

TMREES16-PARIS Daily Program

Wednesday - November 16, 2016

8:30 - 09:30 Registration Desk and Welcome Drink

09:30 - 12:30 Opening session

11:00 – 11:30 Coffee Break (CB1)

Keynote Address: Sylvie Fauchoux, France

" Socio-economic Stakes of the Energy Transition : Towards Sustainability"

12:30 - 14:00 // Lunch

14:00 - 15:30 // Session1-T2 //

15:30 Coffee Break (CB2)

15:30 - 16:30 // Session2-T2-T3-T4 //

16:30 - 18:00 // Session3-T3 //

Thursday - November 17, 2016

09:00 - 10:00 Registration Desk

10:00 - 11:00 /S4 - Plenary Session: Celine Morin, France.

Energetic analysis of a solid biomass fuelled micro-combined heat and electrical power system

11:00 Coffee Break (CB3)

11:30 - 12:30 // S5-T4 //

12:30 - 14:00 // Lunch

14:00 - 15:30 // S6-T4 //

14:00 – 18:00 // VS: Virtual Presentation

15:30 Coffee Break (CB4)

15:30 - 17:30 // S7-T2-T3-T4 // Posters: Presentations and Discussions

18:00 // Metiers Art Museum (60 Rue Réaumur, 75003 Paris, France)

20:00 // Gala Diner

Friday - November 18, 2016

10:30 - 11:00 / S8/ Plenary Session: Reduction of CO2 Emissions of Heat Engines. Radu Chiriac, Romania

11:00 - 12:00 // S9-T4 //

12:00 - 14:00 // Lunch

14:00 - 15:30 // S10-T4 //

16:00 – 18:00 // Conference closing note and Conference Toast (HCB5)



Preface

TMREES CONFERENCE SERIES

Technologies and Materials for Renewable Energy, Environment and Sustainability

TMREES16-PARIS International Conference // November 16-18, 2016 // Paris-France

Clotilde Ferroud, Chafic Salame, Georges Descombes, Michel Aillerie

The International Conference on Technologies and Materials for Renewable Energy, Environment and Sustainability is an annual event organized by the **European Academy for Sustainable Development**.

TMREES16-PARIS, held over the period of November 16-18, 2016 in Paris-France, has a main objective to promote sustainable, healthy and diverse ecosystems; encourage and support the international energy security systems through development of green based and other renewable resources and processes, bringing together participants from international research centers, universities, industry and administrative organizations around the world to exchange innovative and novel ideas, explore enabling technologies, share field trial experiences in sustainability issues and to open a new window on the circumstances of the classical energy sources and their harmful impact on people, society and environment.

Keywords: Renewable Energy, Environment and Sustainability

The TMREES16-PARIS international conference has a general philosophy to gather the global research community, discuss, present and to network the latest developments and innovations in sustainability.

The conference Topics Include:

Topic 1: Special Session: Hydrogen Energy & fuel cells

Hydrogen Energy & fuel cells: production, storage, transmission, utilization, enabling technologies, environmental impact, economic, thermochemical (combustion), photochemical, electrochemical (fuel cells) and nuclear conversion of hydrogen, mechanical & electrical energies (applications in transportation, industrial, commercial & residential sectors).

Topic 2: Solar Energy: New Technologies & Advanced Material

Thin Film solar cells (Si, CdTe, CIS), Solar Cells/ Modules/PV-Systems for Space Applications. Organic-based PV, Polymer PV, dye-sensitized cells/modules. PV Systems and components, PV System Reliability and Availability. PV and Architecture, integration in buildings and urban planning. Photochemical Solar Energy Conversion, Photo thermal Devices.

Crystallization, advanced production technologies for silicon and wafers. Manufacturing Issues and Processing, waste treatment, safety.

Microelectronics for Photovoltaic. Characterization of materials and devices, testing, measurements, quality and aging, reliability aspects. Photovoltaic Materials, New Materials, Nanomaterials, Nanotechnologies, new Design/Concepts for PV Cells and Modules, Modeling and simulation, Semiconductors, III-V & concentrator cells for PV Solar application

Topic 3: Other Renewable Sources of Energy

Smart grids: Innovative systems with storage, Power electronics (components and applications), Power Quality issues, Solar panel Optimization techniques

Energy Storage-Saving-Management: Engineering Technologies & solutions, Energy Transmission and Distribution, Production and Efficiency Electricity Networks of the Future, Power and Energy Generation.

Wind energy: Offshore wind energy-Potential, challenges and state-of-the-art, Technical developments.

Bioenergy: Conversion technologies, Operational and logistical challenges, Techno-economic considerations, *biomass and waste*.

Biofuels: Biorefinery, Thermochemical and Biochemical conversion.

Hydropower: Technology, Integrated water and energy management.

Marine: Salinity difference power source

Topic 4: Management, Sustainability: Resources & Environmental Quality

Hybrid and Integrated Energy System, Power Systems and Automation, Energy Policy, Planning & Management laws

Electricity and Energy Efficiency, Building Management Systems, Smart Grid, Smart metering, Energy Storage & Plug-In Electric Vehicles. Industrial waste treatment, Air pollution control and equipment, Pollution prevention in industry, Water pollution and treatment.

Environmental technologies and Contribution sustainability, Climate Change, emissions and Global Warming, Sustainable built environment, Ecotoxicity. Sustainable development and planning, Natural resources management, Soil contamination and recovery, Landscape development and management, Green economy, Future Markets, Business Opportunities.



