



Name **ANTONIO PANTALEO**
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Nationality Italy
Date of birth ROMA, 25 SEPTEMBER 1974

MAIN REMARKS

20 years of academic, consultancy and industrial experience in energy systems engineering and energy infrastructures. The fields of specialization include renewable and hybrid energy technologies, including energy storage and demand response strategies, energy management and energy audits in industrial and residential sector, biomass, wind and PV power plants electric design and on field engineering, cogeneration, thermo-economic optimization, bioenergy conversion and life cycle analysis of bioenergy systems, energy markets assessment, financial appraisals of energy efficiency investments

Authored + 100 scientific works among book chapters, reports, papers on renewable energy and energy systems modeling and optimization (50 ISI journal papers); led 3 international research projects and participated as co-PI to 10 international research projects since 2006 (total project budget +20 MEur); carried out consultancy works on renewable energy systems, energy audits in industrial and residential sector, energy decarbonization strategies (total projects budget +20 MEur)

Research quality indicators: Italian VQR 2011-15: 2 / 2; H-factor Scopus 16; H-factor Google Scholar 16; research gate score 29 (accessed 14-01-2020); ORCID: 0000-0002-5210-646X; eligible as full professor in applied thermodynamics and biosystems engineering according to Italian rules

Founded the Energy consultancy company Mediterranea Energia in 2006 and Technical Director (2006-12), average annual turnover +100 kEur

ACADEMIC EXPERIENCE

• **from 12/2016 research fellow**
From 06/2006 to 12/2016 research associate
Imperial College London,
South Kensington Campus, 7SW 2
AZ, London, UK

RESEARCH FELLOW, Clean Energy Processes Laboratory (CEP) and Centre for Process Systems Engineering (CPSE), Department of Chemical Engineering Imperial College (part time)
Main research fields: cross-sectorial energy systems integration and modelling, hybrid and renewable energy sources (solar, biomass, wind) techno-economic optimization, waste heat recovery systems, operational and strategic optimization of CHP systems with energy storage and demand response strategies, energy efficiency, LCA and carbon balances of energy systems in food processing;

•
From 02/2020 associate professor
From 06/2006 to 01/2020 academic researcher and assistant professor
• Università degli studi di Bari
Department of agro-environmental sciences and agricultural engineering
Via Amendola 165/A 70125 BA, IT

ASSOCIATE PROFESSOR of renewable energy systems, Department of agro-environmental sciences; Teaching subject '*Clean energy systems in rural sector*' since academic year 2012/13 (energy engineering); '*bioenergy supply chains*' since academic year 2014/15; '*Bioenergy conversion systems*' since 2008 at PhD course in Biosystems engineering;

DELEGATE OF THE RECTOR for energy policy (from 05/2017 to 06/2019), in charge of the implementation of renewable energy and energy efficiency projects for the University of Bari, University Sport Centre and Municipality of Bari (smart cities, PV, energy audits and investments in energy efficiency, budget over 20 MEur); delegate of Uniba in Sustainable Universities network – energy group, to implement sustainable energy policies in the Italian academic sector

• from 03/2016 to 06/2017

senior consultant, Ministry of Research, Rome, Italy

• from 06/2001 to 06/2006

• Università degli studi di Bari, Department PROGESA (BA) IT
• academic

TECHNICAL ADVISOR, Research Division, Ministry of Research and University (MIUR), scientific and technical support in the implementation of the National Research and Innovation Plan 2014-20, specific fields of activity: renewable energy, smart cities, bioenergy; role: development of research strategies and planning, elaboration of calls for tenders and techno-scientific support in the research and innovation proposals evaluation

RESEARCH ASSOCIATE DEPARTMENT AGRO-ENVIRONMENTAL SCIENCES

Fields of research: energy supply and demand in agricultural, food processing and agro-industrial fields; biomass to energy conversion systems (thermochemical and biological); thermo-economic assessment of biomass to energy, wind energy yield assessment and environmental issues

