

CURRICULUM VITAE OF ANTONIO ROSATO

EDUCATION AND TRAINING

- *year 1998:*
Diploma of Secondary School focusing on scientific studies achieved at Secondary School “L.B. Alberti” in Minturno (Italy). Final Score: 60/60.
- *year 2005:*
Degree in Mechanical Engineering (5-year degree) at the University of Naples Federico II (Italy). Final score: 110/110 cum laude. Final thesis on Heat Transfer titled: “Heat conduction effects on mixed convection in horizontal channels with adiabatic and moving wall”. Tutors: Prof. Eng. V. Naso, Prof. Eng. O. Manca, Ph.D. A. Andreozzi.
- *year 2006:*
Achievement of professional engineering license.
- *year 2006:*
Attended the 120-hours course titled “Work safety at temporary and mobile building sites” organized by the company “Sviluppo & Ambiente s.r.l.” in agreement with the confederation of Italian artisans association of the province of Caserta (Italy) according to the Italian Legislative Decree n. 494/96.
- *year 2006:*
Attended the 120-hours course titled “Safety and health in the workplaces while working in private and public sector” organized by the company “Sviluppo & Ambiente s.r.l.” in agreement with the confederation of Italian artisans association of the province of Caserta (Italy) according to the Italian Legislative Decree n. 626/94.
- *from 12/06/2006 to 16/06/2006:*
Attended the second edition of the second edition of the course titled “Fundamentals of Microscale Heat Transfer: Boiling, Condensation, Single and Two Phase Flows” organized by the École Polytechnique Fédérale de Lausanne (Switzerland).
- *from 04/06/2007 to 08/06/2007:*
Attended the third edition of the third edition of the course titled “Fundamentals of Microscale Heat Transfer: Boiling, Condensation, Single and Two Phase Flows” organized by the École Polytechnique Fédérale de Lausanne (Switzerland).

- *from 07/07/2008 to 11/07/2008:*
Attended the first edition of the Summer School on Thermodynamics titled “Thermophysics of building envelope” organized by the University of Sannio (Benevento, Italy).
- *30/03/2009:*
Ph.D. Diploma on “Energetics” (XXth cycle, Scientific Disciplinary Sector ING-IND/10) at the University of Palermo (Palermo, Italy). Title of final thesis: “Experimental analysis of R744 and R422D heat transfer coefficients and pressure drops during evaporation”. Tutors: Prof. Eng. R.M.A. Mastrullo, Prof. Eng. G.P. Vanoli.
Main research activities from 2006 up to 2008 as Ph.D. Student:
 - experimental evaluation of local heat transfer coefficients and local pressure gradients during evaporation of several refrigerants (R407C, R417A, R134a, R422D, R744) substitutes of ozone-depleting fluids under different operating conditions;
 - statistical analysis of methods for predicting local heat transfer coefficients and local pressure gradients during evaporation of several refrigerants (R407C, R417A, R134a, R422D, R744);
 - experimental evaluation of energetic performance of refrigerating systems for domestic applications upon varying the refrigerant charge and position;
 - dynamic and steady-state modeling of refrigerating systems for domestic applications by using the software Matlab.
- *anno 2006:*
Attended the course for Ph.D. Students titled “Thermomechanics of soft matter” held by prof. G. Marrucci from University of Naples Federico II.
- *anno 2007:*
Attended the course for Ph.D. Students titled “Uncertainty in Measurement” held by prof. L. Angrisani from University of Naples Federico II.
- *anno 2007:*
Attended the course for Ph.D. Student titled “Heating Ventilation Air-Conditioning systems” held by prof. M. Cannaviello from University of Naples Federico II.
- *year 2009:*
Attended the two-days course “Matlab Fundamentals” organized by the company “The MathWorks s.r.l.” (Turin, Italy).
- *year 2009:*
Attended the one-day course “Matlab for data processing and visualization” organized by the company “The MathWorks s.r.l.” (Turin, Italy).