Wednesday - November 16, 2016

8:30 - 09:30 Registration Desk and Welcome Drink

09:30 – 12:30: Opening Session

Conference Inauguration, TMREES Information and TMREES16 Paris Technical Program

By: Georges Descombes, CNAM-Fr; Michel Aillerie, LMOPS-Fr; Chafic-Touma SALAME, LMOPS-Fr

Annual Honoring performed by the TMREES Conference Series

Honorer of the TMREES16-Paris: Jean-Pierre Charles, Pr. Emeritus, U. Lorraine-CentraleSupélec, Fr

Keynote by the Honorer: Sustainable Development and Future Generation

11:00 - 11:30 // Coffee Break

Conference Address: Socio-economic Stakes of the Energy Transition : Towards Sustainability.
By Sylvie Faucheux, CNAM-France

12:30 - 14:00 // Lunch

14:00 - 15:30 // S1-T2 // Chairs: Chafic-T Salame, Georges Descombes, Pierre Podevin and Jean Pierre Charles

O-T2-M.86 // Impact of the filling level on the global heat transfer coefficient of a plate cross section for sorption heat pumps

Florine Giraud, Yacine Hamitouche, Pierrick Vallon and Brice Tremeac

Presenter: Florine Giraud // CNAM CMGPCE // France.

O-T2-M.4 // Exploring potential Environmental applications of TiO₂ Nanoparticles

Adawiya J. Haider, Riyadh Hassan Al- Anbari, Ghadah Rasim Kadhim and Duha S. Ahmed

Presenter: Ghadah Rasim Kadhim // University of Technology // Iraq.

O-T2-M.20 // Influence of the External and Internal Parameters on the Characteristics of Generator PV

Mounir Zouli, Ahmed Ouari, Sihem Ghoulbourk and Djallel Dib

Presenter: Sihem Ghoulbourk // university of badji mokhtar-Annaba-algeria // Algeria.

O-T2-M.22 // Selective Harmonic Elimination Strategy in Eleven Level Inverter For PV System with Unbalanced DC sources

Sihem Ghoulbourk, Dib Djalel, Billel Maghni and Mounir Zouli

Presenter: Sihem Ghoulbourk // University larbi Tebessi of Tebessa // Algeria.

O-T2-M.36 // Experimental study of pressure drops across Microtube using Graphene and Magnetic Graphene Nanofluid

Essam Mohamed, Ahmed El-Shazly and Marwa Elkady

Presenter: Ahmed El-Shazly // Egypt-Japan University for Science and Technology(E-JUST) // Egypt.

O-T2-M.114 // Push-Pull with Recovery Stage High-Voltage DC Converter for PV Solar

The Vinh Nguyen, Michel Aillerie, Pierre Petit, Hong Thang Pham and Thành Vinh Vo

Presenter: The Vinh Nguyen // LMOPS // France.

15:30 // Coffee Break

15:30 - 16:30 // S2-T2-T3-T4 // Chairs: Amelie Danlos, Panagiotis Papagorgas, Sylvie Faucheux

O-T3-M.125 // Calculation of Greenhouse Gas Emissions of Jatropha Oil and Jatropha Biodiesel as Alternative Fuels for Electricity Production in Côte d'Ivoire

Atta Pascal Atta, Yao N'guessan, Celine Morin, Anne Jaeger Voirol and Georges Descombes

Presenter: DESCOMBES Georges // CNAM/Univ. Valenciennes // France.



O-T3-M.126 // DEVELOPMENT OF A FIXED BED GASIFIER MODEL AND OPTIMAL OPERATING CONDITIONS DETERMINATION

Manel Dahmani, Christelle Périllon, Christophe Marvillet, Noureddine Hajjaji, Ammar Houas and Zouhour Khila
Presenter: Manel Dahmani // CNAM - ENIG // France.

O-T2-M.127 // Renewable Energy Sources, the Internet of Things and the Third Industrial Revolution: Smart Grid and Contemporary Information and Communication Technologies

Aristidis Kitsios, Konstantinos Bousakas, Takla Salame, Panagiotis Papagiorgas, Georgios Vokas, Fabrice Maufay, Pierre Petit, Michel Aillerie and Jean Pierre Charles
Presenter: Michel Aillerie // Technological Education Institute of Piraeus // Greece.

P-T4-M.128 // Prefabricated Solution to Modular Construction in Cape Verde

Nuno Vieira and Miguel Amado

Presenter: Nuno Vieira and Miguel Amado // Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa // Portugal.

P-T4-M.130 // Ambiences as a Reference for Sustainable Architecture Biomimicry as an Approach - Case of Arid Regions with Hot and Dry Climate -

M'sellem Houda, Bouabdallah Nabila, Labidi Faycal, Alkama Djamel and Bouzaher Soumia

Presenter: M'sellem Houda // UNIVERSITY of biskra // Algeria.

O-T4-M.131 // Energy Consumption renewable energy development and environmental impact in Algeria - Trend for 2030

Fatiha Sahnoune and Djamel Eddine Bouakaz

Presenter: Fatiha Sahnoune // CDER // Algeria.

O-T2-M.132 // Experimental Verification of Internal Parameter in Magnetically Coupled Boost Used As PV Optimizer In Parallel Association

Jean-Paul Sawicki, Frédéric Saint-Eve, Pierre Petit and Michel Aillerie

Presenter: Michel Aillerie // IUT de Thionville-Yutz, Université de Lorraine // France.