ENGINEERING EXPERIENCE

• from 10/2012 till now

• Via Guido de Ruggiero 1, 70125 Bari

ENGINEERING AND CONSULTANCY in renewable energy and energy saving field, in particular:

Detailed electric design, on field engineering, permitting issues for PV and wind farms. Techno-economic assessment for biomass to energy systems and energy savings investments in tertiary and industrial sectors. Scientific consultancy for decarbonization strategies of a major industrial operator in the food sector, consultancy for research and innovation proposals for Italian related to energy efficiency and renewable energy in response to EU and national calls

• from 05/2006 to 10/2012

• *Mediterranea Energia Srl, (BA) IT*

• technical director

Design, engineering and advisory works in the field of energy

TECHNICAL DIRECTOR OF *Mediterranea Energie Srl*, engineering and techno-economic consultancy company in the field of renewable energy. Annual turnover around 100 kEur.

Specific fields of activity:

Biomass cogeneration: permitting issues, preliminar plant design, techno-economic feasibility design, biomass supply and energy potentials for liquid, solid and gaseous biomass plants.

PV: project development, permitting procedures, grid connection (medium voltage), detailed electric design, on field engineering, energy yield assessment for small scale building integrated and large scale ground plants

Energy management and energy efficiency: energy supply contracts optimization, bill auditing for Public Bodies (Municipalities) and large industrial consumers;

Wind energy: visual impact assessment, electric design of wind farm included grid connection to medium and high voltage (5-30 MW plant size), wind flow and energy yield assessment

• from 09-2002 to 03/2003

GSE, Viale maresciallo Pilsudski, Roma, IT Italian TSO

ENGINEER, ITALIAN TRANSMISSION SYSTEM OPERATOR, GSE

Strategy Department, Unit analysis and systems innovation, GSE (ex GRTN) Spa, assessment of the Italian energy supply perspectives, and in particular: Italian generation mix: state of the art and assessment of new power plants to match the energy demand by 2020; wind energy: perspectives of integration of intermittent generation in the Italian energy mix, and regulation issues

• from 06/2000 to 06/2001

*Edison Energie Speciali, Via Pietro Nanni Costa, Bologna, IT
Independent power producer*

JUNIOR ENGINEER, EDISON ENERGIE SPECIALI. Fields of activity: wind energy (i) yield assessment and layout optimization, electromagnetic and noise level assessment (ii) support to due diligence activities carried out by independent engineering companies: biomass: (i) assessment of the most promising bioenergy routes in Italy for large scale cogeneration of heat and power; (ii) business plan of a RDF plant and a CHP plant fired by energy crops (5 MWe size)

EDUCATION

• from 05/2008 to 11/2013

• PhD, Imperial College London, UK;

PhD, Centre for Process Systems Engineering, Chemical Eng Dept Imperial College London (UK).

Thesis: "Perspectives on the role of bioenergy for distributed heat and power generation"; supervisors Prof Nilay Shah, (CPSE, Imperial College) Dr Ausilio Bauen (ICEPT, Imperial College)

Thesis: spatially explicit strategic and operational optimization tools for high efficiency cogeneration plants fired by biomass and natural gas in urban and periurban energy systems. Assessment and thermo-economic optimization of district heating/cooling systems integrated with biomass cogeneration and demand response strategies;

• 10/1993 to 02/2000

Politecnico di Bari, IT

Electrical engineering degree (5 years course, score 110/110 laude), Politecnico di Bari, Thesis: Energy crops: techno-economic feasibility assessment in Alta Murgia Park, Puglia region, Italy"

