

Café Scientifique invité

Bâtiment H10, salle B11

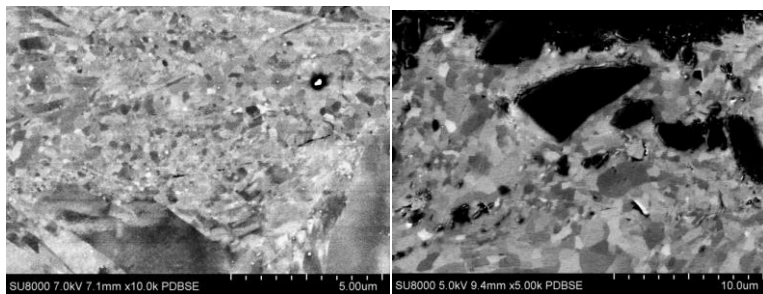
Mardi 17 décembre 2013 - 13h-14h

Micromechanical and Tribological Studies of Cold Spray Coatings

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Cold spray is a coating technology with many applications including freeform manufacturing, aerospace part repair and corrosion and wear resistant coatings. The process has become very robust for metals with high sprayability such as Al and Cu, but difficulty remains for composites and higher strength metals and alloys. In this presentation, I will describe the unique cold spray facilities in the McGill Aerospace Materials and Alloy Design Center (MAMADC) and the multi-scale testing approach used in my research. Two projects will be presented: micromechanical testing of Ti cold spray coatings and tribological testing of cold sprayed Al-Al₂O₃ metal matrix composites.



Ti cold spray coating

Al-Al₂O₃ composite

