## DIAEE Dipartimento di Ingegneria Astronautica, Elettrica ed Energetica



## FERDINANDO SALATA - Curriculum Vitae

Ferdinando Salata is currently Researcher of Type B (RTDB - in Tenure Track) at Sapienza University of Rome, Department of Astronautical, Electrical and Energy Engineering (DIAEE) for the Scientific Sector ING-IND/11 (Italian Accademic Sector 09/C2). He graduated in Mechanical Engineering with specialisation in Energy at the University of Rome "Sapienza" in 2003. He completed his PhD in "Technical Physics" in 2008 at the same University. In his thesis work, he studied the use of ultraviolet radiation coupled with HEPA filtration for the disinfection of airborne biological contaminants in air conditioning systems. After completing his PhD, he was a research fellow until 2017 in the Department where he completed his thesis. During this period, Ferdinando was awarded the title of "Cultore della Materia". In 2017 he obtained from the "Ministero dell'Università e della Ricerca" the "National Scientific Qualification for Associate Professor" for the Italian Accademic Sector 09/C2 (Applied Physics and Nuclear Engineering). In the same year he joined DIAEE as a Fixed-Term Recruiter of Topology A (RTDA, for the next 3 years and renewed for the next 2). He is a member of the Italian National Association of Applied Physics. In recent years, he has carried out in-depth research into the optimisation of energy demand in buildings; cogeneration systems; urban microclimate; thermal comfort in the outdoor environment; energy optimisation and reliability of air conditioning and lighting systems; natural ventilation in buildings; desalination using absorption machines; thermal conductivity problems in soils.

He has participated in the following research projects financed by competitive funds: i) in 2021 "PROPER EFFECT: Piattaforma inteROPERabile collaborativa per l'EFFiciEntamento energetiCo di asseT immobiliari" financed by Regione Lazio; in 2020 "Optimization of heat exchange by natural convection in liquids and gaseous from multiple vertical plates heated at different temperatures" financed by Sapienza Università di Roma - Progetti Medi di Ricerca; in 2019 "Artificial intelligence applied to the energy and maintenance optimization of civil buildings: genetic algorithms for the design of envelope-systems with near Zero Energy Building (nZEB) standards and dynamic predictive simulations in environments ad n multi-purpose variables" funded by Sapienza Università di Roma - Progetti Medi di Ricerca as Principal Investigator; in 2016 "Creation of a new index for thermo-hygrometric well-being in the air-conditioning of enclosed areas in the Mediterranean area for the purpose of a more rational use of energy in buildings" funded by Sapienza University of Rome - Medium Research Projects; in 2009 "Ottimizzazione e validazione di modelli per i fenomeni fisici che determinano il microclima urbano. Metodi di valutazione degli effetti sul benessere ambientale" funded by the Ministry of University and Research - PRIN 2009.

He has been a member of the Teaching Board of the PhD programme in "Energy and Environment" at Sapienza University of Rome since 2017 and co-tutor of two PhD theses. He is in the Editorial Board Members of Sustainable Cities and Society (Elsevier); he is in the International Advisory Board of Thermal Science Journal; he is Associate Editor of Journal of Daylighting (SolarLits); he is in the Editorial Board Members of Atmosphere Journal (MDPI), he is Associate Editor of Journal of Renewable Energy and Technology; he is in the Board Members of Journal of Solar Energy Research Updates (Zeal Press). He was Guest Editor of the Special issue "Advances in Theoretical and Computational Energy Optimization Processes" di Processes (MPDI) and of the Special Issue "Thermo-Hygrometric Comfort in Outdoor Environments and Its Technological, Environmental and Health Applications" di Atmosphere (MDPI). He was Member of Scientific Committee di SBE19 ""Sustainability in the built environment for

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climate change mitigation" - Thessaloniki Conference (Greece). He was Member of Scientific Committee of 5th International Conference on Educational Innovation in Technical Careers INDOTEC 2017 - Granada (Spain).

In 2019 he was the Proponent of: i) International Framework Agreement for Cultural and Scientific Collaboration between Sapienza University of Rome (IT) and University of Plymouth (UK) signed by the Rectors; ii) International Framework Agreement for Cultural and Scientific Collaboration between the two Universities: Sapienza University of Rome (IT) and AGH University of Science and Technology (PL) signed by the Rectors.

Over the last decade, he has been a reviewer for the following international scientific journals: Agronomy; Applied Energy; Applied Thermal Engineering; Atmosphere; Buildings; Building and Environment; Climate; Electrical Engineering; Energies; Energy and Buildings; Energy Conversion and Management; Energy Reports; Entropy; Environments; Environment al Engineering and Management Journal; Environmental Modelling & Software; IET Generation Transmission & Distribution; International Journal of Sustainable Building Technology and Urban Development; Journal of Applied Geophysics; Journal of Cleaner Production; Journal of Daylighting; Journal of Solar Energy Engineering; Journal of Sustainable Building Technology & Urban Development; Processes; Renewable & Sustainable Energy Reviews; Science of the Total Environment; Solar Energy Materials & Solar Cells; Solar Energy; Sustainability; Sustainable Building Technology and Urban Development; Sustainable Cities and Society; Thermal Science; Tunneling and Underground Space Technology.

At "Sapienza" University of Rome, he is professor of Applied Physics (ING-IND/10 from 6 CFU) for the Degree Course in Clinical Engineering. He was professor at the Faculty of Architecture of the University "Sapienza" of Rome for the single-cycle course of Environmental Applied Physics (ING-IND/11 from 8 CFU). He was professor of Environmental Applied Physics (ING-IND/11 8 CFU) at the Degree Course in Architectural Sciences. He acted as co-professor for the teaching of Plant Systems at Urban and Building Scale (ING-IND/11 for 5 CFU) of the Degree Course in Building Process Management. He acted as co-professor for the teaching of Technical Physics (ING-IND/10 for 3 CFU) for the Degree Course in Electrical Engineering. He has carried out seminars, tutorials and assistance in the revision of dissertations for the courses of: "Applied Physics" (for the degree course in Electrical Engineering - N.O.); "Environmental Applied Physics" (ING-IND/11, CFU: 12, for the degree course in Building Engineering Architecture - O.E.); "Hospital Plants I" (for the degree course in Clinical Engineering; "Thermotechnics" (for the degree course in Energy Engineering); "Cold Engineering" (for the degree course in Energy Engineering). He held the course on "Energy certification of buildings" on behalf of the Lazio Region and Kyoto Club Italia. He has been Tutor or Co-tutor of several Master thesis at the Faculty of Civil and Industrial Engineering of Sapienza University of Rome.

His current bibliometric values are as follows (April 2022):

- N° articoli: 65 (source Scopus);
- N° citazioni totali: 2001 (source Scopus);
- H-Index: 28 (source Scopus).