Curriculum vitae of Fontina Petrakopoulou

Work address	Dept of Energy Engineering and Climate Protection Technische Universität Berlin Institut für Energietechnik und Umweltschutz Sekr. KT 1 Marchstr. 18, 10587 Berlin, Germany
Tel.	+49 30 314-22181
Email	fontina.petrakopoulou@tu-berlin.de
Homepage	fontina-petrakopoulou.github.io
Nationality	Greek (married to American)
Date of birth	23 June 1982

EDUCATION

2006-2010	PhD in Energy Engineering, Technische Universität Berlin, Germany Supervisor: Prof. George Tsatsaronis
2000-2005	BA and MSc in Mechanical Engineering, Technical University of Crete, Greece

CURRENT POSITION

2024-present	Full Professor, Chair of Energy Engineering and Climate Protection, Technische Universität Berlin, Germany

PREVIOUS POSITIONS

2018-2023	Ramón y Cajal Fellow (accredited associate professor), Universidad Carlos III, Spain
2015-2018	Assistant professor, Universidad Carlos III, Spain
2013-2015	Research associate, National Technical University of Athens, Greece
2013-2014	Lecturer, Technical University of Crete, Greece
2012	Consulting activities at SHELL Global Solutions International BV on the advanced exergoeconomic evaluation of a power plant with and without post-combustion CO_2 capture
2011-2013	Post-doctoral researcher, Institute IMDEA Energy, Spain
2005-2010	Teaching assistant, Technische Universität Berlin, Germany
2009	Consulting activities at *Nagarjuna Fertilizers and Chemicals Limited* on technical auditing

FELLOWSHIPS AND RESEARCH GRANTS

2018-2023	*Ramón y Cajal Fellowship*, European Union & Ministry for Science, Innovation and Universities, Spain, **308.600 €**
2015-2018	*Marie Curie COFUND CONEX Fellowship*, European Commission (FP7), **210.897,36 €**
2013-2015	*Marie Curie IF GENERGIS*, European Commission (FP7), **161.968,80 €**
2011-2013	*Marie Curie COFUND Fellowship*, European Commission (FP7)
2006-2009	*Marie Curie ITN Early-stage Researcher grant*, European Commission (FP6)

PRIZES & AWARDS

2019	Prize of Excellence, University Carlos III of Madrid, **30.000 €**
2012	Award of Best Presentations at the 1st Workshop of IMDEA Energy
2012	Who's Who in the World (30th Pearl Anniversary Edition 2012)
2011	Finalist (among the three best Ph.D. dissertations in Germany) of the Prize of the Future awarded by RWE AG. (Zukunftpreis); Committee: A. Fitting, I. Alpheus, D. Moest, A. Hartmann, M. Kuehn
2009	Best paper delivered at the International Conference on Optimization Using Exergy-Based Methods and Computational Fluid Dynamics; Committee: D. Moorhouse (Air force Research Laboratories, USA), G. Tsatsaronis (Technische Universität Berlin, Germany), R. Weber (Technical University of Clausthal, Germany)

PROJECT MANAGEMENT (Principal investigator)

2018-2023	*Ramón y Cajal Fellowship* on independent research
2015-2018	*Optimization of Hybrid Power Plants for Polygeneration*, *OPTIHYP*, European Commission (MC-COFUND-CONEX- 51509, FP7), UC3M, Madrid, Spain.

2013-2015 *Green Energy for Islands*, European Commission (MC-IEF-GENERGIS-332028, FP7), National Technical University of Athens, Greece.

2011-2013 *Evaluation of Gasification Processes and their Improvement Potential*, European Commission (MC-COFUND-AMAROUT-229599, FP7), IMDEA Energy, Madrid, Spain.

COLLABORATIVE RESEARCH PROJECTS

2017-2018 *Mejora del sistema de admisión de aire en la góndola de un aerogenerador* (Funding body: Foundation IBERDROLA)

2016-2019 *Optimization of solar thermal power plants, transient analysis and design of concentric receivers* (Funding body: The Spanish Ministry of Economy and Competitiveness)

2012-2015 *Assessment of the manufacturing routes of high energy density biofuels from lignocellulosic via platform molecules*, 3 partners (Funding body: Madrid Regional Authority).

2012-2014 *Development of efficient photocatalysts for obtaining products of commercial interest for the valuation of CO_2* (Funding body: REPSOL)

2011-2015 *Use of agroforest and oily residues to produce clean transportation fuels*, Collaborators: 9 partners from the public and private sectors (Funding body: Madrid Regional Authority).