SPECIALIZATION COURSES

January 2020	Qualified as Energy management Expert (UNI CEI 11339:2009, Rina Services)
March-April 2019	Course on Energy management (Esperto Gestione Energia), Rina Services (40 hours)
May 2016	Course on process systems optimization and operational research, Centre for Process Systems Engineering, Imperial College London
• 25-29/10/2010, Napoli, IT; ENEA – FIRE	Energy manager course, ENEA – FIRE. Energy audit, assessment and design of energy saving and cogeneration investments,
• 21-24/2/2011, Politecnico di Milano, Depart of environmental engineering	Intensive course on biogas plants design and operation
• 5-7/11/2012, University of Manchester, Depart Electric Engineering, (UK)	Intensive course on smart grid, distributed and on site cogeneration and integration into distribution networks
• 10-13/6/2012, Università di Bari, IT	Intensive course on SIMAPRO software for Life Cycle Assessment, Pre Consultants,
• 05/2000, Università di Bari, IT	Intensive course on work safety, Politecnico di Bari

LANGUAGES

English, Spanish, basic knowledge of Germany

FURTHER DETAILS

Affiliations, Membership of professional bodies,.	Member IEEE (Power Electricity Society member) since 2001, member IET since 2001, member ISES Italia since 2001, member AEIT (italian electrotechnical association) since 2001, member ATI (Italian thermotechnical association) since 2016, member FIRE (federazione Italiana Risparmio Energetico) since 2012, member AIIA (Italian Association of agricultural engineering) since 2012, member SISEF (Italian association of forestry engineers), professional engineer (<i>Ordine degli Ingegneri della Provincia di Bari since 2000, n°6038</i>); Member of the Italian Biofuel platform, of the Italian board of experts for technical due diligence of renewable energy and CHP power plants (in agreement with Deliberation AEEG-GOP 43/2010), <i>member of ASME – Coal, Biomass and Alternative Fuels Committee</i> Delegate of University of Bari, thematic working group BSEN Threads, project TABE-NET, Trans-Atlantic Biosystems Engineering, definition of teaching topics and academic curricula for the scientific field of biosystems engineering and agricultural engineering, 2010-13 Delegate for University of Bari on Regional Energy productive District (from 2017)
AWARDS	Vigoni fellowship, British Council-CRUI, for the research project “The future role of bioenergy in urban areas”, in partnership with ICEPT, Imperial College London, 2006; Best paper award ASME Turbo Expo 2015, best paper award ASME ORC 2017 Conference
REVIEWER WORKS	Expert for INEA in Horizon 2020 proposals (6 projects reviewed in 2019); Reviewer of research projects for MIUR (Italian Ministry of research) in particular for FIRB projects; reviewer for the Italian VQR; Reviewer of research proposals for several Universities and Public Bodies; Reviewer of journal ISI/SCOPUS, among others: Nature Energy, Renewable and sustainable energy reviews, Biomass and Bioenergy, Energy Conversion and management, Applied Energy, Energy and Fuels, Fuels, Applied thermal engineering, Science of the total environment, Renewable Energy, Solar Energy, Energies (about 50 reviews per year).
IT KNOWLEDGE	Software for electric plant design, yield assessment of PV and wind plants, database (Access), LabView, Markal models for energy planning, software GEMIS and Simapro for LCA, MatLab, optimization tools (AIMMS), software for thermodynamic analyses (GateCycle, Cycle-Tempo)
DRIVING LICENCE	Driving licence A, B, nautical licence
Web sites	: http://www.imperial.ac.uk/people/a.pantaleo ; https://www.researchgate.net/profile/Antonio_Pantaleo ;

