

Conferencia Máster de Biomateriales

Lugar: aula Cofares

Fecha: 13 Septiembre 2022 a las 15.30h

Enlace a la videollamada: <https://meet.google.com/nss-tpyu-sqc>

Dr. Mingyuan Lu

impartirá una conferencia titulada

“Testing Small – nano-/micro-mechanical testing and its applications”

Dr Mingyuan Lu is a Senior Lecturer in the school of Mechanical and Mining Engineering, the University of Queensland. She is currently leading a diverse research team with Prof. Han Huang. The research interests of her team include nano-/micro-mechanical testing and characterisation, additive manufacturing, and surface engineering. In this Lecture, Dr. Lu will talk about the fundamentals of nano-indentation technique, which has been applied to investigate a broad range of applications: evaluating key materials properties, identifying competing damage modes in complex composite and layer systems, elucidating the micromechanisms of fatigue and wear, quantifying properties of biomechanical systems, and many others. In the second half of the lecture, Dr Lu will also introduce her team's achievements in these three subject areas: 1) the development of nano-/micro-mechanical testing methodologies for interfacial adhesion; 2) additive manufacturing of biodegradable porous scaffolds for bone tissue engineering applications; and 3) laser surface engineering of Ti-alloys. This lecture will be presented in a form suitable for a general audience, with a focus on the research outcomes and applications rather than analytical detail.