

The 577th

MANA & GREEN

The 55th



The 8th Joint Seminar



Molecular Surface Architectures: from Nanostructures to Corrosion Protection Coatings

Chair: Dr. Kohei Uosaki (MANA PI, Director of GREEN)

Prof. Jamie Quinton

(Flinders University, Australia)

Surface Modification is often essential for matching a material's bulk properties with the environment that it will encounter in its final application. Whether by coating, passivation or cladding, the desired outcome is only achieved through controlling the chemistry of the native surface and any species that may be used to alter the surface.

At Flinders over the 15 years we have been using wet-chemical and plasma treatment methods to achieve surface modification, on a variety of surfaces for a number of applications. The success of the approach taken in each case is largely dependent upon understanding molecular scale behaviour that takes place during the surface treatment process.

In this seminar, the spectromicroscopy journey taken in this research field will be highlighted, and a focus on molecular surface modification for nanostructured architectures and environmentally friendly corrosion protection coatings, the latter of which experience unusual self-assembly behaviour, will be made.

Venue: Auditorium, 1F, WPI-MANA Bldg., Namiki-site

Date: February 2nd, Thursday **Time: 16:00-17:00**

Contact: International Center for Materials Nanoarchitectonics (MANA)