- *year 2009:*
Attended the one-day course “Matlab programming techniques” organized by the company “The MathWorks s.r.l.” (Turin, Italy).
- *from 04/07/2011 to 08/07/2011:*
Attended the fourth edition of the Summer School on Thermodynamics titled “Indoor Air Quality” organized by the University of Sannio (Benevento, Italy).
- *from 15/12/2010 up to date:*
Member of the international working group “Annex 54 - Integration of Micro-Generation and Related Energy Technologies in Buildings” of the International Energy Agency (IEA).
- *from 01/04/2014 up to 25/07/2014:*
Visiting Fellow at the “CanmetENERGY Research Division – Renewables and Integrated Energy Systems Laboratory” of the Canadian Government Research Institute “Natural Resources Canada” - Ottawa (Canada).
Main research activities as Visiting Fellow:
 - analysis of control strategies based on artificial neural networks for the optimal operation of civil air-conditioning systems using Ground Source Heat Pumps and Photovoltaic-Thermal panels;
 - dynamic simulation of civil air-conditioning systems using seasonal thermal storages coupled with solar panels;
 - dynamic simulation of solar cooling systems using absorption or adsorption units.

AWARDS, GRANTS AND SCHOLARSHIPS

- *year 2005:*
First, with scholarship and final score of 90/100, in the public academic competition organized by the University of Palermo (Italy) for a Ph.D. student position on “Energetics” (XXth cycle, Scientific Disciplinary Sector ING-IND/10) at the Department of Energetics and Applied Thermodynamics (DETEC) of the Faculty of Engineering of the University of Naples Federico II (Italy).
- *year 2006:*
Occasional cooperation with the Department of Electric Engineering of the University of Naples Federico II (Italy) as teacher’s aid for undergraduate electric engineers attending the course of “Energetics” at the University of Naples Federico II (Italy).
- *year 2008:*

45-days occasional cooperation with the Department of Energetics and Applied Thermodynamics (DETEC) of the Faculty of Engineering of the University of Naples Federico II (Italy) in the field of experimental evaluation of Coefficient Of Performance of retrofitted vapor-compression refrigerating systems.

- *year 2008:*
Occasional cooperation with the Air University of Pozzuoli (Italy) as teacher's aid for undergraduate civil engineers attending the course of "Thermodynamics".
- *year 2010:*
Came first in the public academic competition for Assistant Professor position at the Faculty of Architecture of the Second University of Naples (Scientific Disciplinary Sector ING-IND/11).
- *year 2012:*
The following paper:
A. Rosato, S. Sibilio, Calibration and validation of a model for simulating thermal and electric performance of an internal combustion engine-based micro-cogeneration device, Applied Thermal Engineering, Volumes 45–46, December 2012, Pages 79-98, DOI:10.1016/j.applthermaleng.2012.04.020, URL: <http://www.sciencedirect.com/science/article/pii/S1359431112002633>, ISSN: 1359-4311.
has been recognized by ScienceDirect as one of the Top 25 papers published in Applied Thermal Engineering in 2012.
- *year 2013:*
Teacher of the course "Thermodynamics" for undergraduate students the Second University of Naples within the regional project titled "UNICON - Università della Conoscenza".
- *year 2014:*
Teacher of the course "Microgeneration and distributed generation" for graduate and undergraduate students of the University of Naples Federico II within the national project titled "PON01_2864 – FC SMART GEN".
- *year 2014:*
Visiting Fellowship awarded for one year to carry out researches at the "CanmetENERGY Research Division – Renewables and Integrated Energy Systems Laboratory" of the Canadian Government Research Institute "Natural Resources Canada" - Ottawa (Canada).
- *year 2014:*

Came first in the public academic competition for Associate Professor position at the Department of Architecture and Industrial Design “L. Vanvitelli” of the Second University of Naples (Competition Sector 09/C2 - Scientific Disciplinary Sector ING-IND/11).

- *year 2014:*

Occasional cooperation with the Department L.U.P.T. of the University of Naples Federico II (Italy) as teacher of the course “Efficiency of Air-Conditioning systems” for graduate students.

- *year 2014:*

The following paper:

G. Ciampi, A. Rosato, S. Sibilio, Yearly operation of a building-integrated microcogeneration system in south Italy: energy and economic analyses, International Journal of Low-Carbon Technologies, First published online: 20 October 2013, Pages: 1-16, DOI:10.1093/ijlct/ctt074,

URL: <http://ijlct.oxfordjournals.org/content/early/2013/10/19/ijlct.ctt074.full?keytype=ref&ijkey=TTqupaz3kN1df3w>, Online ISSN: 1748-1325.

has been selected for the SET 2014 award for the best paper published in the International Journal of Low-Carbon Technologies over the year 2014.