16:30 - 18:00 // S3-T2-T3 // Chairs: Christelle Perillon, Michel Aillerie, Seongkon Lee and Sylvie Fauchoux

O-T2-M.116 // A Novel Concept of Electrical Drives Based on Two Five-Phases PMSM Connected in Parallel and Supplied by a Single Inverter

Abdelkader Djahbar, Abdallah Zegaoui, Mohammed Boutoubat, Aissa Boukhtache Aicha, Hadj Allouache and Michel Aillerie

Presenter: Abdelkader Djahbar // University of Chlef // Algeria.

O-T2-M.118 // Comparison between a classical command law and a new advanced recovery command law in a MCB-ARS boost

Pierre Petit, Frédéric Saint-Eve, Jean-Paul Sawicki and Michel Aillerie

Presenter: Pierre Petit // Lorraine University // France.

O-T3-M.90 // Fin-and-Tube Heat Exchanger Material and Inlet Velocity Effect under Frosting Conditions

Elie Keryakos, Joseph Toubassy, Amélie Danlos, Denis Clodic and Georges Descombes

Presenter: Elie Keryakos // CRYOPUR // France.

O-T3-M.27 // Numerical Study for the Flow Field and Power Augmentation in a Horizontal Axis Wind Turbine

Mona Abdelwaly, Hesham El-Batsh and Magdy Bassily

Presenter: Hesham Elbatsh // Benha Faculty of Engineering, Benha University // Egypt.

O-T3-M.35 // Heat Transfer performance for Turbulent Flow Through a Tube Using Baffles.

Amina Benabderrahmane, Abdelylah Benazza, Samir Laouedj and Miloud Aminallah

Presenter: Amina Benabderrahmane // Faculty of Technology // Algeria.

O-T3-M.91 // Material And Fin Pitch Effect On Frosting CO2 In A Fin-And-Tube Heat Exchanger

Joseph Bassila, Joseph Toubassy, Denis Clodic, Amélie Danlos and Georges Descombes

Presenter: Joseph Bassila // Cryo Pur // France.



O-T3-M.34 // Experimental Investigate of Heat Transfer for Graphene/Water Nanofluid in Micro Heat Exchanger

Sara Elsayed Abd Elhafez, Essam Mohamed Abo-Zahhad, Ahmed Hassan Elshazly and Marwa Farouk El-Kady

Presenter: Sara Elsayed Abd Elhafez // Egypt-Japan University of scientific and technology // Egypt.

T3-Oral-M.43 // Investigation on the mixture formation, combustion characteristics and performance of a Diesel engine fueled with Diesel , Biodiesel B20 and hydrogen addition.

Georges Descombes and Radu Chiriac

Presenter: Georges Descombes // CNAM // France.

Thursday - November 17, 2016

09:00 - 10:00 Registration Desk

10:00 - 11:00 / S4 - Plenary Session: Energy management and environment. Celine Morin, UPMC-France

11:00 // Coffee Break

11:30 - 12:30 // S5-T3-T4 // Chairs: Amelie Danlos, Celine Morin, Kriker Abdelouahed and Panagiotis Papageorgas

O-T3-M.124 // Photovoltaic Energy Production Map of Greece based on simulated and measured data

Georgios Vokas, Konstantinos Lagogiannis, Panagiotis Papageorgas and Takla Salame

Presenter: Georgios Vokas // PIRAEUS UNIVERSITY OF APPLIED SCIENCES // Greece.

O-T3-M.121 // On the Effect of Di-Ethyl-Ether (DEE) Injection upon the Cold Starting of a Biodiesel Fueled Compression Ignition Engine

Adrian Clenci, Rodica Niculescu, Victor Iorga-Siman, Alina Trica and Amelie Danlos

Presenter: Adrian Clenci // University of Pitesti & Le Cnam Paris // Romania.

O-T3-M.122 // On the Use of an Arduino-based Controller to Control the Charging Process of a Wind Turbine

Faisal Mahmuddin, Ahmad Muhtam Yusran and Syerly Klara

Presenter: Faisal Mahmuddin // Hasanuddin University // Indonesia.

O-T4-M.55 // A Multi-Criteria Model for the Comparison of Building Envelope Energy Retrofits

Giuseppe Donnarumma and Pierfrancesco Fiore

Presenter: Pierfrancesco Fiore // University of Salerno // Italy.

O-T4-M.26 // A simulation study of a solar collector using phase change materials for air heating application needs

Messaoud Sandali and Abdelghani Boubekri

Presenter: Abdelghani Boubekri // LENREZA, Département de génie mécanique, Université d'Ouargla. // Algeria.

O-T4-M.28 // Dispatchable Hydrogen Production at the Forecourt for Electricity Grid Balancing

Abdulla Rahil, Rupert Gammon and Neil Brown

Presenter: Abdulla Rahil // De Monfort University // United Kingdom.

O-T4-M.31 // Artificial neural networks for defining the water quality determinants of groundwater abstraction in coastal aquifer

Sami Lallahem and Azzedine Hani

Presenter: Sami Lallahem // ix sane // France.

O-T4-M.133 // Optimization of Automotive Rankine Cycle Waste Heat Recovery under Various Engine Operating Condition

Plamen Punov, Nikolay Milkov, Quentin Danel, Christelle Perilhon, Pierre Podevin and Teodossi Evtimov

Presenter: Plamen Punov // Technical university of Sofia // Bulgaria.

12:30 - 14:00 // Lunch

14:00 - 15:30 // Virtual Presentations- Chairs: Georges Descombes, Georges Vokas and Christelle Perilhon



14:00 - 15:30 // S6- T2-T4 // Chairs: Florine Giraud, Georges Vokas, Olivier Gerard and Szabolcs Varga

O-T1-M.328 // Comparison of thermal performances of external and internal reforming molten carbonate fuel cells using numerical analyses

Min Chul Lee

Presenter: Min Chul Lee // Incheon National University // Korea, Republic of.

