

Alberto Rota – Università di Modena e Reggio Emilia

English

Alberto Rota is associate professor at the Department of Physics, Informatics and Mathematics of the University of Modena and Reggio Emilia, Italy. He started his carrier in Surface Science, and since 2006 he moved to the Tribology field, focusing to the micro/nano-scale. His main research interests are on surface patterning at the multiscale, and on 2D and solid lubricant materials (graphene, DLC, MoS₂, Ag, MXene). In particular, his activity focuses on the tribological properties, and on the friction-induced chemical processes. He has published more than 40 peer-reviewed journal publications and he gave more than 20 speeches in international conferences. He is member of the Editorial Board of Industrial Lubrication and Tribology journal, and Review Editor for Frontiers in Chemistry. He works on industrial research and on the relationship with private companies, especially in the mechanical field.

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He is actually in charge of the lab. SUP&RMAN, which is dedicated to tribological research and industrial research.

Carrier and studies

Graduated in Physics 110/110 - 1997 - *"Fase iniziale della transizione ordine-disordine indotta da fasci ionici alla superficie di monocristalli di InP."*

PhD in Physics – 2002 - *"Crescita, struttura e morfologia di film sottili epitassiali"*.

Many post-doc positions in the period 2005-2018.

Researcher positions RTDa 2010-2013 e RTDb 2018-2021.

Teaching activity

"Nanomechanics" course for Master degree in Physics (2019 – current).

"Physics" course for Informatics Engineering Mantova (2018 – current).

"Physics" course for Informatics (2012-2014).

"Elements of materials physics and microclimatology" for Culturale heritage science (2011-2014)

Skills and technical abilities

Ability and skills in the use of ultra-high-vacuum systems, scanning probe microscopy (STM, AFM, FFM, MFM), tribological techniques, deposition techniques.

Modena, 11/07/2024