



Assistant Professor of Environmental Technical Physics (Disciplinary-scientific sector ING-IND/11)
 Department of Architecture and Industrial Design
 University of Campania “Luigi Vanvitelli”
 Address: Abbazia di S. Lorenzo ad Septimum, via San Lorenzo - 81031, Aversa (CE), Italia
 E-mail Address: giovanni.ciampi@unicampania.it
 Personal web page:
<http://www.architettura.unicampania.it/dipartimento/docenti?MATRICOLA=703262>

EDUCATION AND TRAINING

- *From 01/09/2018 to 31/08/2019:*
 Research fellowship (12 months) on “Analisi prestazionale e modellazione termica, acustica e luminosa di elementi innovativi per l’involucro edilizio opaco e trasparente” financed under the PON I&C 2014-2020 “HORIZON2020”, project title “WALLED: Smart LED&OLED per Lighting e MediaBuilding”, Scientific-Disciplinary Sector ING-IND/11, at University of Campania “Luigi Vanvitelli”, Department of Architecture and Industrial Design, Via San Lorenzo – 81031 Aversa (CE).
- *From 15/04/2017 to 14/04/2018:*
 Post-doc researcher (12 months) on “Smart Windows” – Ambito tecnologico prioritario RIS3: “Tecnologie per i beni culturali, il turismo e l’edilizia sostenibile”, Scientific-Disciplinary Sector ING-IND/11, at University of Campania “Luigi Vanvitelli”, Department of Architecture and Industrial Design, Via San Lorenzo – 81031 Aversa (CE).
- *13/01/2017:*
 Ph.D. on “Architettura, Disegno Industriale e Beni Culturali” - XXIX CICLO, Scientific-Disciplinary Sector ING-IND/11 - Building physics and building energy systems at University of Campania “Luigi Vanvitelli”. Title of the Ph.D. Thesis: “Energy, Environmental and Economic Analysis of Micro-polygeneration Systems for Residential Buildings”. Tutor: Prof. Eng. Rosato Antonio (University of Campania “Luigi Vanvitelli”). Co-tutors: Prof. Eng. Sibilio Sergio (University of Campania “Luigi Vanvitelli”), Prof. Eng. Entchev Evgueniy (Natural Resources Canada - Canada).
- *From 15/09/2015 to 15/12/2015:*
 Visiting Ph.D. Student at “CanmetENERGY Research Division” of “Renewables and Integrated Energy Systems Laboratory”, “Natural Resources Canada” - Ottawa (Canada), tutor: Prof. Eng. Entchev Evgueniy.
- *From 30/06/2014 to 04/07/2014 (32 hours):*
 Attended the seventh edition of the Summer School on Thermodynamics titled “Zero energy building, building envelope, energy modeling, multipurpose systems” organized by the University of Sannio (Benevento, Italy).
- *From 01/01/2013 to 31/12/2013:*
 Research fellowship (12 months) financed within the framework of the POR Campania FSE 2007/2013, sviluppo reti di eccellenza tra Università - Centri Ricerca - Imprese, progetto “POLIGRID”, Scientific-Disciplinary Sector ING-IND/11, at the Second University of Naples, Department of Architecture and Industrial Design, Via San Lorenzo – 81031 Aversa (CE).
- *October 2012:*
 Mater Degree in Energy Engineering obtained at University of Sannio, final score: 109/110. Title of the thesis: “Simulazione dinamica ed analisi delle 3-E di un sistema di micro-cogenerazione per un’utenza domestica”. Tutor: Prof. Eng. Sasso Maurizio. Co-tutors: Prof. Eng. Sibilio Sergio, Prof. Eng. Rosato Antonio.
- *From 30/04/2009 to 01/10/2009:*
 Project collaboration assignment for experimental research on micro-cogeneration systems for 5 months, Scientific-Disciplinary Sector ING-IND/11, at Second University of Naples, Department of Architecture and Industrial Design, Via San Lorenzo – 81031 Aversa (CE).