ACADEMIC ACTIVITIES

- *two-year period 2007-2008:*

Ph.D. students representative within the Department of Energetics and Applied Thermodynamics (DETEC) of the Faculty of Engineering of the University of Naples Federico II (Italy).

- *from 15/12/2010 up to date:*

Assistant Professor at the Department of Architecture and Industrial Design “Luigi Vanvitelli” of Second University of Naples (Scientific Disciplinary Sector ING-IND/11).

- *from year 2011 up to date:*

Member of the tutorial commission “Internationalization and Socrates-Erasmus projects” at the Second University of Naples.

- *year 2012:*

- Member of the examination board for assigning a yearly postdoctoral scholarship at the Department of Architecture and Industrial Design “Luigi Vanvitelli” of Second University of Naples.

- *2-year period 2012-2013:*
Member of Organizing Committee of the international conference “MICROGENIII - The 3rd edition of the International Conference on Microgeneration and Related Technologies”
Naples (Italy), April 15-17, 2013.
- *year 2013:*
Chairman of technical sessions at the international conference “MICROGENIII - The 3rd edition of the International Conference on Microgeneration and Related Technologies” ,
Naples (Italy), April 15-17, 2013.
- *from year 2013 up to date:*
Member of teachers’ board of the Doctorate course “Representation, Conservation and Safety of Environment and Structures and Territory Management” of the Second University of Naples.
- *from year 2013 up to date:*
Member of joint committee students-teachers for the master’s degree course “Architecture - Interior Design and for Autonomy” at the Second University of Naples.
- *from year 2013 up to date:*
Representative of the tutorial commission of the laurea degree courses “Architecture” and “Science of Architecture” at the Second University of Naples.
- *03/02/2014:*
Qualified by the Italian Ministry of Education University and Research as eligible for a position of Associate Professor up to February 3rd, 2018.
- *from 03/04/2014:*
Confirmed Assistant Professor at the Department of Architecture and Industrial Design “Luigi Vanvitelli” of Second University of Naples (Scientific Disciplinary Sector ING-IND/11).
- *from 01/11/2014 up to date:*
Associate Professor at the Department of Architecture and Industrial Design “Luigi Vanvitelli” of Second University of Naples (Competition Sector 09/C2, Scientific Disciplinary Sector ING-IND/11).
- Reviewer for a number of International Journals:
 - International Journal of Refrigeration
 - Applied Thermal Engineering
 - Energy and Buildings
 - Energy Conversion and Management
 - Energy

- International Journal of Thermal Sciences
- International Journal of Electrical Power & Energy Systems
- Fuel Processing Technology
- Environmental Engineering and Management Journal
- Environmental Biotechnology

RESEARCH ACTIVITIES

- experimental analysis of performance during both steady-state and transient operation of internal combustion engine-based micro-cogeneration systems, absorption chillers for domestic application, electric heat pumps and gas heat pumps under different operating conditions;
- modeling of micro-cogeneration systems, absorption chillers, electric heat pumps, gas heat pumps, flat tube louvered-fin multiport air condenser with mini-channel and offset strip fin compact plate heat water condenser. Modeling is performed by using the software TRNSYS and/or software Matlab;
- dynamic simulation of building-integrated micro-polygeneration systems upon varying the operating scenario (climatic conditions, building load profiles, control logics, etc.) by means of the software TRNSYS;
- energy, environmental and economic analyses of micro-polygeneration systems;
- development of control strategies based on the utilization of artificial neural networks for air-conditioning systems;
- dynamic simulation of seasonal thermal storages;
- experimental analysis and simulation of scale models of buildings for a correct use of daylight;
- experimental analysis and simulation of artificial lighting systems for indoor and outdoor illumination;
- experimental analysis and simulation of luminaires using LED (Light Emitting Diode).

RESEARCH PROJECTS AND AGREEMENTS

- *year 2006:*
Scientific participation to the research project funded on the basis of a public competition named: “Progetto di ricerca L. R. 28/03/2002 n.5 - Regione Campania”. Title of the research

project: “ Energetic optimization of domestic freezers”. Duration of the research project: 12 months. Role: member of the research group.