Antonio Pantaleo

SELECTED ENGINEERING WORKS IN THE FIELD OF ENERGY ENGINEERING

from 05/2008 to 10/2011 PV plants	1	Preliminar, detailed and as built design, on field engineering, permitting follow up for 2 PV plants of 1 MWe size, Casamassima (BA) customer: Ravano Green Power; investment amount: 5 MEur; engineering work amount: 200 kEur
from 02/2013 to 12/2013 wind farm	2	Detailed electric design and grid connection (HighVoltage) of a 30 MW wind farm, Sava (TA) customer: Ravano Green Power; investment amount 50 MEur; engineering work amount 25 kEur
from 09/2011 to 11/2011 wind farm	3	Final electric design of Medium Voltage grid connection of 10 MWe wind farm in Cutro (KR) customer: Ravano Green Power; investment amount 10 MEur; engineering work amount 18 kEur
from 06/2013 to 08/2013 wind farm	4	Visual impact assessment of wind farm in Sava (TA) customer: Ravano Green Power; investment amount 30 MEur; engineering work amount 5 kEur
from 09/2010 to 10/2010 wind farm	5	Visual impact assessment of wind farm in Manduria (TA) customer: Ravano Green Power; investment amount 20 MEur; engineering work amount 5 kEur
from 11/2010 to 12/2010 PV plants	6	Technical due diligence for ground PV plants in Puglia region, total of 40 MW customer: OST Energy; approx. investment of 120 MEur; engineering work amount 3.5 kEur
from 06/2008 to 08/2010 PV plants	7	Preliminar and final design, permitting ifollow up for PV plant of 1 MWe size, Supersano (LE) Customer: Cautha Energia; investment 5 MEur; engineering works 25 kEur
from 10/2008 to 10/2011 PV plants	8	Preliminar, detailed and as built design, permitting follow up of 250 kWp PV plant building integrated in Bari Customer: Frezza Legnami; investment 1 MEur; engineering works 6.5 kEur
from 05/2008 to 10/2009 biomass	9	Energy potential assessment and techno-economic feasibility of distributed biogas CHP plants in Barsento area, Puglia region, size from 50 kW to 1 MWe customer: GAL Barsento; approx. investment 50 MEur; engineering works 18 kEur
from 04/2008 to 04/2009 biomass	10	Biomass energy potential assessment, preliminary design, layout optimization and techno-economic feasibility of 10 MWe CHP plant feed by olive cake and by pruning residues in Andria (BT) customer: Oliveti d'Italia; investment 45 MEur; engineering works 30 kEur
from 03/2006 to 05/2016 PV plants	11	Preliminar design of 4 PV plants of 50 kW building integrated, Capurso (BA) customer: Municipality of Capurso; investment 1 MEur; engineering works 5 kEur
from 05/2003 to 10/2003 wind farm	12	Preliminar, final, detailed and as built design, permitting follow up, on site engineering for 20 kW wind turbine grid connected, Cittanova (RC) Customer: Municipality of Cittanova; investment 60 kEur; engineering works 2.5 kEur
from 03/2007 to 05/2007 biomass	13	Biomass energy potential assessment and optimal CHP plant sizing for the agro-forestry resources of the Municipality of Gravina (BA) Customer: Babcock and Brown ; investment 30 MEur; engineering works 10 kEur
from 05/2006 to 10/2006 biomass	14	Feasibility assessment of a lignocellulosic biomass CHP plant of 40 MWe, Molfetta (BA) Customer: Daneco renewables; investment 120 kEur; engineering works 3.5 kEur
from 05/2006 to 10/2006 biomass	15	Feasibility assessment of a liquid biomass CHP plant of 24 MWe, Molfetta (BA) Customer: Daneco renewables; investment 50 kEur; engineering works 3.5 kEur
from 06/2012 to 04/2013 biomass	16	Feasibility assessment of biomass to energy investments in response to the call POI Energia, Italian Ministry of Economic Development, location Puglia and Sicily, Italy customer: Meridionale Servizi Srl; approx. investment 50 MEur; engineering works 8 kEur
from 02/2006 to 09/2006 energy audits	17	Energy audits and measurement of energy intensity during the print of newspapers and magazines for a major Italian operator customer: Sedit Srl; engineering works 2 kEur
From 01/2010 to 02/2010 biomass	18	Energy potentials and biomass supply costs in the sector of olive oil production, Puglia region customer: ITEA ; engineering works 3.5 kEur
from 05/2006 to 10/2006 biomass	19	Techno-economic feasibility for distributed small scale gasification plants feed by local lignocellulosic biomass in Province of Brindisi; submission of investment proposal for energy savings in Province of Benevento in response to call ELENA -EIB customer: Progin approx. investment 50 MEur; engineering works 2.5 kEur
from 10/2012 to 10/2012 biomasse	20	Biomass supply plan and preliminary environmental impact assessment for a trigeneration biomass plant at the premises of Bari airport customer: CPL Concordia investment 5 MEur; engineering works 2.5 kEur
from 01/2015 to 02/2015 energy efficiency	21	Energy efficiency investments plan and energy audit for pharmaceutical firm Farnigea, Pisa customer: Siemens
from 05/2006 to 10/2006 PV	22	Preliminar design of PV plants in Puglia, total cumulated power of 10 MWp customer: Pavove Filippo Studio tecnico ; engineering work 2.5 kEur
from 05/2006 to 10/2012 energy audit	23	Energy audit, bill audit, comparative assessment of energy supply contracts for several Municipalities in Puglia and basalicata region, for Mediterranea Energia Srl ; total consultancy works 150 kEur