- *March 2009:*

Bachelor Degree in Energy Engineering obtained at University of Sannio, final score: 110/110. Title of the thesis: “Analisi energetica e sperimentazione di un impianto di micro-poligenerazione”. Tutor: Prof. Eng. Sasso Maurizio. Co-tutor: Prof. Eng. Sibilio Sergio.

RESEARCH ACTIVITIES

The main researches are related to the experimental and simulation analysis of micro-polygeneration systems, district heating and cooling systems using seasonal thermal storages, LED-based artificial lighting appliances and “smart windows”:

- experimental analysis of performance during both steady-state and transient operation of internal combustion engine-based micro-cogeneration systems and vapour compression electric refrigeration systems under different operating conditions;
- modeling of micro-cogeneration systems, absorption and adsorption chillers and vapour compression electric refrigeration systems. Modeling activity is performed by using the software TRNSYS;
- dynamic simulation of building-integrated micro-polygeneration systems based on the utilization of micro-cogeneration units, absorption and adsorption chillers, vapour compression electric refrigeration systems and hot water storages upon varying the operating scenario (climatic conditions, electric, thermal and cooling load profiles of the building, control logics, etc.) by means of the software TRNSYS;
- energy, environmental and economic analyses of building-integrated micro-polygeneration systems;
- dynamic simulation of solar district heating and cooling systems based on the utilization of seasonal thermal storages;
- simulation analysis of hybrid smart district heating & cooling systems using seasonal and short-term thermal storages;
- experimental analysis of energy performance of opaque and transparent innovative envelope elements through in situ measurements;
- modeling of opaque and transparent innovative envelope elements by means of the simulation software TRNSYS.

The research activities are performed in the “Built environment control laboratory Ri.A.S.”. Research activities have been/are carried out in co-operation with:

- the research group “Energy Efficiency & Environment - E3”, Department of Architecture and Industrial Design, University of Campania “Luigi Vanvitelli”, Scientific Coordinator: Prof. S. Sibilio (<http://www.architettura.unicampania.it/ricerca/gruppi-di-ricerca>);
- the research group “Acoustics, Vibration and multisensory Interactions – ACOUVI”, Department of Architecture and Industrial Design, University of Campania “Luigi Vanvitelli”, Scientific Coordinator: Prof. L. Maffei (<http://www.architettura.unicampania.it/ricerca/gruppi-di-ricerca>);
- Prof. Maurizio Sasso, Prof. Carlo Roselli, Prof Filippo De Rossi of University of Sannio;
- Prof. Giuseppe P. Vanoli of University of Molise;
- Dr. Prof. Evgueniy Entchev, Dr. Wahiba Yaïci, Dr. Hajo Ribberink, Renewable Energy, Heat and Power Laboratory Buildings and Renewables Group, CanmetEnergy Research Centre, Natural Resources Canada, Ottawa, Canada (<https://www.nrcan.gc.ca/energy/offices-labs/canmet/ottawa/5753>);
- Prof. Atsushi Akisawa, Department of Mechanical Systems Engineering, Tokyo University of Agriculture and Technology (Japan), <http://www.tuat.ac.jp/en/>;
- the international working group of IEA SHC Task 61 / EBC Annex 77 - “Integrated Solutions for Daylight and Electric Lighting”, <http://task61.iea-shc.org/participants>.

INTERNATIONAL AND NATIONAL RESEARCH PROJECT FUNDED

- *From 1/09/2018 up to date:*

Member of the project “WALLED: “Smart LED&OLED” per Lighting e MediaBuilding”, financed under the PON I&C 2014-2020 "HORIZON2020", technological field: “5. Fabbricazione e trasformazione avanzate”, sector: “5.2_Tecnologie per edifici efficienti sul piano energetico, tecnologie di costruzione sostenibili in grado di favorire un maggior utilizzo di sistemi e materiali efficienti sotto il profilo energetico negli edifici nuovi, rinnovati e ristrutturati”, value of the project: € 1,200,000.00. The project was carried out together with two Italian companies: TELENIA s.r.l. and RI.EL.CO. Impianti s.r.l.

