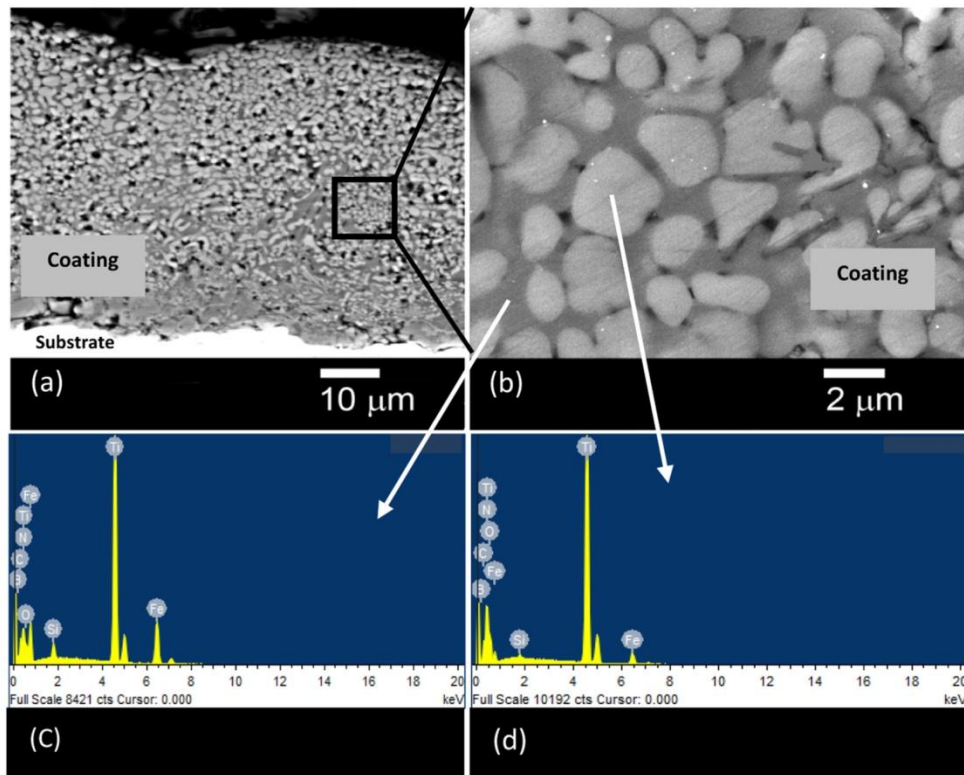


## Research highlights from Coatings Tribology group

Our research endeavors include Surface Technologies, Coatings' Tribology and Solid Lubrication. We primarily focus on the development of protective coatings with a suitable combination of hardness, thermal stability, wear and corrosion resistance and low friction characteristics following different methods and procedures. Hard coatings can be manufactured in-situ or ex-situ through laser surface alloying (LSA) or powder metallurgical routes. Manufacturing such hard metal matrix or ceramic matrix composite coatings can increase the potential of a metal surface in tribological applications. We are also involved in the development of electroless Ni plating, which is also one effective route to manufacture metal alloy or composite coatings with considerable superiority in terms of hardness and tribological properties and has relevance to aerospace, automotive, chemical and electrical industries. Presently, we are trying to find a way to incorporate lubricious phases into the electroless coating matrix with a view to improve its frictional properties.

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This SEM photograph of our latest publication has been chosen to be at the cover page of the latest edition of *Ceramics international* journal (Volume 44, Issue 14)