MAIN RESEARCH PROJECTS AND CONSULTANCY WORKS

As coordinator	<p>“The future role of bioenergy in urban areas”, funded by British Council and CRUI (Italian coordinator A. Pantaleo, british coordinator A. Bauen, ICEPT, Imperial College, Centre for Energy Policy and Technology, (jan 2006-mar 2007); topic: define best strategies and guidelines for optimal integration of biomass energy in urban areas for stationary applications (CCHP)</p>
As coordinator of research unit	<p>WP leader of BIOSOLESCO: “Non technical barriers for ESCOs providing heating/cooling from biomass and solar thermal energy in tertiary sector”, coordinator NTUA, Finland, Italian coordinator A. Pantaleo, funded by EIE, 18 partners of 8 MC; (july 2008-july 2011); objective: assess business models for ESCO operations and non technical barriers to provide heating and cooling from biomass and solar thermal sources to tertiary and residential end users</p> <p>Leader of research unit in the project “<i>Networks of laboratories – integrated energy production from renewable sources in the regional agro-industrial system</i>” funded by Puglia region, aiming at the establishment of a network of laboratories in the field of biomass energy, 2011-14; Euro 269.384 – scientific coordinator of Laboratory of solid biomass of DISAAT Department, with instruments to carry out tests on biomass and biofuels quality Coordinated under University of Bari</p> <p>Co-Principal investigator of the project High performance heat-power-cooling iHPC (2.5 m£, EPSRC) aimed at minimizing primary energy use in UK industry, by proposing next generation technological solutions, identifying techno-economic bottlenecks, and assessing opportunities and benefits of these technologies via case studies with different stakeholders, coordinated under Imperial College</p> <p>Co-Principal investigator of the IDLES project, 5 M£, funded by EPSRC to Imperial College (2019-24) an aimed at integration of energy systems (electric network, gas network, district heating, water, waste) with an holistic and multi-disciplinary approach and focused on robust spatially and temporally explicit energy systems modelling for strategic planning of energy investment and operational optimization, assessment of disruptive and flexible technologies for energy generation (heat, power, transport), storage (thermal, electric), distribution/transport</p> <p>Co-Principal Investigator of a project on flexible hybrid renewable energy technologies integration (biomass, wind, solar) in Egypt funded via Newton project by British Council (200 k£) to Imperial College London in collaboration with Fayoum University Egypt</p>
As participant to research unit	<p>Thermos Horizon 2020 project on district heating strategic planning optimization and development of support decision tools for Municipalities and public stakeholders, Imperial College (2016-20)</p> <p>EDF Sparkfund project funded by EDF UK on optimal integration of centralized heat pumps and district heating systems, with a case study in isle of Dogs, London (2016-18)</p> <p>Project funded by Royal Society with University of Mauritius, University of Pretoria, University of Lagos, on optimal integration of concentrating solar technologies and biomass to energy conversion systems in rural areas in Africa (2017-19)</p> <p>Project S2Biom, “<i>Delivery of sustainable supply of non-food biomass to support a resource-efficient bioeconomy in Europe</i>”, led by CEP, Imperial College London, 2013-16 (7th FP) specific analysis of lignocellulosic biomass supply and logistics (in cooperation with Wageningen University), classification, market analyses and techno-economic perspectives by 2020 and 2050 of bio-based products as alternative to lignocellulosic biomass to energy chains (in cooperation with ECN), assessment of energy policy measures related to bioenergy in the EU</p> <p>Project BASIS Bioenergy, “<i>A platform to assess your risk from a sustainable wood chip supply</i>”, coordinated by AEBIOM (2004-16) funded by IEE, assessment of state of the art and market opportunities for heat and electricity generation from wood chips in the UK by means of medium-large scale boilers</p> <p>“<i>Energy in urban areas</i>” funded by BP, led by Imperial College London, CPSE, (2009-2014), assessment of potential for integration of bioenergy in urban areas, by means of MILP based modelling and optimization tools, coordinator Prof Nilay Shah</p> <p>“<i>Decarbonizing Sainsbury’s energy consumption</i>”, funded by Sainsbury’s and coordinated by Imperial College London: specific assessment of potentials for refurbishment of Sainsbury’s thermal plants to pellet fuel and related logistic, technical, economic, organizational and environmental implications; assessment of sustainable energy management models for Sainsbury’s, coordinator Prof Nilay Shah</p> <p>Project Celsius-Smart Grids “<i>Combined Efficient Large Scale Integrated Urban Systems</i>”, (2013-16) led by Goteborg City Council, participant Imperial College London, specific work on integration of biomass and natural gas district heating and cooling in urban areas</p>