ATTENDANCE/ORGANIZATION OF NATIONAL AND INTERNATIONAL MEETINGS/CONFERENCES

- 23-26/09/2018

Co-chair of a technical session at the “7th International Building Physics Conference - IBPC 2018 on Healthy, Intelligent and Resilient Building and Urban Environments”, Syracuse, New York (USA).

- 23-26/09/2018

Attended, with oral presentation, the “7th International Building Physics Conference - IBPC 2018 on Healthy, Intelligent and Resilient Building and Urban Environments”, Syracuse, New York (USA).

- 2-3/07/2018

Member of Organizing Committee of the “22nd International Scientific Conference on Mind Scenery in the Landscape-cultural Mosaic. Palimpsests, Networks, Participation” Aversa/Caserta (Italy) - <https://sites.google.com/site/landscapewonder/2018-conference>.

- 15-17/06/2017

Attended the international conference “WORLD HERITAGE and DISASTER. Knowledge, Culture and Representation”, Le Vie dei Mercanti - XV Forum Internazionale di Studi, Napoli/Capri (Italy).

- 16-18/06/2016

Attended the international conference “WORLD HERITAGE and DEGRADATION. Smart Design, Planning and Technologies”, Le Vie dei Mercanti - XIV Forum Internazionale di Studi, Napoli/Capri (Italy).

- 9-10/06/2016

Attended, with oral presentation, the “10th AIGE 2016 and 1st AIGE/IIETA International Conference of Energy Conversion, Management, Recovery, Saving, Storage and Renewable Systems”, Napoli (Italy).

- 14-17/06/2015

Attended, with both the oral presentation and the poster, the “6th International Building Physics Conference - IBPC 2015 on Building Physics for a Sustainable Built Environment”, Torino (Italy).

- 11-13/06/2015

Attended the international conference “HERITAGE and TECHNOLOGY Mind Knowledge Experience”, Le Vie dei Mercanti - XIII Forum Internazionale di Studi, Aversa/Capri (Italy).

- 17-20/05/2015

Attended, with oral presentation, the international conference “ASME-ATI-UIT 2015 - Thermal Energy Systems: Production, Storage, Utilization and the Environment”, Napoli (Italy).

- 15-17/04/2013

Attended the international conference “MICROGENIII - The 3rd edition of the International Conference on Microgeneration and Related Technologies”, Napoli (Italy), organized by University of Campania “Luigi Vanvitelli” together with University of Sannio.

INTERNATIONAL AND NATIONAL AWARDS AND GRANTS ASSOCIATED TO THE RESEARCH ACTIVITIES

- my Ph.D. Thesis, titled:

“Energy, Environmental and Economic Analysis of Micro-polygeneration Systems for Residential Buildings”, tutor: Prof. Ing. Rosato Antonio (University of Campania “Luigi Vanvitelli”), co-tutors:

Prof. Ing. Sibilio Sergio (University of Campania “Luigi Vanvitelli”), Prof. Ing. Entchev Evgueniy (Natural Resources Canada - Canada), received a grant of € 500,00 from the “Accademia Ercolanese” about the competition “Euromediterraneo XIII edizione – Migliore tesi di dottorato” with the following motivation “Recognition of the high contribution made to scientific research for the progress of knowledge”.

- The following paper:

G. Ciampi, A. Rosato, S. Sibilio (2014). *Yearly operation of a building-integrated microcogeneration system in south Italy: energy and economic analyses*. International Journal of Low-Carbon Technologies, vol. 9, p. 331-346, Online ISSN: 1748-1325, Print ISSN: 1748-1317 DOI: 10.1093/ijlct/ctt074.

has been recognized from the scientific committee of the Editorial Board of the “International Journal of Low-Carbon Technologies” as “SET Best Article Award 2014” – Best paper published in the International Journal of Low-Carbon Technologies over the year 2014.

SCIENTIFIC PUBLICATIONS

Co-author of more than 40 on peer-reviewed national and international journals as well as proceedings of peer-reviewed national and international conferences. https://iris.unicampania.it/simple-search?location=&query=&filtername=author&filtertype=authority&filterquery=rp11953&rpp=1000&sort_by=bi_sort_2_sort&order=desc#.XiWUa8hKhPY