## Scientific Curriculum Vitae

**Roberta Cocci Grifoni,** Researcher in Technologies (RTD b) for Architecture at School of Architecture and Design, University of Camerino (Italy)

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: "International Conference on Environmental Problems in Coastal Regions" and "International Conference on Sustainable Planning & Development" and she has been member of the International Scientific Advisory Committee of numerous International Conferences such as Environmental Problems in Coastal Regions & Development (Wessex Institute). From 2002 she is Fellow of Southampton Institute of Great Britain.

She is author of 4 books and over 60 papers on international and national journals devoted to the fields air pollution, boundary layer physics, turbulence and diffusion, thermophysical properties of fluid system, outdoor thermal comfort, 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, parametrization of the Planetary Boundary Layer, models for controlling the air quality, statistic filling and time series, 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 2019 Researcher and assistant Professor in Technologies for Architecture at School of Architecture and Design, University of Camerino (Ascoli Piceno)

Since 5 November 2018 passed "National Scientific Qualification" as Associate Professor in Technologies for Architecture.

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 Desig, University of Camerino (Ascoli Piceno)

## **REFEREE WORK**

- 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
- Referee for international conference " Passive and Low Energy Architecture PLEA ", 2015 , Architecture in (R)Evolution
- 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
- Chair Person/ 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 Polithecnic 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 Polithecnic University of Marche, Ancona.

• 2008 "Development of a modellistic system for the forecast of atmospheric phenomena in the short term in Region Marche". for the Polithecnic 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". Cod. di progetto 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-present JOINT-SECAP Interreg Italy-Croatia "Joint strategies for Climate
  - Change Adaptation in coastal areas"
  - 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-present Researcher in Technologies for the Architecture "comfort outdoor end energy efficiency in buildings"

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