the substrate, are still not well understood. Thus NiCr splats, plasma and HVOF (High Velocity Oxygen Fuel) sprayed onto Al and stainless steel substrates in various conditions, were studied using several electron microscopy techniques (SEM, FIB, TEM, etc.) to observe their microstructure and the characteristics of the splat-substrate interface.

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