2011-2014 *Advanced Electrolyser for Hydrogen Production with Renewable Energy Sources, Fuel Cells and Hydrogen Joint Undertakin*g, 13 partners from 8 countries (Funding body: European Commission FP7).

2006-2009 *Optimization of Systems, Energy Management and Environmental Impact in Process Engineering*, 16 partners from 11 countries (Funding body: European Commission FP6).

2005-2007 *Optimal design of products and manufacturing processes, with focusing on the parametric formation of complicated geometry bladin*gs, Programme "Pythagoras II", (Co-funding bodies: European Commission, Greece)

TEACHING ACTIVITIES

2024-present Energietechnik, Technische Wärmelehre, Technische Universität Berlin, Germany

2016-2023 Energy & Water (in English/Spanish), Universidad Carlos III, Spain

2016-2018 Thermal engineering (in English/Spanish), Universidad Carlos III, Spain

2013-2014 Heat Transfer (in Greek), Technical University of Crete, Greece

2009 Design, Analysis and Optimization of Energy Conversion Systems (in German), Technische Universität Berlin, Germany

2007-2010 Advanced Computational Training in Energy Engineering (in German), Technische Universität Berlin, Germany

SUPERVISION OF GRADUATE STUDENTS

2017-present Supervisor of 1 Postdoc, 1 ongoing PhD student & co-supervisor of two collaborative PhD theses

2008-present Supervisor of 30+ Bachelor and Master theses

ORGANISATION OF SCIENTIFIC MEETINGS

2024 **Program co-chair**, 13th International Conference on Smart Cities and Green ICT Systems. SMARTGREENS 2024, Angers, France

2021 **Session Convener** "Renewable electricity generation systems 1" of SDEWES, Cologne, Germany (virtual)

2020 **Session Convener** "Energy system analysis - 3" of SDEWES, Cologne, Germany (virtual)

2019 **Organizing committee** of the International European Conference on Renewable Energy Sources (ECRES), Madrid, Spain

2019 **Session Convener** "Energy efficiency and sustainability in buildings and industry" of ECRES, Madrid, Spain

2017-present **Scientific committees**: Conference on Clean Energy Technologies and Assessment (CETA2022), Conference of Sustainable Energy, Water and Environment Systems (SDEWES), International Conference on Environmental Science & Technology (CEST), North American Conference on Sustainable Development of Energy, Water and Environment Systems, NA.SDEWES2024, International European Conference on Renewable Energy Sources (ECRES)

2013-2017 **Session Convener** "Energy technologies and sustainability" of the International Conference on Environmental Science and Technology, Rhodes & Athens, Greece

INSTITUTIONAL & ACADEMIC RESPONSIBILITIES

2021-present	**Expert Evaluator**, European Union, Individual Marie Skłodowska-Curie Fellowships
2021	**Guest Editor** of Special Issue "Advances in the Evaluation of Advanced Energy Conversion Systems", Applied Sciences (ISSN 2076-3417), Co-editor: Luis M. Romeo
2021	**Guest Editor** of Special Issue "Sustainable and Secure Energy Conversion Systems", Sustainability (ISSN 2071-1050), Co-editors: Francesco Calise, Maria Vicidomini.
2020-present	**Topic Editor** of the open access journal Applied Sciences (ISSN 2076-3417)
2020	**Expert Evaluator**, HORIZON 2020 - FET-OPEN Challenging Current Thinking
2017-present	**Editorial Board** of the open access journal Environments (ISSN 2076-3298)
2016-present	**Evaluator** of 30+ Bachelor and Master theses, Universidad Carlos III, Spain
2016-present	**Committee Member** of 3 Ph.D. theses (KTH, 2021; ITALY, 2019; Technical University of Madrid, Spain, 2016)
2007-present	**Reviewer** for more than 25 journals (Applied Energy / Energy / Environmental Science and Technology / Journal for Engineering for Gas Turbines and Power, etc.)