O-T4-M.74 // C3H7NO2S Effect on Concrete Steel-Rebar Corrosion-Inhibition in 0.5 M H2SO4 Simulating Industrial/Microbial Environment

Joshua Okeniyi, Christopher Nwadialo, Folusho Olu-Steven, Samaru Ebinne, Taiwo Coker, Elizabeth Okeniyi, Adebajji Ogbiye, Taiwo Durotoye and Emmanuel Badmus

Presenter: Joshua Okeniyi // Covenant University, Ota, Nigeria // Nigeria.

O-T4-M.75 // Fluid Flow and Heat Transfer in Solar Collector with Baffles

Henaoui Mustapha, Aliane Khaled and Sari-Hassoun Zakaria

Presenter: Henaoui Mustapha // Tlemcen University, Algeria // Algeria.

O-T4-M.81 // Study of thermal and mechanical behavior of a composite material Clay/Alfa fibers: application to earth brick in northern Morocco.

Yassine Elhamdouni, Abdelhamid Khabazi, Chaimaa Benayad and Youssef Maaloufa

Presenter: Yassine Elhamdouni // Université Med V-Agdal // Morocco.

O-T4-M.83 // Impact Of Operating Conditions On Cooling Capacity For Sorption Systems Using Water As Refrigerant

Brice Tremeac, Florine Giraud and Pierrick Vallon

Presenter: Brice Tremeac // CNAM // France.

O-T4-M.84 // Adiabatic expansion effect of natural Gas at the downstream Extremity of the Pipeline

Mohand Kessal, Khadidja Amara and Idir Belaidi

Presenter: Mohand Kessal // University of Boumerdes // Algeria.

O-T4-M.85 // Smart Urban Design Reducing Transportation Impact in city centers

Soufiane Fezzai, Said Mazouz and Atef Ahriz

Presenter: Soufiane Fezzai // University of Biskra // Algeria.

O-T4-M.134 // Carbon Tax, System Marginal Price and Environmental Policies on Smart Microgrid Operation

Anestis Anastasiadis, Stavros Konstantinopoulos, George Kondylis, Georgios Vokas and Maya Julien-Salame

Presenter: Anestis Anastasiadis // Power Public Corporation (PPC) - HELLAS // Greece.

O-T4-M.123 // Application of Voltage Oriented Control in a fully renewable, wind powered, autonomous system with storage capabilities

Georgios Vokas, Anestis Anastasiadis, George Kondylis and Stavros Konstantinopoulos

Presenter: Georgios Vokas // PIRAEUS UNIVERSITY OF APPLIED SCIENCES // Greece.

15:30 // Coffee Break

15:30 - 17:30 // S7-T2-T3-T4 // Posters: Presentations and Discussions

Metiers Art Museum (60 Rue Réaumur, 75003 Paris, France)

Gala Diner (Around 20:00)



Friday - November 18, 2016

10:30 - 11:00 / S8 - Plenary: Reduction of CO2 Emissions of Heat Engines. Radu Chiriac, Poli. Bucharest –Romania

11:00 - 12:00 // S9-T4 // Chairs: Brice Tremeac, Joshua Okeniyi, Pierfrancesco Fiore, Sami Lallahem

O-T4-M.52 // A Trnsys Simulation Of A Solar-Driven Ejector Air Conditioning System With An Integrated PCM Cold Storage

Yosr Allouche, Szabolcs Varga, Chiheb Bouden and Armando Oliveira
Presenter: Yosr Allouche // Université de Tunis El Manar // Tunisia.

O-T4-M.60 // National Hydrogen Technology Competitiveness Analysis with an Integrated Fuzzy AHP and TOPSIS Approaches: In Case of Hydrogen Production and Storage Technologies

Seongkon Lee and Gento Mogi
Presenter: Seongkon Lee // Korea Institute of Energy Research // Korea.

O-T4-M.87 // crumb rubber impact to the mechanical performance of concrete based at round gravel

Wafa Bouaka and Abdelouahad Kriker
Presenter: Wafa Bouaka // univesty KASDI Merbah OUARGLA // Algeria.

O-T4-M.89 // Experimental evaluation of sound transmission through single, double and laminated glazing

Rawad Assaf, Georges Descombes, Francis Guillemard, Elias Elhachem and Walid Larbi
Presenter: Rawad Assaf // ISSAE-CNAM // Lebanon.

O-T4-M.98 // The Level of Flood Risk between Topography and Urban Morphology Case of Ghardaia

Belarbi Lakhdar, Sahnoune Tayeb And Boudersa Ghani
Presenter: Sahnoune Tayeb // university of constantine3 // Algeria.

12:00 - 14:00 // Lunch

14:00 - 15:30 // S10-T2-T3-T4 // Chairs: Djallel Dib, Radu Chiriac, Rawad Assaf and Yosr Allouche

O-T2-M.94 // Investigation of a Hybrid PVT Air Collector System

Salim Haddad and Mourad Mordjaoui
Presenter: Salim Haddad // University of 20 août 1955 - Skikda // Algeria.

O-T4-M.99 // Evaluation of the urban vulnerability of cities exposed to the industrial risks. Case: the city of Skikda

Ghani Boudersa, Tayeb Sahnoune And Lakhdar Belarbi
Presenter: Ghani Boudersa // university of Constantine3 // Algeria.

