



Materials Australia VIC-TAS Branch/RMIT Europe Online Event

Thursday 4th July 2024
4.30 pm – 6pm AEST, 8.30 am – 10.00 am CET

Future directions in materials research in Europe

A roundtable with:

Javier Gravalos, Tomáš Prošek, Mira Todorova, Taner Tunç

[Register here for this free event:](#)

After you register, you will receive the login information

In Europe & Australia, we are facing unprecedented changes driven by climate change and the required responses in terms of decarbonization and the circular economy and new energy sources, digitization's and its impact across our lives – not least manufacturing and increased global competition combined with supply chain uncertainty. What challenges does this present to our materials community and how can we use current and developing technologies to make a major contribution to meeting these challenges and creating a greener, digital materials world. How can Australia learn from and collaborate with Europe.

4 experts will discuss how materials research can respond across our sector with:

- Taner Tunç on Future directions in machining of metals
- Tomáš Prošek on Future directions in metal alloy coatings
- Mira Todorova on Future directions in materials from modelling
- Javier Gravalos on Innovation sector in materials and Australian/European collaboration

Tomáš Prošek is head of the Department of Metallic Construction Materials at the University of Chemistry & Technology (Prague) and president of the European Federation of Corrosion. His research focuses on corrosion protection by metallic & organic coatings and interaction of metallic materials with hydrogen.

Taner Tunç has 20 years' experience in machining of aerospace- & nuclear-grade metals, primarily with 5-axis milling of turbine disks for jet engines, robotic milling, and abrasive water jet machining. He is associate professor at the Mechanical Engineering & Engineering Science at the University of North Carolina.

Mira Todorova is group leader at the Max Planck Institute for Sustainable Materials. Her research areas include electronic structure methods, statistical physics & thermodynamics, ab initio-based multi-scale approaches, theoretical solid-state physics, computational materials science, defect chemistry, electrochemistry, and corrosion. She was recently awarded the Alexander Kuznetsov Prize for Theoretical Electrochemistry.

Javier Grávalos has 20 years of experience in research and innovation management; in new product development and process optimization. He has previously led R&D transformations at industrial corporations. Has experience along the entire value chain, from lab work, project management, industrial scale-up.