MEMBERSHIPS

2007-present	Association of German Engineers (Verein Deutscher Ingenieure, VDI), American Society of Mechanical Engineers (ASME), American Geophysical Union (AGU), Technical Chamber of Greece (TEE)

PRESS

2019	Article highlight with interview by SolarPACES (International Energy Agency, IEA): A New Way to Dry Cool Solar Thermal Power Plants – with Underground Air, https://www.solarpaces.org/a-new-way-to-dry-cool-thermal-power-plants-with-underground%E2%80%A8-air/.
2017	eLetter to Science Magazine: Fossil power, not guilt free, in response to the perspective "Fossil fuel, guilt free", https://science.sciencemag.org/content/fossil-power-not-guilt-free, 2017.

CAREER BREAKS

2 Maternity leaves: 02/10/2015-24/02/2016; 14/10/2019-07/03/2020

PUBLICATIONS

Google Scholar: **2260 citations / H-index 24**
55 ISI articles, 7 technical reports, 3 book chapters, 2 lecture notes, 50+ conferences/workshops (9 invited)

Articles

2023

[57] **Petrakopoulou F.**, García-Tenorio Corcuera E., 2023. "Evaluating hydrogen-based electricity generation using the concept of total efficiency", Energy Conversion & Management, accepted for publication.

[56] Shirmohammadi R., Aslani A., Batuecas E., Ghasempour R., Romeo L.M., **Petrakopoulou F.**, 2023. "A comparative life cycle assessment for solar integration in CO2 capture utilized in a downstream urea synthesis plant", Journal of CO2 Utilization, 74, 102534.

2022

[55] **Petrakopoulou F.,** García-Tenorio Corcuera E., 2022. "Introducing the total efficiency to address challenges of the 21st century", Journal of Cleaner Production, 374, 133409.

[54] **Fernández Torres J., Petrakopoulou F.**, 2022. "A Closer Look at the Environmental Impact of Solar and Wind Energy", Global Challenges, 6 (8), 2200016.

[53] Calise F., Liberato Cappiello F., Dentice d'Accadia M., **Petrakopoulou F.**, Vicidomini M., 2022. "A solar-driven 5th generation district heating and cooling network with ground-source heat pumps: a thermo-economic analysis", Sustainable Cities and Society, 76, 103438.

[52] Shirmohammadi R., Aslani A., Ghasempour R., Romeo L.M., **Petrakopoulou F.**, 2022. "Exergoenvironmental analysis and thermoeconomic optimization of an industrial post-combustion CO_2 capture and utilization installation", Journal of CO_2 Utilization, 59, 101927.

2021

[51] **Petrakopoulou F.**, Batuecas, E., 2021. "Introduction to an exergy-based socioeconomic analysis", Energy Conversion and Management, 249, 114853.

[50] De la Rocha Camba, E. **Petrakopoulou F.**, 2021. "Economic analysis of a zero-water solar power plant for energy security", Applied Sciences 11(20), 9639.

[49] Sefiddashti, A.R. Shirmohammadi R., **Petrakopoulou F.**, 2021. "Efficiency Enhancement of Gas Turbine Systems with Air Injection Driven by Natural Gas Turboexpanders", sustainability-1377454.

[48] Shirmohammadia R., Aslani A., Ghasempour R., Romeo L.M., **Petrakopoulou F.**, 2021. "Techno-economic assessment and optimization of a solar-assisted industrial post-combustion CO_2 capture and utilization plant", Energy Reports 7, 7390-7404.

[47] Nasrollahi, H., Safaei Boroujeni, R., Shirmohammadi R., Najafi Nobar Sh., Aslani A., Amidpour, M., **Petrakopoulou F.**, 2021. "Optimization of Water Pressure of a Distribution Network within the Water–Energy Nexus", Applied Sciences, 8371.

[46] **Petrakopoulou F.**, 2021. "Defining the cost of water impact for thermoelectric power generation", Energy Reports 7, 2101-2112.

[45] Shirmohammadi R., Aslani A., Ghasempour R., Romeo L.M., **Petrakopoulou, F.**, 2021. "Process design and thermoeconomic evaluation of a CO_2 liquefaction process driven by waste exhaust heat recovery for an industrial CO_2 capture and utilization plant", Journal of Thermal Analysis and Calorimetry, 145:1585–1597.

2020

[44] **Petrakopoulou, F.**, Robinson, A., Olmeda-Delgado, M., 2020. "Impact of climate change on power-plant operation", Journal of Cleaner Production 273, 122816.

[43] Sharifi, S., Nozad Heravi, F., Shirmohammadi, R., Ghasempour, R., **Petrakopoulou, F.**, Romeo, L.M., 2020. "Comprehensive thermodynamic and operational optimization of a solar-assisted LiBr/water absorption refrigeration system", Energy Reports 6, 2309-2323.