O-T4-M.101 // Experimental Study of Heat Pump Thermodynamic Cycles Using CO2 Based Mixtures - Methodology and First Results

Paul Bouteiller, Marie France Terrier And Pascal Tobaly
Presenter: Pascal Tobaly // CNAM // France.

O-T4-M.103 // Prediction of the Thermal Behavior of a Paraffin Composite for Thermal Energy Storage

Najoua Mekaddem, Samia Ben Ali, Atef Mazioud And Ahmed Hannachi
Presenter: Najoua Mekaddem // National School of Engineers of Gabes // Tunisia.

O-T4-M.108 // Parameters and characteristics of PV solar modules under the influence of thermal stresses

Jean Zaraket, Takla Salame And Michel Aillerie
Presenter: Jean Zaraket // Lebanese University and Lorrain University // Lebanon.

O-T4-M.109 // A territorial diagnostic of the French region Pays de la Loire through the prism of energy metabolism

David Merlaut, Jean-françois Hetet, David Chalet And André Sobczak
Presenter: David Merlaut // Ecole Centrale Nantes // France.

16:00 – 18:00 // Conference closing note by Clotilde Ferroud, CNAM-France and Conference Toast



POSTERS PRESENTATIONS

P-T2-M.10 // Photovoltaic Pumping System Comparative Study Analysis Between Direct and Indirect Coupling Mode

Abdelghani Harrag, Abdessalam Titraoui, Hamza Bahri and Messalti Sabir

Presenter: Abdelghani Harrag // CCNS Laboratory // Algeria.

P-T2-M.14 // A new robust control scheme using second order sliding mode and fuzzy logic of a DFIM supplied by two five-level SVPWM inverters

Zinelaabidine Boudjema, Rachid Taleb and Adil Yahdou

Presenter: Zinelaabidine Boudjema // LGEER Laboratory, Hassiba Benbouali University // Algeria.

P-T2-M.15 // The Effect of Seasonal Variation on the Performances of Grid Connected Photovoltaic System in Southern of Algeria

Layachi Zaghba, Messaouda Khennane, Nadjiba Terki, Abdelhalim Borni, Abdelhak Bouchakour, Amor Fezzani, Idriss Hadj Mahamed and Samir Hamid Oudjna

Presenter: Layachi Zaghba // URAER, CDER // Algeria.

P-T2-M.16 // Fuzzy logic, PSO based Fuzzy logic algorithm and Current controls comparative for Grid-Connected Hybrid System

Abdelhalim Borni, Boualem Benlhbib, Thameur Abdelkrim, Layachi Zaghba, Abdelhak Bouchakour and Laid Zarour

Presenter: Abdelhalim Borni // URAER, CDER // Algeria.

P-T2-M.25 // Study of heat transfer by natural convection of a nanofluid in a solar water-heater enclosure

Mabrouk Guestal and Mahfoud Kadja

Presenter: Mahfoud Kadja // University des Frères Mentouri Constantine, Department of mechanical engineering // Algeria.

P-T2-M.40 // Study of evolution in temperatures in flat plate solar collector

Zakaria Sari Hassoun, Khaled Aliane and Imane Hiba Berrezoug

Presenter: Zakaria Sari Hassoun // Université Abou Baker Belkaid Tlemcen Algeria // Algeria.

P-T2-M.42 // Dynamic study of the flow and influence of the artificial roughness in a flat plate solar collector

Aliane Khaled and Sari Hassoun Zakaria

Presenter: Aliane Khaled // University of Tlemcen // Algeria.

P-T2-M.46 // Improving Activation Energy and Electrical Conductivity of Electrospun Nylon Films by Polyaniline Addition

Akram Jabur

Presenter: Akram Jabur // University of Technology // Iraq.

P-T2-M.62 // Degradation evaluation of PV modules operating under northern Saharan environment in Algeria

Omar Charrouf, Achour Betka, Hefaidh Hadeif, Mebarek Djebabra and Mourad Tiar

Presenter: Omar Charrouf // kasdi merbah university // Algeria.

P-T2-M.63 // Control Strategy based on SPWM Switching Patterns for Grid Connected Photovoltaic Inverter

Linda Hassaine, Abdelhamid Mraoui, Amar Guellal and Mohamed Kherchi

Presenter: Linda Hassaine // Centre de Développement des Energies Renouvelables, CDER Bouzareah // Algeria.

P-T2-M.78 // Ploys of Popular House in the Desert Climate. ... Today, in Perdition Way.

Nawal Benslimane, Ratiba Wided Biara and Sara Zatir

Presenter: Ratiba Wided Biara // Bechar University // Algeria.

P-T2-M.82 // Efficiency Optimization of a Photovoltaic water pumping System for Irrigation in Ouargla, Algeria

Mohammed Lakhdar Louazene, M^a Del Carmen Alonso-García and Driss Korichi

Presenter: Mohammed Lakhdar Louazene // University Kasdi Merbah, 30000 Ouargla // Algeria.

P-T3-M.5 // Physico-mechanical properties of a raw brick based with sand of dunes stabilized by hydraulic lime

Djoughri Mohamed and Bentebba Mohamed Taher

Presenter: Djoughri Mohamed // university of ouargla // Algeria.



P-T3-M.6 // Analysis of an Autonomous Wind-Diesel System With Battery Storage

Abdelhamid Ksentini, Elbahi Azzag and Ahmed Bensalem

Presenter: Abdelhamid Ksentini // Batna2 university // Algeria.