Principal investigator of other researches

“A whole system approach to analysing the bioenergy demand and supply: mobilising the long term potential of bioenergy” - TSEC-BIOSYS -, project coordinator A. Bauen, Imperial College London, Centre for Energy Policy and Technology – ICEPT, November 2005 – June 2009 (UKERC), assessment of UK bioenergy demand and supply dynamics, and quantification of potential uptake of biomass for heat and power in the UK by 2020-30 through markets segmentation, qualitative-quantitative approaches and market-Times modelling tools

“Assessment of biomass chains in Italy” – specific assessment of olive sector in Puglia Region (Project PRIN funded by MIUR, coordinator Prof. Riva, 2004-06;

“Techno-economic potentials and feasibility of biomass to energy chains in Puglia region” (Studio per la valorizzazione energetica di biomasse agro-forestali nella regione Puglia” (2005-07);

Techno-economic assessment of decarbonization strategies in the heating sector for Nestlé (E4tech consultancy work, 2020, 200 k€)

Analysis of potentials of bioliquids for heating in the UK energy market (work for E4tech, 2018)

Technologies for outdoor air quality monitoring in urban areas (for Engie, 2019, 10 k€)

Bioremediation processes and energy conversion of short rotation forestry biomass for biochar and energy via gasification processes, project funded by Puglia Region (2018-20, 1 MEur)

Brunel University: assessment of energy consumption in food processing (2016-17)

Tecnofrutta Srl: energy savings measures in food drying (2016)

Biomass ash discharge processing and densification for use as fertilizer and raw material for bio-based chemicals

Intermittent waste heat recovery in coffee torrefaction for Saicaf (2015-16)

Horse manure to energy chains: densification and pre-treatment processes and thermo-economic optimization of supply chains and energy conversion for small scale heat and power (2015)

Energy saving in food processing, interactions between energy consumption and quality of products with applications to coffee torrefaction, pasta drying, carried out for Siemens Italy 2014-15

Scientific consultancy for ITEA Spa (Ansaldo group), related to regulations, logistics, technical issues for biomass to energy conversion in small scale plants through thermo-chemical processes, 2012

Techno-economic feasibility assessment of a biomass power plant feed by olive pruning and olive oil cake, 10 MWe, for Consorzio Oliveti d'Italia, funded by MIPAF, 2008-10;

