

Riccardo Moscatelli



PRESENT OCCUPATION

Ph.D. Student – Mechanical Engineer - Researcher

PROFESSIONAL EXPERIENCE

01/01/2014 – Today

Ph.D. Student - Researcher

Università degli Studi "Roma Tre", Dipartimento di Ingegneria D.I.

Via della Vasca Navale 81, 00100 Roma (Italia)

Ph.D. student in Mechanical Engineering, major in Materials.

Research themes : characterization and functionalization of materials using innovative measurement techniques (Nanoindentation with not conventional methods).

Free Surface Energy and materials adhesion study.

Nanoindentation for mechanical engineering and biomedical applications.

Collaboration with Nanomechanics Inc. (Oak Ridge, TN, USA) from June to July 2014

Collaboration with the Beijing University of Technology (Beijing, China) from September 2014 until July 2015

Teaching:

Invited speaker for two seminars at University of Rome "Roma Tre": Introduction to Material Science and Technology (2016 – Arcadia University)

Publications:

"High-resolution high-speed nanoindentation mapping of cement pastes: Unravelling the effect of microstructure on the mechanical properties of hydrated phases", M. Sebastiani · R. Moscatelli · F. Ridi · P. Baglioni · F. Carassiti, 2016, Journal of Materials and Design

"Load Displacement and high speed nanoindentation data set at different state of charge (SoC) for spinel $\text{Li}_x\text{Mn}_2\text{O}_4$ cathodes", Muhammad Zeeshan Mughal · Riccardo Moscatelli · Marco Sebastiani, 2016, Data in Brief

"Effect of lithiation on micro-scale fracture toughness of $\text{Li}_x\text{Mn}_2\text{O}_4$ cathode", Muhammad Zeeshan Mughal · Riccardo Moscatelli · Hugues-Yanis Amanieu · Marco Sebastiani, 2016, Scripta Materialia

"Cemented carbides with highly oriented WC grains and formation mechanisms", Xilong Wang · Haibin Wang · Riccardo Moscatelli · Xuemei Liu · Xiaoyan Song, 2016, Material Science and Engineering A

01/06/2012 – 31/12/2013

Post Doctoral Grant

Università degli Studi "Roma Tre", Dipartimento di Ingegneria D.I.

Via della Vasca Navale 81, 00100 Roma (Italia)

Design and characterization of an icephobic coating for aeronautical applications. Contact angle measurements, profilometer studies, Scratch Tests, Micro and Nano Indentation Tests.

Publications:

"CSM and DCM-Express Nanoindentation Mapping on Lithium/Polymer Battery Composites" M. Sebastiani, F. Massimi, R. Moscatelli, Edoardo Bemporad, D. Rosato, H.-Y. Amanieu (2013)

01/01/2011 – 31/05/2012 **Expert consultant for Fluid dynamics**

Università degli Studi "Roma Tre", Dipartimento di Ingegneria D.I.

Via della Vasca Navale 81, 00100 Roma (Italia)

Expert consultant for numerical simulations (C.F.D.) with Fluent code for :

- *Wing section study for vertical axis wind turbine (Savonius)*
- *Heat exchangers with porous medium study for optical applications*
- *Fire security*
- *Experimental measurements*
- *Assistant supervisor for master degree students*

ISTRUCTION AND FORMATION

26/09/2011 **Admission at the Engineer Register of Rome N. 33635 Sect. A**

Ordine degli Ingegneri della Provincia di Roma – Civil, Informatic and Industrial Areas.

01/10/1998 - 21/12/2010 **Master Degree in Mechanical Engineering, major in Materials (vote : 105/110)**

Università degli Studi "Roma Tre", Facoltà di Ingegneria Meccanica

Via della Vasca Navale 81, 00100 Roma (Italia)

01/10/1993 - 15/06/1998 Secondary Scientific School diploma with 60/60

Liceo Scientifico Malpighi, Roma (Liceo)

Via del Forte Braschi, 00100 Roma (Italia)

PERSONAL COMPETENCES

Mother Language Italian

Other Languages

	COMPREHENSION		CONVERSATION		WRITING
	Listening	Reading	Interaction	Oral Production	
Inglese	B2	B2	B2	B2	B2

Livelli: A1/2 Base Level - B1/2 Medium Level - C1/2 Advanced Level
Quadro Comune Europeo di Riferimento delle Lingue

Communication Competences Very good communication competences matured during private teaching activities to singles and groups and during past professional experiences (Presentation of technical-scientific reports and projects)

Organization and management Competences Very good work organization and management competences, both individual or in team. Timeliness and precision during the development of a project.
Propensity to both individual or team work

Willing for work in foreign countries (in particular: China)

Informatic Competences Very good hardware and software competence, matured during past private work as LAN.
Competences in the most important photo and video editor.
Very good Knowledge of CFD code FLUENT and mesh softwares (Tecplot and Gambit)
Very good competence with all the Office and Adobe Suite.

Other Competences Good competence in photography.
Buone attitudini alla scrittura ed alto interesse alle arti.

Driving Licenses European A (all) and B

OTHER INFORMATIONS
