

Λευκωσία, 9 Οκτωβρίου 2018

**ΠΡΟΣ:** Όλα τα Μέλη

**ΘΕΜΑ:** 6<sup>ο</sup> Επιστημονικό Συνέδριο Ανανεώσιμων Πηγών Ενέργειας και Εξοικονόμησης Ενέργειας, 1-2 Νοεμβρίου 2018, Λευκωσία

Κύρια/ε,

Το Κυπριακό Εμπορικό και Βιομηχανικό Επιμελητήριο σε συνεργασία με το Υπουργείο Ενέργειας, Εμπορίου, Βιομηχανίας & Τουρισμού και με όλους τους εμπλεκόμενους φορείς στην Κύπρο σε θέματα ενέργειας καθώς επίσης και σε συνεργασία με ακαδημαϊκά ιδρύματα της Κύπρου και της Ελλάδας, διοργανώνει για έκτη φορά το Επιστημονικό Συνέδριο «**Renewable Energy Sources & Energy Efficiency, New Challenges**» την 1<sup>η</sup> & 2<sup>α</sup> Νοεμβρίου 2018 στο Πανεπιστήμιο Κύπρου στη Λευκωσία.

Το Συνέδριο διοργανώνεται για έκτη φορά σε συνέχεια των πολύ επιτυχημένων προηγούμενων διοργανώσεων. Σε αυτό θα συζητηθούν και θα παρουσιαστούν εργασίες και τεχνολογίες στον τομέα των φωτοβολταϊκών, της εξοικονόμησης ενέργειας, των ηλιακών θερμικών τεχνολογιών και άλλων σχετικών τεχνολογιών. Η θεματολογία του Συνεδρίου είναι αποτέλεσμα συνεργασίας των επιστημονικών συνεργατών του Συνεδρίου, γεγονός που εγγυάται την ποιότητα των παρουσιάσεων.

Πέραν των διακεκριμένων ομιλητών που έχουν προσκληθεί στο Συνέδριο, έχουν αξιολογηθεί και θα παρουσιαστούν πέραν των 40 εργασιών από ακαδημαϊκά ιδρύματα της Κύπρου, της Ελλάδας και άλλων χωρών.

Συνημμένα μπορείτε να βρείτε το προκαταρκτικό πρόγραμμα του Συνεδρίου.

Για εγγραφές στο Συνέδριο παρακαλώ επισκεφθείτε την ιστοσελίδα <http://www.mse.com.cy/resee2018/> ή επικοινωνήστε με τη γραμματεία του Συνεδρίου: MSE Congress Plus στο τηλέφωνο 22-466400.

Με εκτίμηση,

Ανδρέας Ανδρέου,  
Διευθυντής Τμήματος Βιομηχανίας,  
για Γενικό Γραμματέα.

/ΜΚ.

6th International Conference on  
Renewable Energy Sources  
& Energy  
Efficiency  
- New  
Challenges  
[www.mse.com.cy/resee2018](http://www.mse.com.cy/resee2018)



1-2 NOVEMBER 2018

Nicosia-Cyprus

Venue:  
University  
of Cyprus



Under the Auspices of  
The Minister of Energy  
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Organised by:



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MSE Congress Plus

tel.: +35722466400 fax: +35722767680

email: [mse@mse.com.cy](mailto:mse@mse.com.cy) [www.mse.com.cy](http://www.mse.com.cy)

## Scope of the Conference

The 6th International Conference on Renewable Energy Sources and Energy Efficiency (RESEE2018) follows the five successful editions held in Nicosia (2007, 2009, 2011, 2013, and 2016). The aim of the conference is to bring together all the key stakeholders interested in renewable energy sources and energy efficiency to share and discuss advances and developments in this field. It is therefore aimed at assisting researchers, scientists, manufacturers, companies, communities and agencies to keep abreast on new developments in their specialist fields and to join forces in finding alternative energy solutions to current issues. The thematic areas of the conference cover all topics of renewable energy as well as energy efficiency in all sectors.

## Who should attend

- Members of the research and academic communities aiming at exchanging results, sharing similar experiences or new applications.
- Architects, engineers and energy consultants.
- Decision makers, including managers and policy makers interested in exchanging ideas and experiences and learning about new initiatives.
- Representatives of international organizations or other organizations willing to share relevant experience on renewable energy exploitation, energy efficiency techniques and developments of conventional technologies.
- Private companies interested in investing on renewable energy and energy efficiency equipment.
- Individuals who wish to be informed on new developments, tools and techniques.
- Regulators, utilities and operators enriching the conference with their views on the changing needs of systems in delivering the quality of supply that everybody expects.