P-T3-M.19 // Design of a Pitch Angle Control System for a Small Wind Turbine Based on Neural Network Fitting

Mohamed E. M. Salem, Hesham M. El-Batsh, Ahmed A. El-Betar and Ali M. A. Attia

Presenter: Hesham Elbatsh // Benha Faculty of Engineering // Egypt.

P-T3-M.23 // A New Adjustable Gains for Second Order Sliding Mode Control of Saturated Doubly-Fed Induction Generator based Wind Turbine

Elhadj Bounadja, Mohand Oulhadj Mahmoudi, Rachid Taleb and Zinelaabidine Boudjema

Presenter: Elhadj Bounadja // University of Chlef // Algeria.

P-T3-M.24 // Optimum location of a wind farm

Houria Smail and Rezak Alkama

Presenter: Houria Smail // University of Bejaia // Algeria.

P-T3-M.59 // Spatio-tempO analysis of extreme rainfall and Flooding in the semi-arid region of Algeria and its application to the regionalization of flood flow estimates

Fares Belagoune and Djamel Boutaoutaou

Presenter: Fares Belagoune // University Kasdi Merbah, ouargla // Algeria.

P-T3-M.71 // Performance Optimization of a Photovoltaic Chain Conversion by the PWM Control

Mohamed Redha Rezoug and Rachid Chenni

Presenter: Mohamed Redha Rezoug // University of Ouargla // Algeria.

P-T3-M.79 // Recov'Heat: An estimation tool of urban waste heat recovery potential in sustainable cities

Alain Pascal Goumba Cyubahiro, Samuel Chiche and Xiaofeng Guo

Presenter: Xiaofeng Guo // ESIEE Paris - EFFICACITY // France.

P-T3-M.93 // Optimal Tracking and Second Order Sliding Power Control of the DFIG Wind Turbine

Sabrina Abdeddaim, Achour Betka and Omar Charrouf

Presenter: Sabrina Abdeddaim // university of biskra // Algeria.

P-T4-M.1 // Wastes of oil drilling: treatment technics and their effectiveness

Abbas Hadj Abbas, Hacini Messaoud and Aiad Lahcen

Presenter: Abbas Hadj Abbas // univesity of Kasdi Merbeh Ouargla // Algeria.

P-T4-M.12 // Developing a feed forward multilayer neural network model for prediction biochemical oxygen demand, case study

Laidi Maamar and Hanini Salah

Presenter: Laidi Maamar // Médéa University // Algeria.

P-T4-M.18 // A Review on Environment-Friendly Working Fluid for Organic Rankine Cycle for solar thermal power plant application

Arun Kumar, Shailendra Kumar Shukla and Jeevan Vachan Tirkey

Presenter: Arun Kumar // IIT(BHU) // India.

P-T4-M.30 // Study on the benefits of using the date palm trees residuals in saudi arabia for development of the non-traditional wooden materials

Mohamed Nabil Metwally, Hamza Ghulman and Mohamedwasela. Al-Hazmi

Presenter: Mohamed Nabil Metwally // Umm Alqura University // Saudi Arabia.

P-T4-M.37 // Flat plate solar air heater with latent heat storage

Boumediene Touati, Nordine Kerroumi and Joseph Virgone

Presenter: Boumediene Touati // ENERGARID lab, Team of Solar Resources and its Applications (GSA) Tahri Mohammed University // Algeria.



P-T4-M.38 // The Outdoor Thermal Comfort: Theory and Guidelines

Atef Ahriz, Nouredine Zemmouri and Soufiane Fezzai

Presenter: Atef Ahriz // university of tebessa // Algeria.

P-T4-M.39 // Application of an approach based on indicators to improve the comfort of the urban environment and energy mastery of their entities: Suitable for humid climate.

Rahmani Khadidja and Bouaziz Nahla

Presenter: Rahmani Khadidja // University Tunis el Manar // Algeria.

P-T4-M.41 // Physico-chemical composition of urban wet weather discharges in Seybous watershed (north eastern Algeria)

Samira Khadri, Abd El Aziz Laraba and Nadjib Haied

Presenter: Samira Khadri // Université Badji Mokhtar - Annaba // Algeria.

P-T4-M.47 // Adsorptive Kinetic Mechanism of Heavy Metal Cations on the Surface of Graphite Oxide and its SiO₂ Composite

Imtithal Sheet, Ahmad Kabbani and Hanafy Holail

Presenter: Imtithal Sheet // Lebanese International University // Lebanon.

P-T4-M.48 // The use of anaerobic digestion process for treating sludge from wastewater treatment plants

Slimane Kalloum, Mohamed Djaafri, Mostapha Khalafi and Fethya Salem

Presenter: Slimane Kalloum // University of Adrar // Algeria.

P-T4-M.50 // Exergy-aided environmental analysis of a high bypass aero-engine

Ramazan Atilgan and Onder Turan

Presenter: Ramazan Atilgan // Anadolu University // Turkey.

P-T4-M.51 // Nonlinear Analysis of Concrete Beams Strengthened by Date Palm fibers

Samia Bouzouaid and Abdelouahed Kriker

Presenter: Samia Bouzouaid // alger // Algeria.

P-T4-M.53 // Contribution of the characteristics rheological of the pavement structure with the addition of brick waste

Zoubida Senisna and Med Tahar Bentebba

Presenter: Zoubida Senisna // UNIVERSITY // Algeria.

P-T4-M.54 // Compressive strength sand dunes reinforced concrete

Mohamed Mani, Abdelouahed Kriker and Allaoua Belferrag

Presenter: Mohamed Mani // University KASDI Merbah of Ouargla // Algeria.

