Scientific Curriculum Vitae

Roberta Cocci Grifoni, Associate Professor in Technologies for Architecture at School of Architecture and Design, University of Camerino (Italy)
e-mail: roberta.coccigrifoni@unicam.it

PERSONAL DATA:

Roberta Cocci Grifoni is graduated in Physics from "La Sapienza" University, Rome and she completed a Ph. D in Applied Physics in "Polytechnic University of Marche", Italy. In 2000 she was awarded a post doc position at the same University. She has also participated in numerous national and international research endeavors since 1998. She is referee for international conferences, and she has been member of the International Scientific Advisory Committee of numerous International Conferences such as Environmental Problems in Coastal Regions Coastal Environment and Sustainable Planning & Development (Wessex Institute). From 2002 she is Fellow of Southampton Institute of Great Britain.

She is author of 4 books and over 90 papers on international and national journals devoted to the fields air pollution, boundary layer physics, turbulence and diffusion, computational fluid dynamics for urban area, outdoor thermal comfort, urban heat island, parametric optimization and energy efficiency.

Her investigation fields include air quality modelling (photochemistry, pollutant dispersion), model evaluation techniques, sensitivity and uncertainty studies, models for environment control – evaluation of polluting emissions, models for controlling the air quality, local, meso and micro scale meteorology, Computational Fluid Dynamics (CFD), Nature based solutions (NbS) for outdoor thermal comfort and energetic efficiency in buildings, Urban Heat Island UHI, models for dwelling energy performance under the UHI effect, Energetic efficiency in buildings, design of urban spaces, analysis and mitigation of the local microclimate in order to achieve better environmental quality.

CAREER AND APPOINTMENTS

Since January 2022 Associate Professor in Technologies for Architecture at School of Architecture and Design, University of Camerino (Italy)

2019-2021 Researcher and assistant Professor in Technologies for Architecture at School of Architecture and Design, University of Camerino (Ascoli Piceno)

2009-2017, Researcher and assistant Professor in Environmental Applied Physics at School of Architecture and Design, University of Camerino (Ascoli Piceno)

2004-2009 Contract Professor in Applied Physics and Environmental Applied Physics at School of Architecture and Design, University of Camerino (Ascoli Piceno)

REFEREE WORK

- Referee for VQR (Valutazione Qualità della Ricerca) 2015-2019
- Reviewer for "International Journal for Numerical Methods in Engineering." Wiley Publisher, "Atmospheric Research" Elsevier Publisher, "Atmosphere" International open access Journal, MDPI online quarterly, "Sustainability" International open access Journal, MDPI online quarterly, "Energy and Buildings" Elsevier Publisher, "Buildings" International open access Journal, MDPI online quarterly, "Remote sensing" International open access Journal, MDPI online quarterly
- Editorial Board Member for "INCyTA Magazine" del Department of Construction and Architectural Technology at the UPM (Universidad Politécnica de Madrid).
- Committee member of DCTA, DEPARTAMENTO DE CONSTRUCCIÓN Y TECNOLOGÍA ARQUITECTÓNICAS, Universidad Politécnica de Madrid, "Caracterización experimental y modelo predictivo del comportamiento térmico de una fachada vegetal", 2013
- Committee member of DCTA, DEPARTAMENTO DE CONSTRUCCIÓN Y TECNOLOGÍA ARQUITECTÓNICAS, Universidad Politécnica de Madrid, "Efecto de las cubiertas ajardinadas sobre el microclima de verano en clima Mediterráneo", 2016
- Chairperson/ Special session organized: Adaptive Building Skins for Energy Saving and User Comfort in 12nd Conference on Advanced Building Skins, Bern, Switzerland, 02-03 October 2017

- Referee for international conference " PLEA 2018: Smart and Healthy Within the Two-Degree Limit", 2018

RESEARCH ACTIVITIES

- 1997-2000: PhD student in Applied Physics
- 2000-2005: Post-doctoral fellow in Environmental Applied Physics
- 2006-2008: Working, as scientist, at Energetic Department at Polytechnic University of Marche
- 2007 “Development of simulation numeric models of the Planetary Boundary Layer and of the atmospheric dynamics on the Surface Boundary Layer for the forecast of atmospheric phenomena in the short term” for the Polytechnic University of Marche, Ancona.
- 2008 “System development models for the forecast of atmospheric phenomena in the short term in Region Marche”. for the Polytechnic University of Marche, Ancona.

2008-2012 Study and analysis of eco-friendly materials for building for WWFrp, Italy

- 2011-2014 Access2Mountain Project, Sustainable Mobility and Tourism in Sensitive Areas of the Alps and the Carpathians, ERDF PP 5 – UNICAM.
- 2014-2107 University Research Fund (FAR) “Quality of the Landscape and Quality of Life in the Sustainable Adriatic City”.
- 2014-2017 LIFE+ 2013- Umbria strategy for Natura 2000 network “SUN LIFE”. (LIFE 13 NAT/IT/000371, CUP J62F14000040006).
- 2013-2016 MODIFICA. “PREDICTIVE MODEL FOR DWELLINGS ENERGY PERFORMANCE UNDER THE URBAN HEAT ISLAND EFFECT”, financiado por el Plan Estatal de Investigación Científica y Técnica y de Innovación 2013-2016.
- 2015-2018 University Research Fund (FAR) “Urban GenHome” project.
- 2017-present ERA-NET Cofund Smart Urban Futures (ENSUF). JPI Urban Europe 2016. Smart Urban Green (SMART-U-GREEN). Project no. 693443 Project. Coordinator/Main Applicant: Prof. D. Loorbach, Erasmus University Rotterdam.
- 2018-present University Research Fund (FAR) “Climate change and urban health resilience-CCUHRE”
- 2019-2021 JOINT-SECAP Interreg Italy-Croatia “Joint strategies for Climate Change Adaptation in coastal areas”
- 2021-2022 SNSVS 2–Marche Region 2019.“VAUTERECO. Evaluation of urban and territorial assets for the resilience of communities”.
- 2019-present LIFE Integrated2; Integrated MAnagement and Grant Investments for the N2000 NEtwork in Umbria-IMAGINE".
- 2021-present LIFE+ A_GreeNet; LIFE20-CCA_IT_001752
- 2022-present ERASMUS+ CLICCHE Climate change, cities, communities and Equity in health (2021-1-IT02-KA220-HED-000032223)
- 2022-present ERASMUS+ EDUSCAPE (Education, Landscape and Climate Change adaptation) in Erasmus KA2 Strategic partnership for school education"_2021.
- 2022-present PNRR: Ecosistema dell'Innovazione "Vitality Innovation, digitalization and sustainability for the diffused economy in Central Italy", Spoke 6.
- 2009-2017 Researcher in environmental applied physics “Analysis of thermal comfort in open spaces, environmental thermal fluid dynamics, and air quality”, School of Architecture and Design
- 2019-2021 Researcher in Technologies for the Architecture “comfort outdoor end energy efficiency in buildings”