- *year 2011:*

Scientific coordinator of a research agreement between the Second University of Naples and the multinational company “DENSO THERMAL SYSTEMS S.p.A.”. Aim of the research agreement: developing a Matlab simulation code for predicting the performance of air-cooled condensers for automotive application. Duration of the research contract: 5 months.

- *year 2011:*

Scientific participation to the 1-year research agreement titled “Setting up of a virtual power plant for the analysis of micro-polygeneration systems” between the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and the Department of Engineering of the University of Sannio.

- *year 2012:*

Scientific coordinator of a research agreement between the Second University of Naples and the multinational company “DENSO THERMAL SYSTEMS S.p.A.”. Aim of the research agreement: optimization of a Matlab simulation code for predicting the performance of air-cooled condensers for automotive application developed during a previous research agreement. Duration of the research contract: 6 months.

- *year 2012:*

Scientific participation to the 1-year research agreement titled “Development and experimental validation of control strategies for a real grid of micro-polygeneration systems” between the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and the Department of Engineering of the University of Sannio.

- *year 2013:*

Scientific coordinator of a research agreement between the Second University of Naples and the multinational company “DENSO THERMAL SYSTEMS S.p.A.”. Aim of the research agreement: recognition of the correlations for predicting both heat transfer coefficients and pressure drops of fluids flowing into water strip fin plate heat exchangers for automotive application. Duration of the research contract (in progress): 3 months.

- *year 2013:*

Scientific participation to the research project granted on the basis of the competition named “BANDO PER LA CONCESSIONE DI AIUTI A PROGETTI DI RICERCA INDUSTRIALE E SVILUPPO SPERIMENTALE PER LA REALIZZAZIONE DI CAMPUS

DELL'INNOVAZIONE - POR CAMPANIA FESR 2007-2013". Title of the project:
Ecoturismo Urbano per la Fruizione Sostenibile dei Beni Culturali. Duration of the project: 24 months.

DIDACTIC ACTIVITIES

- *from 01/01/2006 to 31/12/2008:*
Academic collaboration (practice exercises, seminars and tutorial assistance) to the courses of "Thermodynamics" and "Refrigerating Systems" for undergraduate engineering students at the University of Naples Federico II (Italy).
- *from 01/01/2006 to 31/12/2008:*
Member of the examination boards of the courses of "Thermodynamics" and "Refrigerating Systems" for undergraduate engineering students at the University of Naples Federico II (Italy).
- *year 2008:*
Tenured teacher of the course "Thermodynamics" for undergraduate civil engineering students at the Air University of Pozzuoli (Italy).
- *from 01/01/2006 to 30/03/2009:*
Co-supervisor of 7 experimental laurea degree theses for undergraduate mechanical engineering students at the University of Naples Federico II (Italy).
- *academic year 2010-2011:*
Tenured teacher of the course "Energetics and Environmental Control" for students of the master's degree course "Design for Innovation" at the Second University of Naples.
- *academic year 2011-2012:*
Tenured teacher of the course "Special Plants" for students of the master's degree course "Architecture and Civil Engineering" at the Second University of Naples.
- *academic year 2012-2013:*
Tenured teacher of the course "Design of Built Environment control and energetic systems" (in English) for students of the master's degree course "Architecture - Interior Design and for Autonomy" at the Second University of Naples.
- *academic year 2013-2014:*
Tenured teacher of the course "Design of Built Environment control and energetic systems" (in English) for students of the master's degree course "Architecture - Interior Design and for Autonomy" at the Second University of Naples.

- *academic year 2014-2015:*
Tenured teacher of the course “Design of Built Environment control and energetic systems” (in English) for students of the master’s degree course “Architecture - Interior Design and for Autonomy” at the Second University of Naples.
- *4-year period 2011-2014:*
Co-supervisor of 4 master’s degree theses for undergraduate students of the master’s degree course “Architecture and Civil Engineering” at the Second University of Naples.
- *4-year period 2011-2014:*
Co-supervisor of 2 master’s degree theses for undergraduate energetic engineering students at the University of Sannio (Italy); Co-supervisor of 2 bachelor’s degree theses for undergraduate energetic engineering students at the University of Sannio (Italy).
- *year 2014:*
Co-supervisor 1 master’s degree thesis, in English, for an undergraduate student of the master’s degree course “Architecture – Interior Design and for Autonomy” at the Second University of Naples.