P-T4-M.56 // The Valorization of the Plastic Waste to the Rheological Characteristics of Bituminous Mixtures

Mohammed Boucherba, Abdelouahed Kriker and Nabil Kebaili

Presenter: Mohammed Boucherba // Ouargla University Kasdi Merbah // Algeria.

P-T4-M.57 // Shrinkage modeling of concrete reinforced by palm fibres in hot dry environments+Z73

Akchiche Hamida and Kriker Abdelouahed

Presenter: Kriker Abdelouahed // university of Ouargla Algeria // Algeria.

P-T4-M.61 // Contribution study to the thermal insulation of the builders in the desert regions of exploiting gypsum fiber reinforced palm

Fouad Hafsi, Abdelouahed Kriker and Said Abani

Presenter: Fouad Hafsi // University KASDI Merbah of Ouargla // Algeria.

P-T4-M.64 // Modeling Peaks Over A Threshold Using R (Case Wadis Soubella, Algeria)

Fares Belagoune, Djamel Boutoutaou and Mehdi Bellout

Presenter: Fares Belagoune // université // Algeria.

P-T4-M.66 // Effects of Mineral Additions on Durability and Physico-mechanical Properties of Mortar

Abdelaziz Logbi, Abdelouahed Kriker and Zoubaida Snisna

Presenter: Abdelaziz Logbi // University Kasdi Merbah Ouargla Algeria // Algeria.



P-T4-M.72 // Investigating Inhibition of Microbes Inducing Microbiologically-Influenced-Corrosion by Tectona grandis based Fe-Nanoparticle Material

Joshua Okeniyi, Olugbenga Omotosho, Michael Inyang, Elizabeth Okeniyi, Ikechi Nwaokorie, Emmanuel Adidi, Felicia Owoeye, Kelechukwu Nwakudu, Deborah Akinlabu, Olanrewaju Gabriel, Olugbenga Taiwo and Olufisayo Awotoye
Presenter: Joshua Okeniyi // Covenant University, Ota, Nigeria // Nigeria.

P-T4-M.76 // C6H5NH2 Effect on the Corrosion Inhibition of Aluminium in 0.5 M HCl

Olugbenga Adeshola Omotosho, Joshua Olusegun Okeniyi, Cleophas Akintoye Loto, Abimbola Patricia Idowu Popoola, Ekundayo Oluwademilade Jacob Fademi, Segun Isaac Oladipupo, Ayomide Samuel Alabi, Omokolade Bamidele Ajibola and Alex Emelieze
Presenter: Olugbenga Adeshola Omotosho // Covenant University // Nigeria.

P-T4-M.88 // Contribution to the Hydrodynamic Modeling of Groundwater in the Ain El Bel Syncline Wilaya of Djelfa (Algeria)

Azlaoui Mohamed, Nezli Imed Eddine and Djelita Belkheir

Presenter: Azlaoui Mohamed // Geology Laboratory of the Sahara, University kasdi merbah, 30,000 Ouargla, Algeria // Algeria.

P-T4-M.92 // what fate for ksours and town-ksours southwestern Algeria?

Abdrabi Brahimi

Presenter: Abdrabi Brahimi // SUD-PLANNING OFFICE STUDIES // Algeria.

P-T4-M.95 // Assessing Long-term Water Demand of Constantine Province in Kébir-Rhumel Mediterranean Catchment

Hocine Kiniouar, Azzedine Hani And Abdelkader Younsi

Presenter: Hocine Kiniouar // Mohamed Seddik Benyahia // Algeria.

P-T2-M.97 // Experimental study of heat transfer in parabolic trough solar receiver: using two different heat transfer fluids

Reda Tahtah, Ali Bouchoucha, Cherfia Abid And Mounir Tichouchai

Presenter: Ali Bouchoucha // Université Des Frères Mentouri Constantine 1 // Algeria.

P-T4-M.100 // Building Energy Systems Operation Optimization with Ice Storage – A Real Time Approach

Babak Soltan And Brian Robyns

Presenter: Babak Soltan // Mostham // Australia.

P-T4-M.105 // Physico-Chemical Composition Of Urban Wet Weather Discharges In Seybous Watershed (North Eastern Algeria)

Khadri Samira, Laraba Abd El Aziz And Haied Nadjib

Presenter: Khadri Samira // Badji Mokhtar University // Algeria.

P-T4-M.106 // Effect of Ecological Insulating Fiber on the Thermal and Mechanical Properties of plaster.

Youssef Maaloufa

Presenter: Youssef Maaloufa // LEME EST Sale // Morocco.

P-T2-M.107 // Influence of the spectral distribution of light on the characteristics of photovoltaic panel. Comparison between simulation and experimental.

Meriem Chadel, Mohammed Moustafa Bouzaki, Asma Chadel, Pierre Petit, Jean-paul Sawicki, Michel Aillerie And Boumediene Benyoucef

Presenter: Meriem Chadel // university of Tlemcen // France.

P-T4-M.110 // The prevalence and distribution of indicators of fecal contamination in the sand from the beaches of Oran coast

Naima Messaoui, Amaria Matallah-boutiba And Zitouni Boutiba

Presenter: Naima Messaoui // Université d'Ahmed Benbella 1 // France.

P-T2-M.112 // ANFIS based Maximum Power Point Tracking Controller for PV Systems Using Direct Control Method

Mohamed Lasheen, Ali Kamel, Mazen Abd Elsalam and S. Ookawara

Presenter: Mohamed Lasheen // E-Just // Egypt.



