PROGRAMME
MED GREEN FORUM – III
MEDITERRANEAN GREEN BUILDINGS AND RENEWABLE ENERGY FORUM – 2015

August 26_28, Tour Visit 29, 2015, School of Architecture, University of Florence, Florence, Italy.
Mission Statement

This is a World Renewable Energy Congress and Network Forum aimed at the international community as well as Mediterranean countries. The first forum was held in 2010 in France followed by Morocco in 2012 and the third forum is going to be at Florence, Italy 25-28 August 2015.

The Forum will highlight the importance of growing renewable energy applications in two main sectors: Electricity Generation and the Sustainable Building Sector. The Mediterranean region was chosen to illustrate the viability of using renewable energy to satisfy all its energy needs. We are hoping to demonstrate the effectiveness of using renewable energy in these countries to act as a beacon of light to the rest of the world to follow.

Renewables are the cornerstones and the foundation of a truly sustainable energy future. Our mission is to promote enabling policies and to further develop a broad range of renewable energy technologies and applications in all sectors – for electricity production, heating and cooling, agricultural applications, water desalination, industrial applications and for the transport sectors leading to A BETTER, CLEANER AND SAFER WORLD

Chairman Message

In this third Med Green Forum I am lucky to have my Co-Chair Prof Marco Sala, Head of ABITA, Florence and The Head of administration is Ms Angela Grassi, Director of ETA Renewable Energy-Florence. We also have excellent team representing the Technical Committee.

We received more than 152 abstracts from 51 countries covering the 9 topics of the Forum. Our aim is to learn from each other’s experience, and to highlight the best practice. The Mediterranean region will be the first in the world where all energy demand be met from renewable energy sources. During the last twenty five year the World Renewable Energy Congress and Network have run outstanding events in more than 50 countries and this is our fifth meeting in Florence, the city of Culture, Art and knowledge.

Our thanks to all the sponsors including: ISESCO, Italian Foreign Ministry and Springer.

Technical Committee

Mr Rainer Hinrichs-Rahlwes - Germany
Prof Arch Fernando Recalde - Italy
Dr Neveen Hamza – UK
Prof Bahram Moshfegh – Sweden
Prof Federico Butera – Italy
Prof Runming Yao -UK

DO NOT FORGET NEXT YEAR

1- World Renewable Energy Congress – 15, Jakarta, Indonesia, 19 – 24 September 2016,
   Contact: Dr Herman Darnel Ibrahim, Email: hermandarnel@yahoo.com Or Dr Suharta
   Email: herliyani.suharta@gmail.com

   Contact: Dr. Kuruvilla Mathew, K.Mathew@murdoch.edu.au
### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Time</th>
<th>ROOM</th>
<th>FUNCTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 10:30</td>
<td>Main Theatre (MT)</td>
<td>Opening Ceremony &amp; Main Plenary</td>
<td>4</td>
</tr>
<tr>
<td>11:00 – 13:00</td>
<td>Main Theatre (MT) &amp; First Floor Theatre (FFT)</td>
<td>Two Parallel Plenaries</td>
<td>4 5</td>
</tr>
<tr>
<td>14:30 – 16:00</td>
<td>&quot; &quot;</td>
<td>Two Parallel Plenaries</td>
<td>5 5</td>
</tr>
<tr>
<td>16:30 – 18:00</td>
<td>&quot; &quot;</td>
<td>Two Parallel Plenaries</td>
<td>6 6</td>
</tr>
</tbody>
</table>

**THURSDAY**

<table>
<thead>
<tr>
<th>Time</th>
<th>ROOM</th>
<th>FUNCTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 -10:30</td>
<td>Main Theatre (MT) &amp; First Floor Theatre (FFT)</td>
<td>Two Parallel Plenaries</td>
<td>7 7</td>
</tr>
<tr>
<td>11:00 – 13:00</td>
<td>Main Theatre (MT), First Floor Theatre (FFT), Two Ground Floor Rooms 1 &amp; 2</td>
<td>Invited Four Parallel sessions</td>
<td>8 8 9</td>
</tr>
<tr>
<td>14:30 – 16:00</td>
<td>Main Theatre (MT), First Floor Theatre(FFT), Two Ground Floor Rooms 1 &amp; 2</td>
<td>Four Technical Sessions</td>
<td>10 10 11 11</td>
</tr>
<tr>
<td>16:30 – 18:00</td>
<td>Main Theatre (MT), First Floor Theatre (FFT), Two Ground Floor Rooms 1 &amp; 2</td>
<td>Four Technical Sessions</td>
<td>12 12 13 13</td>
</tr>
</tbody>
</table>