WORKING EXPERIENCES

- *from 01/04/2009 to 14/12/2010:*
Heat pump system engineer at R&D department of the multinational company “DENSO THERMAL SYSTEMS S.p.A” (Torino, Italy).
Main activities:
 - development of Matlab codes for predicting the performance of condensers for automotive applications;
 - experimental evaluation and theoretical analysis of reversing heat pump systems' energy performance and control logic for electric vehicles.

ATTENDANCE TO NATIONAL AND INTERNATIONAL MEETINGS

- *September 12-15, 2006:*
Attended, with oral presentation, the 61st national congress of Italian thermotechnical association (ATI) organized by the University of Perugia (Italy).
- *June 21-23, 2006:*

Attended the XXIV congress of Italian association of thermofluidynamics (UIT) organized by the University of Naples (Italy).

- *September 11-14, 2007:*

Attended, with oral presentation, the 62nd national congress of Italian thermotechnical association (ATI) organized by the University of Salerno (Italy).

- *September 23-26, 2008:*

Attended, with oral presentation, the 63rd national congress of Italian thermotechnical association (ATI) organized by the University of Palermo (Italy).

- *June 4, 2009:*

Attended, with oral presentation, the seminar of the Italian association for air-conditioning heating and refrigeration AICARR titled “New generation synthetic refrigerants with low greenhouse effect” organized by the University of Padova (Italy).

- *Aprile 4-6 2011:*

Attended the international congress “MICROGENII - The 2nd International Conference on Microgeneration and Related Technologies” organized by the University of Strathclyde (Glasgow, Scotland).

- *April 6-8, 2011:*

Attended, with oral presentation, the third expert meeting for the working group “Annex 54 - Integration of Micro-Generation and Related Energy Technologies in Buildings” of the International Energy Agency (IEA) organized by the University of Strathclyde (Glasgow, Scotland).

- *September 20-23, 2011:*

Attended, with oral presentation, the fourth expert meeting for the working group “Annex 54 - Integration of Micro-Generation and Related Energy Technologies in Buildings” of the International Energy Agency (IEA) organized by the Second University of Naples/University of Sannio (Italy).

- *April 23-25, 2012*

Attended, with oral presentation, the fifth expert meeting for the working group “Annex 54 - Integration of Micro-Generation and Related Energy Technologies in Buildings” of the International Energy Agency (IEA) organized by National Research Council of Canada (Ottawa, Canada).

- *October 9-12, 2012*

Attended, with oral presentation, the sixth expert meeting for the working group “Annex 54 - Integration of Micro-Generation and Related Energy Technologies in Buildings” of the International Energy Agency (IEA) organized by the University of Tokyo (Tokyo, Japan).

- *April 15-17, 2013*

Attended, with oral presentations, the international congress “MICROGENIII - The 3rd edition of the International Conference on Microgeneration and Related Technologies” the Second University of Naples/University of Sannio (Italy).

- *April 18-19, 2013*

Attended, with oral presentation, the seventh meeting for the working group “Annex 54 - Integration of Micro Generation and Related Energy Technologies in Buildings” of the International Energy Agency (IEA) organized by Italian National Agency for New Technologies, Energy and Sustainable Economic Development ENEA, (Rome, Italy).

- *September 18-20, 2013*

Attended, with oral presentation, to the eighth expert meeting for the working group “Annex 54 - Integration of Micro-Generation and Related Energy Technologies in Buildings” of the International Energy Agency (IEA) organized by the Technical University of Munich (Munich, Germany).

LIST OF PUBLICATIONS

PUBLICATIONS ON PEER-REVIEWED INTERNATIONAL JOURNALS (IN ENGLISH):

- [1] G. Ciampi, A. Rosato, M. Scorpio, S. Sibilio, Experimental analysis of a micro-trigeneration system composed of a micro-cogenerator coupled with an electric chiller, *Applied Thermal Engineering*, Volume 73, Issue 1, December 2014, Pages 1307-1320, DOI:10.1016/j.applthermaleng.2014.09.018, URL:<http://www.sciencedirect.com/science/article/pii/S135943111400790X>, ISSN: 1359-4311.
- [2] G. Angrisani, A. Rosato, C. Roselli, M. Sasso, S. Sibilio, A. Unich, Influence of climatic conditions and control logic on NO_x and CO emissions of a micro-cogeneration unit serving an Italian residential building, *Applied Thermal Engineering*, Volume 71, Issue 2, October 2014, Pages 858-871, DOI: 10.1016/j.applthermaleng.2013.12.037, URL:<http://www.sciencedirect.com/science/article/pii/S1359431113009253>, ISSN:1359-4311.