Techno-economic feasibility assessment, energy potential assessment and size optimization of medium-small scale biogas plants feed by energy crops and manure in the area of Barsento Local Action Group (Puglia region), 2008

Business plan for the development of small scale lignocellulosic biomass CHP plants based on gasification technologies for Municipalities in the area of Terre di Arneo Local Action Group, Puglia region, 2012

Advisory for submission of industrial research and innovation project in response to national and European calls related to smart use of energy (among the others, for the following customers in Italy: Adriatica legnami, Forme industriali, Sedit, Socoges Daneco renewables, Frezza legnami, De Carlo Infissi, Meridionale Servizi, CPL Concordia) 2006-15

LIST OF SELECTED PAPERS 2015-2019

- Camporeale S, Turi F, Torresi M, Fortunato B, Pantaleo A, Pellerano A (2015) *Part load performances and operating strategies of a natural gas-biomass dual fuelled microturbine for CHP operation*, Proceedings of ASME Turbo Expo 2014: Düsseldorf, Germany, June 16-20, 2014 GT2014- 27109, *and Journal for Engineering for Gas Turbines and Power*, 137(12) (dec 2015) (13 pages) doi: 10.1115/1.4030499

- Pantaleo A, Ciliberti P, Camporeale S, Shah N (2015) *Thermo-economic assessment of small scale biomass CHP: steam turbines vs ORC in different energy demand segments*, Proceedings of 7th International Conference on Applied Energy – ICAE, Abu Dhabi, March 28-31 2015 and *Energy Procedia* 75(2015) 1609-1617

- Camporeale S, Ciliberti P, Torresi M, Fortunato B, Pantaleo A (2016), *Externally fired micro gas turbine and ORC bottoming cycle: optimal biomass/natural gas CHP configuration for residential energy demand*, Proceedings of ASME Turbo Expo 2015, Montreal, Canada, June 15-19 2015 (best paper award – cycle innovation committee), *and Journal of Engineering for Gas Turbines and Power* DOI: 10.1115/1.4034721

- Domenico Borello, Benedetta De Caprariis, Paolo De Filippis, Andrea Marchegiani, Nilay Shah, Antonio Marco Pantaleo, (2015), *Thermo-Economic Assessment of a olive cake Gasifier for Cogeneration Applications*, Proceedings of 7th International Conference on Applied Energy – ICAE, Abu Dhabi, March 28-31 march 2015 and *Energy Procedia*, 75(2015) 252-258 -

- Camporeale S, Ciliberti P, Pantaleo A, Fortunato B (2015), *Thermo-economic analysis and fluid selection of the bottoming ORC cycle coupled with an externally fired gas turbine*, ASME-ATI-UIT 2015 Conference on Thermal Energy Systems: Production, Storage, Utilization and the Environment 17 – 20 May, 2015, Napoli, Italy, ISBN 978-88-98273-17-1

- Camporeale S, Pantaleo A, Ciliberti P, Fortunato B, *Cycle configuration analysis and techno-economic sensitivity of biomass externally fired gas turbine with bottoming ORC*, *Energy Conversion and Management* 105 (2015) 1239–1250 <http://dx.doi.org/10.1016/j.enconman.2015.08.069>

- Camporeale S, Ciliberti P, Pantaleo A (2015), *Influence of heat demand on techno-economic performance of a natural gas/biomass fired micro gas turbine with bottoming ORC for cogeneration*, 3rd International Seminar on ORC power systems, ASME, Brussels, 12-14 october 2015,

- A. Pantaleo, S. Camporeale, B Fortunato (2015) *Small scale biomass CHP: techno-economic performance of steam vs gas turbines with bottoming ORC*, *Energy Procedia* 82 (2015) 825 – 832 ATI Conference 9-11 september, Rome