## Venue

University of Cyprus, Nicosia

## Parallel Workshops

Industry workshops will be organised and be available on request, depending on satisfactory number of applications received.

## Conference presentations

- The presentation of all the selected papers will be 15 minutes duration. Each session will be followed by a 10-minute discussion.
- Conference proceedings: All accepted papers and the papers of the invited speakers will be available to the registered participants in the Conference webpage [www.mse.com.cy/resee2018](http://www.mse.com.cy/resee2018)
- Official language: The official language of the conference is English.

## Executive Organising Committee

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Prof Theodoros Zachariadis, Cyprus University of Technology
- Conference Coordinator:** Mr Andreas Andreou, Cyprus Chamber of Commerce and Industry

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- Dr Venizelos Efthymiou Chairman, FOSS Research Centre for Sustainable Energy, University of Cyprus

## Invited Keynote Speakers

To be announced

## Publication of selected papers in Journals

Authors of selected papers presented at the conference will be invited to publish extended and revised versions, after the respective review procedure, in the SCOPUS, EI, INSPEC, etc. listed journals:

- International Journal of Sustainable Energy, Taylor & Francis
- Advances in Building Energy Research, Taylor & Francis
- Journal of Power Technologies (JPT), ITC

## Conference Fees

- Early Registration before 1st October 2018 € 250
- Registration after 1st October 2018 € 350
- Students € 100

**Fees cover the admission to all sessions, invitation to all coffee breaks, one lunch, conference material, and VAT.**

## Registration

To register please visit [www.mse.com.cy/resee2018](http://www.mse.com.cy/resee2018)

## Conference Secretariat

### MSE Congress Plus

3, Sina Street, 2nd floor, Office 204A, P.O. Box 24612, T.T. 1306 Nicosia-Cyprus  
Phone: 00357 22 466400, Fax: 00357 22 767680  
E-mail: [mse@mse.com.cy](mailto:mse@mse.com.cy), Website: [www.mse.com.cy](http://www.mse.com.cy)  
Conference webpage: [www.mse.com.cy/resee2018](http://www.mse.com.cy/resee2018)

## Conference topics

Papers are invited reporting original research as well as papers focusing on the results that have been achieved in the areas of Renewable Energy Sources, Energy Efficiency and Policy, Education and Research in Energy and Environment, as well as Oil and Gas Technologies. Indicative themes of the Conference are listed below:

### Renewable Energy Sources

Renewable energies  
Biomass, bioenergy & bio-economy  
Energy storage technologies  
Geothermal technologies  
Photovoltaics  
Power systems  
Concentrated solar power  
Smart networks  
Energy networks  
Wind energy technologies  
Hybrid energy systems  
Solar heating and cooling  
Solar desalination  
Grid Integration  
Demand Response,  
Demand Side Management

### Energy Efficiency and Policy

Energy generation  
Energy recovery  
Energy management and economics  
Automization of energy systems  
Energy and the built environment  
Bioclimatic design of buildings and public spaces  
Smart cities  
Building management systems  
Heating, ventilating and air conditioning systems  
Sustainable transport  
Zero emission buildings  
Energy policy, economics and planning  
Energy and climate change  
Environmental impact  
Energy investment financing

### Education and Research in Energy and Environment

Distance learning in Energy and Environmental topics  
Interdisciplinary educational programmes  
Large scale research facilities  
Pilot and demonstration projects  
Training and certification schemes

### New Challenges

Security of energy supply  
Carbon capture and storage technologies  
Enhanced oil recovery for deep-water  
Hydrocarbons exploration strategies  
Natural gas liquefaction technologies  
Natural gas pipeline transportation technologies  
Natural gas policy issues  
Enhanced oil recovery for deep-water  
Oil and gas reserves and economics by region  
Shale gas technologies  
Energy-food-water nexus

## Organised by:



## Co-organisers:



## Thursday

08:30-09:00 Registration  
09:00-09:30 Opening Ceremony09:30-11:00 **Plenary session 1** Chair: Prof. G.H.Georghiou - Dr. G.Partasidis

Dr Charles Ellinas, E-C Natural Hydrocarbons Company Ltd (eCNHC), UK: Energy Transition and its impact on East Med and the wider region

Dr Zeger Vroom, Zuyd University of Applied Sciences, The Netherlands: Building Integrated PhotoVoltaics (BIPV).