- [3] G. Angrisani, M. Canelli, A. Rosato, C. Roselli, M. Sasso, S. Sibilio, Load sharing with a local thermal network fed by a microcogenerator: Thermo-economic optimization by means of dynamic simulations, *Applied Thermal Engineering*, Volume 71, Issue 2, October 2014, Pages 628-635, DOI:10.1016/j.applthermaleng.2013.09.055, URL:<http://www.sciencedirect.com/science/article/pii/S1359431113006893>, ISSN: 1359-4311.
- [4] A. Rosato, S. Sibilio, M. Scorpio, Dynamic performance assessment of a residential building-integrated cogeneration system under different boundary conditions. Part I: Energy analysis, *Energy Conversion and Management*, Volume 79, March 2014, Pages 731-748, DOI:10.1016/j.enconman.2013.10.001, URL:<http://www.sciencedirect.com/science/article/pii/S0196890413006213>, ISSN: 0196-8904.
- [5] A. Rosato, S. Sibilio, M. Scorpio, Dynamic performance assessment of a residential building-integrated cogeneration system under different boundary conditions. Part II: Environmental and economic analyses, *Energy Conversion and Management*, Volume 79, March 2014, Pages 749-770, DOI:10.1016/j.enconman.2013.09.058, URL:<http://www.sciencedirect.com/science/article/pii/S0196890413006195>, ISSN: 0196-8904.
- [6] G. Ciampi, A. Rosato, M. Scorpio, S. Sibilio, Energy performance of a residential building-integrated micro-cogeneration system upon varying thermal load and control logic, *International Journal of Low-Carbon Technologies*, First published online: 5 November 2013, Pages: 1-14, DOI:10.1093/ijlct/ctt075, URL:<http://ijlct.oxfordjournals.org/content/early/2013/11/05/ijlct.ctt075.full?keytype=ref&ijkey=X5aza6Q8xdIaBXZ>, Online ISSN: 1748-1325.
- [7] G. Ciampi, A. Rosato, S. Sibilio, Yearly operation of a building-integrated microcogeneration system in south Italy: energy and economic analyses, *International Journal of Low-Carbon Technologies*, First published online: 20 October 2013, Pages: 1-16, DOI:10.1093/ijlct/ctt074, URL:<http://ijlct.oxfordjournals.org/content/early/2013/10/19/ijlct.ctt074.full?keytype=ref&ijkey=TTqupaz3kN1df3w>, Online ISSN: 1748-1325.
- [8] A. Rosato, S. Sibilio, G. Ciampi, Energy, environmental and economic dynamic performance assessment of different micro-cogeneration systems in a residential application, *Applied Thermal Engineering*, Volume 59, Issues 1-2, September 2013, Pages 599-617, DOI:10.1016/j.applthermaleng.2013.06.022,

URL:<http://www.sciencedirect.com/science/article/pii/S135943111300447X>, ISSN: 1359-4311.