P-T4-M.115 // Power Supply Improvements for ballasts-low pressure mercury/argon discharge lamp for water purification

Abdallah Zegaoui, Aissa Boukhtache Aicha, Michel Aillerie, Abdelkader Djahbar, Fatima Zohra Kessassia, Hadj Allouache and Mohamed Seghir Boucherit

Presenter: Abdallah Zegaoui // Laboratory of Optical Materials, Photonics and Systems (LMOPS), UPVM University France // France.

P-T2-M.117 // Sliding Mode Control for a Three Phase Multicell Inverter dedicated to Renewable Energy systems

Hemici Kheira, Abdallah Zegaoui, Abdelkader Djahbar, Aissa Boukhtache Aicha, Fatma Zohra Kessaissia, Hadj Allouache, Mustapha Mahmoudi and Michel Aillerie

Presenter: Hemici Kheira // université // Algeria.

P-T2-M.119 // Maximum Power Point Tracking algorithm based on sliding mode and fuzzy logic for photovoltaic sources under variable environmental conditions

Lotfi Atik, Pierre Petit, Jean-Paul Sawicki, Zine Eddine Touhami Ternifi, Ghalem Bachir, Mohammed Della and Michel Aillerie

Presenter: Lotfi Atik // University of Science and Technology of Oran - Mohamed Boudiaf Algeria // Algeria.

P-T3-M.120 // New Vision for Irrigation System from AHD to Esna; the Impact Electrically and Hydraulically

Nadia Eshra

Presenter: Nadia Eshra // Nile Research Institute // Egypt.

ATT--M.302 // Attendee Participation

Diana Jelenova

Presenter: Diana Jelenova // Heriot-Watt University // UK.

ATT--M.303 // Attendee Participation

Salaheldin Mahmoud Abdellatif Ibrahim Ghanem

Presenter: Salaheldin Mahmoud Abdellatif Ibrahim Ghanem // Alexandria Detergents And Chemicals Company // Egypt.

ATT--M.305 // Attendee Participation

Szabolcs Varga

Presenter: Szabolcs Varga // Faculty of Engineering of the University of Porto.

Rua dr Roberto Frias

4200-465 Porto

Portugal // Portugal.

ATT--M.332 // Attendee Participation

MILKOV Nikolay

Presenter: MILKOV Nikolay // CNAM – Univ de Sofia // France/Bulgarie.

ATT--M.333 // Attendee Participation

COMBES Anthony

Presenter: COMBES Anthony // CNAM // France.

ATT--M.335 // Attendee Participation

DANLOS Amelie

Presenter: DANLOS Amelie // CNAM // France.

ATT--M.336 // Attendee Participation

PODEVIN Pierre

Presenter: PODEVIN Pierre // CNAM // France.

ATT--M.337 // Keynote Speaker

MORIN Céline

Presenter: MORIN Céline // CNAM // France.

ATT--M.338 // Attendee Participation

PERILHON Christelle

Presenter: PERILHON Christelle // CNAM // France.

ATT--M.339 // Attendee Participation



TOUSSAINT Michel

Presenter: TOUSSAINT Michel // CNAM // France.

ATT--M.340 // Keynote Address

Sylvie Faucheux

Presenter: Sylvie Faucheux // CNAM // France.

ATT--M.341 // Honoree

Jean-Pierre Charles

Presenter: Jean-Pierre Charles // Lorraine Univ // France.

ATT--M.342 // Honoree First Lady

Michel Colion-Paradis

Presenter: Michel Colion-Paradis // Medical // France.

ATT--M.343 // Invitee

Patricia Moinard

Presenter: Patricia Moinard // METZ METROPOLE DEVELOPPEMENT // France.



Conference Committees

Chairs Committee

Clotilde Ferroud, Fr
Chafic-Touma Salame, Lb
Georges Descombes, Fr
Michel Aillerie, Fr

Program Committee

Amelie Danlos, France
Anthony Combes, France
Antoine Aouad, Lebanon
Christelle Périlhon, France
Jean Zaraket, Lebanon
Maya Julian, Lebanon
Panagiotis Papageorgas, Greece
Pierre Podevin, France
Ralph Abi-Rizk, Lebanon

SC/ Int'l Reviewers // President: Panagiotis Papageorgas and Sylvie Fouchaux

Andrea Capodaglio, Italy	Michel Aillerie, France
Angel Cid-Pastor, Spain	Mona Gamal El-Din, Egypt
Abdelaziz Ahaitouf, Morocco	Muna Abbas, Iraq
Ali Benmeddour, Canada	Muthana Sirhan, United Kingdom
Aseel, Hassan, United Kingdom	Nachida Kasbadji Merzouk, Algeria
Burak Kadem, United Kingdom	Nicolas Fressengeas, France
Chafic Salame, Lebanon	Omar Elmazria, France
Christelle Perilhon, France	Ondrej Sikula, Czech republic
Elena Cristina Rada, Italy	Panagiotis Papageorgas, Greece
Errami Youssef, Morocco	Paulo Brito, Portugal
Fernando Tadeo, Italy	Piotr Arabas, Poland
Frederic Saint-Eve, France	Rachid Benchrif, Morocco
Georges Vokas, Greece	Safa Othman, Tunisie
Imthithal Sheet, Lebanon	Sidi Hamadi, France
Kareema Ziad, Iraq	Salman Ajib, Germany
Lina Youssef, UAE	Sylvie Faucheux, France
M.Y. Ayad, France	Torretta Vincenzo, Italy
Majda Suleiman, Kuwait	Valter Silva, Portugal
Mona Karnib, Lebanon	