**FRIDAY**

<table>
<thead>
<tr>
<th>Time</th>
<th>ROOM</th>
<th>FUNCTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 10:30</td>
<td>Main Theatre (MT) &amp; First Floor Theatre (FFT)</td>
<td>Two Parallel Plenaries</td>
<td>14 14 22</td>
</tr>
<tr>
<td>11:00 – 13:00</td>
<td>Main Theatre (MT), First Floor Theatre (FFT), Two Ground Floor Rooms 1 &amp; 2</td>
<td>Invited Four Parallel sessions</td>
<td>14 15 15 16 22</td>
</tr>
<tr>
<td>14:30 -16:00</td>
<td>Main Theatre (MT), First Floor Theatre (FFT), Two Ground Floor Rooms 1 &amp; 2</td>
<td>Four Technical Sessions</td>
<td>16 17 17 18 22</td>
</tr>
<tr>
<td>16:30 -18:00</td>
<td>Main Theatre (MT), First Floor Theatre (FFT), Three Ground Floor Rooms 1 &amp; 2 &amp; 3</td>
<td>Five Technical Sessions</td>
<td>18 19 19 20 21 21 22</td>
</tr>
</tbody>
</table>

**NOTE:** Green Buildings Sessions will be in (MT), Renewable Energy Sessions will be in (FFT)
Wednesday 26 August

09:00-09:30 Opening Ceremony – Main Theatre
- Welcome Speech by: Prof Ali Sayigh, Chairman of MED Green Forum - UK
- Welcome Speech by: Prof Marco Sala, Co-Chair of Med Green Forum- Italy
- A Speech by Dr Aisha Bammoun, A. Director of Science, ISESCO – Morocco
- A Speech by H E Minister Eliecer Cruz – Galapagos Island

09:30-10:30 Main Plenary – Main Theatre Chairman: Prof Ali Sayigh
09:30- 10:00 The European Climate and Energy Framework 2030 – Impact on Renewable Energy development
Rainer Hinrichs-Rahlwes, (EREF) European Renewable Energies Federation, German Renewable Energy Federation (BEE), Berlin, Germany

10:00-10:30 Evaluating building performance using carbon mapping, physical monitoring and post-occupancy evaluation
Rajat Gupta, School of Architecture, Oxford Brookes University, Oxford, UK

10:30 – 11:00 COFFEE BREAK

11:00 – 13:00 Main Plenary – Main Theatre Chairman: Dr Ruxandra Crutescu
11:00 – 11:30 The energy, water, food nexus
Bill Watts, Max Fordham LLP, London

11:30 – 12:00 Energy savings solutions for five Hospitals in Europe
Marco Sala¹, Giuseppina Alcamo², Lucia Ceccherini Nelli², University of Florence, DIDA Dept. – ABITA Firenze Italy

12:00 – 12:30 Revitalization and refurbishment of Mediterranean minor historical Centres
Alessandra Battisti, PDTA Dept., Sapienza” Rome University, Roma, Italy

12:30 – 13:00 Buildings’ Energy flexibility: A bottom-up approach for system integration of energy infrastructures starting from the user to support the Smart grid
Wim Zeiler, Faculty of the Built Environment, TU Eindhoven, Eindhoven, Netherlands
11:00 – 13:00 **Main Plenary – First Floor Theatre** **Chairman: Prof Bahram Moshfegh**

11:00 – 11:30 **Innovative Solar Resource Tools for a Growing Photovoltaic Energy Supply**
Dave Renné, Boulder, CO 80304, USA

11:30 – 12:00 **Autothermal reforming of BTL diesel fuel for fuel cell systems**
Joachim Pasel¹, Remzi Can Samsun¹, Ralf Peters¹ and Detlef Stolten¹,²
¹Forschungszentrum Jülich GmbH, Institute of Energy and Climate Research, Jülich, Germany, ²Chair for Fuel Cells, RWTH Aachen University, Germany

12:00 – 12:30 **Solving water scarcity problems by renewable energy technology**
Riadh H. AL-Dabbagh, Ajman University of Science and Technology, UAE

12:30 – 13:00 **The use of computational models to aid the understanding of tidal renewable energy**
Ian Masters, Marine Energy Research Group, Swansea Univ., Swansea, UK

**13:00 – 14:30 LUNCH BREAK**

14:30 – 16:00 **Main Plenary – Main Theatre** **Chairman: Dr Neveen Hamza**

14:30 – 15:00 **Sustainable Building Design for Tropical Climates: a handbook for practitioners and architecture students**
Federico M. Butera, Politecnico di Milano, Milano, Italy