Prof. Agis Papadopoulos, Aristotle University of Thessaloniki, Greece: Thermal comfort in Zero Energy Buildings: State of the art and prospects

11:00-11:15 Coffee break

11:15-13:00 **Session A1: Deloitte Session** Chairman: Nicos Kyriakides

13:00-14:00 Lunch break

14:00-16:00 **Session A2****Session B2****Session C2****Solar systems** Chair: Dr.V.Efthimiou - Prof.A.Charalambides**Energy and Buildings 1**

Chair: Prof. M.Todorovic - Prof. D.Serghides

**Marine Renewable Energy Potentials, Challenges & Future Trends**

Chair: Mr A. Ktoris - Dr S. Petrakides

Keynote	1828 S.Nizetic	General effectiveness of the passive cooling techniques for siliceous based photovoltaic panels
	1801 A.Demou	Thermal modelling of solar air collectors
	1848 A.Montenon	Theoretical study of a hybrid Fresnel collector to supply electricity and air-conditioning for buildings
	1810 E.Kyriaki	Phase Change Materials to increase storage in solar thermal systems for buildings
	1831 V.Efthimiou	The EOS 50MW CSP project in Cyprus for 24-hour solar energy
	1866 K.Dermentzis	Electrochemical Treatment of Olive mill waste powered by Photovoltaic Solar Energy

1875 D.Serghides	A New Approach in the Refurbishment of the Office buildings – From Nearly Zero Energy buildings to Smart Energy Buildings	A.Ktoris	Welcome Speech & Introduction of PELAGOS EU Project
1826 T.Bajc	Perception of Indoor Environment Conditions in Non-Residential Buildings: A case study in Greece and Serbia	T.Soukissian	Offshore Wind Energy
1827 P.Antoniadou	Interaction of Individual Characteristics on Occupants' Comfort Perception in cases of Office Buildings in Greece and Croatia	J.P.Kofoed	Wave Energy
1828 M.Kyprianou Dracou	EPBD legislation in practice: Challenges regarding compliance and quality of the works - The Cyprus case study	P.Polycarpou	Algae to Biofuel
1844 G.Panaras	Building integrated energy solutions for an indoor aquatic center	D.R. Hayes	Expected and actual ocean current conditions in Cyprus
1808 C.Konstantinidou	Life Cycle and Life Cycle Cost of the use of Phase Change Materials (PCM) in office buildings in the Mediterranean climate of Greece		Presentation of the Cypriot HUB enterprises

16:00-16:15 Coffee break

## Thursday

16:15-18:00	Session A3	Chair: Dr.C.Rouvas - Prof.M.Komodromos	Session B3	Chair: Prof.K.Papakostas - C.Maxoulis	Session C2 (continued)	Networking
	<b>Energy policies in Cyprus</b>		<b>Energy and Buildings 2</b>			
Keynote	Dr Constantinos Varnava, Director, Cyprus Transmission System Operator, Cyprus: Integration of renewable energies into the electricity market		8137 G.Kahwaji	Life Cycle Energy, Environmental Impact, and Cost Analysis of Eight Conventional/Hybrid 1 Cooling Systems in the United Arab Emirates		
			1845 A.Efstathiades	Managing Household Electricity Consumption; a Factor Analysis Study		
			1809 E.Giama	Energy and Environmental Performance of Airports' Operation		
			18111 G.Mouzeviris	Comparative analysis of air-to-water heat pumps performances – seasonal performance for heating of domestic heat pumps in the Greek climate		
			1869 Aimilios Michael	Thermal Performance and Environmental Impact of an Innovative Exterior Wall System		
			18110 X.T. Schneider	Applying Responsible Research and Innovation in Wave Energy –Lessons Learned and Best Practices		

## Friday

## 09:15-10:45 Plenary session 2 Chair: Prof. T.Zachariadis - Dr. N.Fylaktos

Prof. Dr. Roland Roesch, International Renewable Energy Agency (IRENA): New pathways for the acceleration of the global transition to a sustainable future based on innovative renewable energy options

Dr Diego-César Alarcón-Padilla, CIEMAT-Plataforma Solar de Almeria, Spain: Solar desalination: A review of the current available technologies and their economic feasibility

Dr Andreas Poullikkas, Cyprus Energy Regulatory Authority Chairman, Cyprus: Development of energy strategies for sustainable future