[42] Calise F., Liberato Cappiello F., Vicidomini M., **Petrakopoulou F.**, 2020. "Water-Energy Nexus: a thermoeconomic analysis of polygeneration systems for small Mediterranean islands", Energy Conversion and Management 220, 113043.

[41] de la Rocha Camba, E., **Petrakopoulou, F.**, 2020. "Earth-cooling air tunnels for thermal power plants: initial design by CFD modelling", Energies 13, 797.

[40] Khoshgoftar Manesh, M.H., Kabiri., S., Yazdi, M., **Petrakopoulou, F.**, 2020. "Exergoeconomic modeling and evaluation of a combined-cycle plant with MSF and MED desalination", Journal of Water Reuse and Desalination 10 (2): 158–172.

[39] Khoshgoftar Manesh, M.H., Kabiri., S., Yazdi, M., **Petrakopoulou, F.**, 2020. "Thermodynamic evaluation of a combined-cycle power plant with MSF and MED desalination", Journal of Water Reuse and Desalination 10 (2): 146–157.

2019

[38] Fernández-Gil, G., **Petrakopoulou, F.**, 2019. "Sustainable Water Generation on a Mediterranean Island in Greece", Energies, 12(22), 4247.

[37] del Moral Sabroso, A., **Petrakopoulou, F.**, 2019. "Evaluation of the coupling of a hybrid power plant with a water generation system", Applied Sciences, 9(23), 4989.

[36] Rodríguez Hervas, G., **Petrakopoulou, F.**, 2019. "Exergoeconomic Analysis of the Allam Cycle", Energy Fuels, 33(8), 7561-7568.

[35] **Petrakopoulou, F.**, Olmeda-Delgado, M., 2019. "Studying the reduction of water use in integrated solar combined-cycle plants", Sustainability, 11(7), 2085.

[34] Cristina Serrano-Sanchez, C., Olmeda-Delgado, M., **Petrakopoulou, F.**, 2019. "Exergy and Economic Evaluation of a Hybrid Power Plant Coupling Coal with Solar Energy", Applied Sciences 9(5), 850.

2018

[33] **Petrakopoulou F.**, 2018. "Economic and environmental considerations for zero-emission transport and thermal energy generation on an energy autonomous island", European Journal of Sustainable Development Research, 2(1), 05.

2017

[32] **Petrakopoulou F.**, Sánchez-Delgado S., Marugán-Cruz C., Santana D., 2017. "Improving the efficiency of gas turbine systems with volumetric solar receivers", Energy Conversion and Management 149, 579-592.

[31] Yolanda L., **Petrakopoulou F.**, Morosuk T., Boyano A., Tsatsaronis G., "The Relationship Between Costs and Environmental Impacts in Power Plants: An Exergy-Based Study", Energy, 138, 920-928, DOI: 10.1016/j.energy.2017.07.087.

[30] **Petrakopoulou F.**, 2017. "The Social Perspective on the Renewable Energy Autonomy of Geographically Isolated Communities: Evidence from a Mediterranean Island", Sustainability 9(3), 327; doi:10.3390/su9030327.

[29] González-Gómez P.A., **Petrakopoulou F.**, Briongos J.V., Santana D., 2017. "Cost-based design optimization of the heat exchangers in a parabolic trough concentrating solar power plant", Energy – The International Journal 123, 314-325.

2016

[28] Alhammadi M., Alblooshi M., **Petrakopoulou F.**, Dadach Z., 2016."Effects of summer weather conditions on the environmental impact of a power plant in the UAE", International Journal of Energy Engineering 6 (2), 29-42.

[27] **Petrakopoulou F.**, Robinson A., Loizidou M., 2016. "Simulation and evaluation of a hybrid concentrating-solar and wind power plant for energy autonomy on islands", Journal of Renewable Energy 96, 863-871.

[26] **Petrakopoulou F.**, 2016. "On the economics of stand-alone renewable hybrid power plants in remote regions", Energy Conversion and Management 118, 63-74.

[25] **Petrakopoulou F.**, Robinson A., Loizidou M., 2016. "Simulation and analysis of a stand-alone solar-wind and pumped-storage hydropower plant", Energy – The International Journal 96, 676-683.