- [9] A. Rosato, S. Sibilio, G. Ciampi, Dynamic performance assessment of a building-integrated cogeneration system for an Italian residential application, *Energy and Buildings*, Volume 64, September 2013, Pages 343-358, DOI:10.1016/j.enbuild.2013.05.035, URL:<http://www.sciencedirect.com/science/article/pii/S037877881300323X>, ISSN: 0378-7788.
- [10] A. Rosato, S. Sibilio, Performance assessment of a micro-cogeneration system under realistic operating conditions, *Energy Conversion and Management*, Volume 70, June 2013, Pages 149-162, DOI:10.1016/j.enconman.2013.03.003, URL:<http://www.sciencedirect.com/science/article/pii/S0196890413001106>, ISSN: 0196-8904.
- [11] A. Rosato, S. Sibilio, Preliminary experimental characterization of a three-phase absorption heat pump, *International Journal of Refrigeration*, Volume 36, Issue 3, May 2013, Pages 717-729, DOI:10.1016/j.ijrefrig.2012.11.015, URL:<http://www.sciencedirect.com/science/article/pii/S0140700712003234>, ISSN: 0140-7007.
- [12] A. Rosato, S. Sibilio, Energy performance of a micro-cogeneration device during transient and steady-state operation: Experiments and simulations, *Applied Thermal Engineering*, Volume 52, Issue 2, 15 April 2013, Pages 478-491, Publisher: Elsevier, DOI:10.1016/j.applthermaleng.2012.12.028, URL:<http://www.sciencedirect.com/science/article/pii/S1359431112008472>, ISSN: 1359-4311.
- [13] A. Rosato, S. Sibilio, Calibration and validation of a model for simulating thermal and electric performance of an internal combustion engine-based micro-cogeneration device, *Applied Thermal Engineering*, Volumes 45–46, December 2012, Pages 79-98, DOI:10.1016/j.applthermaleng.2012.04.020, URL:<http://www.sciencedirect.com/science/article/pii/S1359431112002633>, ISSN: 1359-4311.
- [14] G. Angrisani, A. Rosato, C. Roselli, M. Sasso, S. Sibilio, Experimental results of a micro-trigeneration installation, *Applied Thermal Engineering*, Volume 38, May 2012, Pages 78-90, DOI:10.1016/j.applthermaleng.2012.01.018, URL:<http://www.sciencedirect.com/science/article/pii/S1359431112000208>, ISSN: 1359-4311.

- [15] R. Mastrullo, A.W. Mauro, A. Rosato, G.P. Vanoli, Carbon dioxide heat transfer coefficients and pressure drops during flow boiling: assessment of predictive methods, *International Journal of Refrigeration*, Volume 33, Issue 6, September 2010, Pages 1068-1085, DOI:10.1016/j.ijrefrig.2010.04.005, URL:<http://www.sciencedirect.com/science/article/pii/S0140700710000757>, ISSN: 0140-7007.
- [16] A. Rosato, A.W. Mauro, R. Mastrullo, G. P. Vanoli, Experiments during flow boiling of a R22 drop-in: R422D adiabatic pressure gradients, *Energy Conversion and Management*, Volume 50, Issue 10, October 2009, Pages 2613-2621, DOI:10.1016/j.enconman.2009.06.001, URL:<http://www.sciencedirect.com/science/article/pii/S0196890409002313>, ISSN: 0196-8904.
- [17] R. Mastrullo, A.W. Mauro, A. Rosato, G.P. Vanoli, Carbon dioxide local heat transfer coefficients during flow boiling in a horizontal circular smooth tube, *International Journal of Heat and Mass Transfer*, Volume 52, Issues 19–20, September 2009, Pages 4184-4194, DOI:10.1016/j.ijheatmasstransfer.2009.04.004, URL:<http://www.sciencedirect.com/science/article/pii/S0017931009002622>, ISSN: 0017-9310.
- [18] F. de Rossi, A. W. Mauro, A. Rosato, Local heat transfer coefficients and pressure gradients for R-134a during flow boiling at temperatures between -9 °C and +20 °C, *Energy Conversion and Management*, Volume 50, Issue 7, July 2009, Pages 1714-1721, DOI:10.1016/j.enconman.2009.03.022, URL:<http://www.sciencedirect.com/science/article/pii/S0196890409000995>, ISSN: 0196-8904.
- [19] R. Mastrullo, A. Rosato, G. P. Vanoli, J. R. Thome, A methodology to select the experimental plant instrumentation based on an a priori analysis of measurement errors and instrumentation cost, *International Communications in Heat and Mass Transfer*, Volume 35, Issue 6, July 2008, Pages 689-695, DOI:<http://10.1016/j.icheatmasstransfer.2008.02.001>, URL:<http://www.sciencedirect.com/science/article/pii/S0735193308000444>, ISSN: 0735-1933.
- [20] C. Aprea, A. Greco, A. Rosato, Comparison of R407C and R417A heat transfer coefficients and pressure drops during flow boiling in a horizontal smooth tube, *Energy Conversion and Management*, Volume 49, Issue 6, June 2008, Pages 1629-1636, DOI:10.1016/j.enconman.2007.11.003,

URL:<http://www.sciencedirect.com/science/article/pii/S0196890407004050>, ISSN: 0196-8904.

PUBLICATIONS ON PROCEEDINGS OF PEER-REVIEWED INTERNATIONAL CONFERENCES (IN ENGLISH):

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