## 10:45-11:30 Coffee break - Poster tour and presentation

## 11:30-13:15 Session A2

		Chair: P.Keliris - Prof. C.Christodoulou Preliminary investigation on the solar pyrolysis of waste biomass: the reactor concept
Keynote	18141 S.Werle	Pilot evaluation of a novel anaerobic fermentation process for the production of digestate with low ammonia content
	1895 P.Photiou	
	1812 E.Dolmaci	Energy and Environmental Assessment of Pellets produced from solid residues of the winery Industry
	1890 C.Chasos	Combustion simulations of different hydrocarbon content natural gas in constant volume chamber and direct-injection spark-ignition internal combustion engine
	1839 S.Petrakides	On the Combustion of Premixed Gasoline - Natural Gas Dual Fuel Blends in an Optical SI engine

## 13:15-14:00 Lunch break

## 14:00-14:00 Meet the Editors Prof. A.M.Papadopoulos, Prof.J.Milewski and Prof. S.Nizetic

## Session B2

		Chair: Prof. T.Tsoutsos and M. Stylianos-Michaelidou
	C. Mantero	Overcoming energy efficiency challenges for sustainable mobility in Madeira
	M. Stylianos Michaelidou	Fast tourist development and need for sustainable mobility measures. The Limassol story
	S.Tournaki	Environmental evaluation of mobility measures - Experience from the H2020 CIVITAS DESTINATIONS project
	S.Gouskos	From Used Cooking Oil to biodiesel. Full Supply Chain demonstration
	Round table discussion	

## Session C2:

		Chair: C.Stambolis - Prof.H.Doukas Fostering innovative energy policy
	1835 H.Doukas	making through integrated approaches
	1849 C.Stambolis	Renewable Energy Sources in SE Europe: Challenges and Lessons to be Learned
	1850 I.Kyprianou	An Overview of Energy Poverty - Policies and Measures in Cyprus
	1861 A.Orlov	Classification of EU countries in terms of energy efficiency indicators
	1881 M.Syrimis	Cyprus System of Guarantees of Origin



## Friday

15:00-16:45 Session A3			Session B3			Session C3		
	<b>RES Systems</b>	Chair: Prof. N.Christofides - Prof. M.Neofytou	<b>Grids</b>	Chair: M.Syrimis - Prof. E.Kyriakides		<b>Research activities of Cyprus Institutions</b>	Chair: Prof. A.Papadopoulos - Prof. S.Nizetic	
Key note	1820 J.Milewski	Mechanical strength of fibers reinforced matrices of Molten Carbonate Fuel Cell	18143 A.Kotsonias	Conventional Weighted Least Squares State Estimation for Monitoring Low Voltage Distribution Grids		Prof. Marios Dikaiaikos	Energy Saving in Public Academic Buildings with Data Centers (ENEDI)	
	1897 R.Chumbinho	The role of test facilities in the development of Marine Renewable Energy – Smartbay as an example	1854 C. Charalambides	Promoting Effective Generation and Sustainable Uses of electricity (PEGASUS) – The case of the FOSS lab area nanogrid		Prof. Alexandros Charalambides	ENERFUND	
	1821 K.Gkarakis	Performance analysis of an operating windfarm of 21MW in Greece for a period of three years	1855 A.Sahlberg	Geospatial modelling for universal electrification. Can hybrid mini-grids be part of the solution?		Prof. George E. Georghiou	Stimulating scientific excellence through twinning in the quest for sustainable energy (TwinPV)	
	1834 M.Chrysostomou	Cooling methods for energy efficient micro-datacentres: A comparative study	1884 K.Oureilidis	Demonstration Tools for Trading Flexibility in Distribution Grids in Cyprus - The Cases of A Microgrid and Dispersed Prosumers		Maria Achilleos	Transferring Energy Efficiency in Mediterranean Schools (TEESCHOOLS)	
	1863 C.Yianni	Economic Viability of Battery Energy Storage for the Provision of Frequency Regulation Service	1886 Z.Ali	The Role and Necessity of PLL and Current Controllers in GSC of Distributed RE Systems		Prof. Costas Papanicolas, George Kirkos	Networking for Excellence in Solar Thermal Energy Research (NESTER)	
	18144 T.Slini	Environmental management systems as tools to address climate change: the case of Cyprus	18145 J.Kupecki	Strategies for operating solid oxide electrolyzers as a part of grid balancing systems in reference markets				
16:45-17:15	Closing ceremony	Prof. I.Michaelides						

# Conference Venue

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