[24] **Petrakopoulou F.**, Robinson A., Loizidou M., 2016. "Exergetic analysis and dynamic simulation of a solar-wind power plant with electricity storage and hydrogen generation", Journal of Cleaner Production 113, 450-458.

[23] **Petrakopoulou F.**, Sanz-Bermejo J., Dufour J., Romero, M., 2016. "Exergetic Analysis of Hybrid Power Plants with Biomass and Photovoltaics Coupled with a Solid-Oxide Electrolysis System", Energy – The International Journal 94, 304-315.

2015

[22] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2015. "Advanced Exergoeconomic Analysis of a Power Plant with CO2 Capture", Energy Procedia 75, 2253-2260.

[21] Peters J., **Petrakopoulou F.**, Dufour J. 2015. "Exergy analysis of synthetic biofuel production via fast pyrolysis and hydroupgrading", Energy – The International Journal 79, 325-336.

[20] **Petrakopoulou F.**, Iribarren D., Dufour J., 2015. "Life-cycle performance of natural gas power plants with pre-combustion CO2 capture", Greenhouse Gases: Science and Technology 5(3), 268-276.

2014

[19] **Petrakopoulou F.**, Tsatsaronis G., 2014. "Can Carbon Dioxide Capture and Storage from Power Plants Reduce the Environmental Impact of Electricity Generation?", ACS Energy & Fuels, 28(8), 5327–5338.

[18] Iribarren D., Susmozas A., **Petrakopoulou F.**, Dufour J., 2014. "Environmental and exergetic evaluation of hydrogen production via lignocellulosic biomass gasification", Journal of Cleaner Production 69, 165-175.

[17] Peters J., **Petrakopoulou F.**, Dufour J., 2014. "Exergetic analysis of a fast pyrolysis process for bio-oil production", Fuel Processing Technology 199, 245-255.

[16] **Petrakopoulou F.**, Lee Y.D., Tsatsaronis G., 2014. "Simulation and Exergetic evaluation of CO2 capture in a solid oxide fuel cell combined cycle power plant", Applied Energy 114, 417-425.

[15] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2014. "CO2 capture in a chemical looping combustion power plant evaluated with an advanced exergetic analysis", Wiley - Environmental Progress and Sustainable Energy 33(3), 1017-1025.

2013

[14] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2013. "Assessment of a power plant with CO2 capture using an advanced exergoenvironmental analysis", ASME Journal of Energy Resources Technology 136(2), 022001.

[13] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2013. "Evaluating the potential for improvement of an oxy-fuel power plant with CO2 capture using an advanced exergetic analysis", ACS Energy & Fuels 27 (8), pp. 4850-4858.

[12] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2013. "Evaluation of a Power Plant with Chemical Looping Combustion Using an Advanced Exergoeconomic Analysis", Sustainable Energy Technologies and Assessments 3, pp. 9-16.

[11] Iribarren D., **Petrakopoulou F.**, Dufour J., 2013. "Environmental and thermodynamic evaluation of CO2 capture, transport and storage with and without enhanced resource recovery", Energy – The International Journal 50, pp. 477-485.

2012

[10] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2012. "Advanced exergoenvironmental analysis of a near-zero emission power plant with chemical looping combustion", Environmental Science and Technology 46, pp. 3001-3007.

[9] **Petrakopoulou F.**, Tsatsaronis G., 2012. "Production of hydrogen-rich fuels for pre-combustion carbon capture in power plants: A thermodynamic assessment", International Journal of Hydrogen Energy 37 (9), pp. 7554-7564.

[8] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., Paitazoglou C., 2012. "Environmental evaluation of a power plant using conventional and advanced exergy-based methods", Energy – The International Journal 45 (1), pp. 23-30.

[7] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., Carassai A., 2012. "Conventional and advanced exergetic analyses applied to a combined cycle power plant", Energy – The International Journal 41 (1), pp. 146-152.

[6] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., Carassai A., 2012. "Advanced exergoeconomic analysis applied to a complex energy conversion system", ASME Journal of Engineering for Gas Turbines and Power 134 (3), pp. 031801-031808.

2011

[5] **Petrakopoulou F.**, Tsatsaronis G., Boyano A., Morosuk T., 2011. "Exergoeconomic and Exergoenvironmental Evaluation of power plants including CO2 capture", Chemical Engineering Research and Design 89 (9), pp. 1461-1469.

