



Thermal spray technologies: from hot plasma to cold kinetic spray

July 5th, h. 10:00 – 11.00 am

Seminar Room, Polo Ferrari 2, Via Sommarive 9, Trento

Info

DII - Dipartimento di Ingegneria Industriale tel. +39 0461 282500 dii.supportstaff@unitn.it

Speaker

Jan Cizek, Institute of Plasma Physics, Czech Academy of Sciences, Czech Republic

Thermal spray technologies are an ensemble of industrially proven processes with an annual worldwide turnover of over \$9bn. Ever since its humble beginnings a century ago, its evolution has given rise to novel approaches, materials and opened a vast field of applications.

To illustrate the pace, three new processes were invented in the last decade and the conservative sectors such as aerospace or biology use the processes routinely now. In the talk, we will cover the basic work principles, present some of the techniques, discuss the respective advantages and drawbacks and, in the end, we will take a deeper look at cold kinetic spraying, a newborn in the family.