- Bert Annevelink, Hugo de Groot, Nilay Shah, Sara Giarola, Antonio Marco Pantaleo, Perttu Anttila, Martijn Vis, Rik te Raa, Douwe van den Berg, Benoît Gabrielle, David Sanchez Gonzalez, Daniel García Galindo, Eva López Hernandez, Špela Ščap, Nike Krajnc (2015) *S2Biom database with logistical components of the biomass value chain*, 23rd European Biomass Conference and Exhibition, Vienna 1-4 June 2015 ISBN 978-88-89407-516

- Fortunato B, Camporeale S, Fornarelli F, Torresi M, Pantaleo A (2016) *A combined power plant fed by syngas produced in a downdraft gasifier*, Proceeding of ASME Turbo-Expo, Seoul 13-17 June ISBN: 978-0-7918-4974-3; doi: 10.1115/GT2016-58159

- E. Savuto, D. Borello, A. Di Carlo, S. Natali, A. Pantaleo, F. Rispoli (2016) *Experimental study of mayenite-based catalyst effectiveness in reducing pollution from biomass gasification in fluidized bed reactors*, Proceeding of ASME Turbo-Expo, Seoul 13-17 June; doi:10.1115/GT2016-57666

- M. Mozaffarian, H. M. Londo, J. van Stralen, C.M. Kraan, A.M. Pantaleo, C. Panoutsou (2016) *Lignocellulosic biomass as feedstock for energy, fuels, biobased chemicals and materials in Europe An integrated assessment on using biomass resources among different demand sectors*, Biomass Energy Conference and Exhibition, Amsterdam

- Oyewunmi O, Kirmse C, Pantaleo A M, Markides C (2016) *Performance of working fluid mixtures in an ORC-CHP system at different heat demand levels*, Proceedings of ECOS 2016, June 19-23, Portoroz, Slovenia and *Energy Conversion and management* <http://dx.doi.org/10.1016/j.enconman.2017.05.078>

- A. Pantaleo, S. Camporeale, A. Miliozzi, V. Russo, C. Markides, N. Shah, (2016) *CSP/biomass hybrid externally fired gas turbines: thermo-economic assessment*, *Energy Procedia ICAE 2016*, 8-11 october 2016, Bejiin and *Applied Energy* 10.1016/j.apenergy.2017.05.019

- A. Pantaleo, S. Camporeale, C. Markides, N. Shah, (2016) Energy performance and thermo-economic assessment of a dual fuel gas-biomass microturbine for trigeneration Energy Procedia ICAE 2016, 8-11 october 2016, Beijing
- A. Pantaleo, A. Sorrentino, A. Miliozzi, S. Camporeale, C. Markides, N. Shah (2017) Hybrid solar-biomass combined Brayton/organic Rankine-cycle plants integrated with thermal storage: Techno-economic feasibility in selected Mediterranean areas, IV International Seminar on ORC Power Systems, ORC2017, 13-15 September 2017, Milano, Italy best paper award and **Renewable Energy**, 147, pp. 2913-2931, doi:10.1016/j.renene.2018.08.022)
- P. Tamburrano, A. Pantaleo, E. Distaso, R. Amirante (2017) Thermodynamic analysis of a small scale combined cycle for energy generation from carbon neutral biomass, IV International Seminar on ORC Power Systems, ORC2017, 13-15 September 2017, Milano, Italy
- M. T. White, O. A. Oyewunmi, M. A. Chatzopoulou, A. M. Pantaleo, A. J. Haslam, C. N. Markides (2017) Integrated computer-aided working-fluid design and thermoeconomic ORC system optimisation in waste heat recovery applications, IV International Seminar on ORC Power Systems, ORC2017, 13-15 September 2017, Milano, Italy, and **Energy** White, M. T., Oyewunmi, O. A., Chatzopoulou, M. A., Pantaleo, A. M., Haslam, A. J., & Markides, C. N. (2018). Computer-aided working-fluid design, thermodynamic optimisation and thermoeconomic assessment of ORC systems for waste-heat recovery. *Energy*, 161, 1181–1198. <http://doi.org/10.1016/j.energy.2018.07.098>
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