[4] **Petrakopoulou F.**, Boyano A., Cabrera M., Tsatsaronis G., 2011. "Exergoeconomic and exergoenvironmental analyses of a combined cycle power plant with chemical looping technology", International Journal of Greenhouse Gas Control 5 (3), pp. 475-482.

[3] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2011. "Exergoeconomic analysis of an Advanced Zero Emission Plant", ASME Journal of Engineering for Gas Turbines and Power 133 (11), pp. 113001-113012.

2010

[2] **Petrakopoulou F.**, Tsatsaronis G., Morosuk T., 2010. "Conventional Exergetic and Exergoeconomic analyses of a power plant with chemical looping combustion for CO2 capture", International Journal of Thermodynamics 13 (3), pp. 77-86.

[1] **Petrakopoulou F.**, Boyano A., Cabrera M., Tsatsaronis G., 2010. "Exergy-based analyses of an advanced zero emission plant", International Journal of Low-Carbon Technologies 5 (4), pp. 231-238.

Chapters in books

[3] **Petrakopoulou F.**, De la Rocha Camba E., 2022. "Hybrid fossil fuel/renewable systems for polygeneration" Cheater 7 in Polygeneration Systems – Design, Processes and Technologies (F. Calise, M.D. D'Accadia, L. Vanoli, M. Vicidomini), Elsevier, ISBN: 978-0-12-820625-6.

[2] **Petrakopoulou F.**, Tsatsaronis G., Boyano, A., Morosuk, T., 2012. "Post-Combustion CO2 Capture with Monoethanolamine in a Combined-Cycle Power Plant: Exergetic, Economic and Environmental Assessment", Chapter 21 in Greenhouse Gases - Emission, Measurement and Management (Dr. Guoxiang Liu), InTech (Open Access Publisher), ISBN: 978-953-51-0323-3, pp. 463-484.

[1] **Petrakopoulou F.**, Tsatsaronis G., Piancanstelli C., Gallio I., Morosuk, T., 2011. "Exergetic and Exergoeconomic Analyses of an Oxy-Fuel Power Plant with CO2 Capture", Chapter 9 in Advances in Energy Research, Vol. 6, (Morena J. Acosta), Nova Publishers, ISBN: 978-1-61122-075-9, pp. 229-242.

PhD thesis

Petrakopoulou F., 2010. "Comparative evaluation of power plants with CO2 capture: Thermodynamic, economic and environmental performance", Technische Universitaet Berlin, supported by the European Commission (FP6), realized in a Marie Curie Training Network.

Technical reports

[7] **Petrakopoulou F.**, 2015. "Review of laws and regulations concerning renewable energy policy", Technical report, prepared for the FP7 project GENERGIS (IEF-2012-332028).

[6] **Petrakopoulou F.**, 2015. "Energy statistics and renewable energy potential of Greece", Technical report, prepared for the FP7 project GENERGIS (IEF-2012-332028).

[5] **Petrakopoulou F.**, 2015. "Demographics, geography, economy and energy statistics of Skyros", Technical report, prepared for the FP7 project GENERGIS (IEF-2012-332028).

[4] **Petrakopoulou F.**, 2015. "Current energy use on Skyros: statistical, economic and environmental analysis", Technical report, prepared for the FP7 project GENERGIS (IEF-2012-332028).

[3] **Petrakopoulou F.**, 2015. "Description, economics and environmental issues of renewable energy technologies", Technical report, prepared for the FP7 project GENERGIS (IEF-2012-332028).

[2] **Petrakopoulou F.**, 2015. "Scenarios for the sustainable development of energy autonomy of Skyros", Technical report, prepared for the FP7 project GENERGIS (IEF-2012-332028).

[1] **Petrakopoulou F.**, 2015. "Guidelines for sustainable development of stand-alone energy networks", Technical report, prepared for the FP7 project GENERGIS (IEF-2012-332028).

Lecture notes

[2] **Petrakopoulou F.**, Nikolos I., 2014. "Lecture notes and exercises of the class Heat Transfer" (in Greek: «Σημειώσεις και ασκήσεις μαθήματος Μετάδοση Θερμότητας»), Undergraduate class "Heat Transfer", 7th semester, Technical University of Crete.

[1] **Petrakopoulou F.**, 2008. "Instructions for EbsilonProfessional 6.0" (in English), Undergraduate class "Entwurf, Analyse und Optimierung von Energieumwandlungsanlagen" ("Design, analysis and optimization of energy conversion systems"), Technische Universität Berlin.