15:00 – 15:30 **The perennial of sustainable architecture**
Emil Barbu Popescu, University of Architecture and Urbanism, Bucharest, Romania

15:30 – 16:00 **Spectral Variation of Energy Efficient Room Lighting**
Helmut F.O. Müller, Green Building R&D GmbH, Duesseldorf, Germany

**16:00 – 16:30 COFFEE BREAK**

14:30 – 16:00 **Main Plenary – First Floor Theatre** **Chairman: Prof Runming Yao**

14:30 – 15:00 **First Year Performance of a PV Plant in Jordan**
Compared to PV Plants in the Region
Ali Hamzeh¹, Sadiq Hamid¹, Abbas Sandouk², Zakaria Al-Omari¹, Ghada Aldahim²
¹Al-Ahliyya Amman University, Amman, Jordan, ²- Damascus University, FMEE, Syria
15:00 – 15:30 Wind Power in Indonesia: Regulation, Projects and Development Challenges
Herman Darnel Ibrahim, Renewable Energy Society, Jakarta, Indonesia

15:30 – 16:00 Thermal Energy Recovery System Upgrading Waste Heat by Absorption Heat Pump
Yoshinori Itaya, Graduate School of Engineering, Gifu University, Gifu, Japan

16:00 – 16:30 COFFEE BREAK

16:30 – 18:00 Main Plenary – Main Theatre
Chairman: Prof Mohsen Aboulnaga

16:30 – 17:00 Future Cities and Architecture: Ecology, Culture, Sustainability
Derya Oktay, Ondokuz Mayis University, Atakum/Samsun, Turkey

17:00 – 17:30 Energy performance of a renovated multi-family buildings in Sweden
Lina La Fleur, Bahram Moshfegh, Patrik Rohdin, Division of Energy Systems, Linköping University, Sweden

17:30 – 18:00 Benchmarking Frameworks for Sustainable Building Assessment and Diagnosis
Vasco Portugal, Joana Rafael, Manuel Correia Guedes, Department of Civil Engineering and Architecture Instituto Superior Técnico

16:30 – 18:00 Main Plenary – First Floor Theatre
Chairman: Dr Herliyani Suharta

16:30 – 17:00 Multipurpose crops for energy and biorefineries
M. Christou, E. Alexopoulou, I. Eleftheriadis, I. Papamichael, K. Tsiotas, Center for Renewable Energy Sources (CRES), Pikermi, Greece

17:00 – 17:30 Integration of advanced Biochemical/Biomaterial Demonstration Activities within commercial modern biorefineries.
Giuliano Grassi, Eubia, Brussels (B), Harold Wouters, Modern Bioenergy International, Singapore, E.T.A., Florence, Italy

17:30 – 18:00 Ionic liquid based artificial cellulase type catalysts for cellulosic ethanol process
Ananda S. Amarasekara*, Onome S. Owereh, Preethi Shanbhag, Bernard Wiredu Department of Chemistry, Prairie View A&M University, Prairie View, Texas, USA

18:00 – 18:15 RECYCLING THE BIO-BASED MATERIAL FOR THE BUILDING SECTOR.
Dora Francese, Nicolina Mastrangelo, Department of Architecture University of Naples Federico II, Naples, Italy
Thursday 27 August

09:00-10:30 Main Theatre  
Chairman: Prof Federico Butera

09:00 – 9:30  **Light and shadow. Mediterranean visual scenes**  
Judit López-Besora*, Helena Coch, Architecture & Energy, School of Architecture of Barcelona, UPC, Barcelona, Spain

09:30 – 10:00 **Sustainability of Educational Buildings: Retrofitting Measures to Enhance Energy Performance; the case of the AASTMT Management Building**  
Mohsen M. Aboulnaga¹, Ayman Wanas, M. Hammed² & M. S. Hussein², Sustainable Built Env.Dept. of Architectural Eng., Faculty of Eng., Cairo University, Egypt

10:00 – 10:30 **Qualitative Approach for evaluation of architectural projects based on the influence of design variables for indoor environment.**  
Dania González Couret, Luis Alberto Rueda Guzmán, Nataly González Milian, Elizabeth Rodríguez García, Mónica Llovet Salazar, Faculty of Architecture, Havana, Cuba

09:00-10:30 First Floor Theatre  
Chairman: Mr Rainer Hinrichs-Rahlwes

09:00 -09:30 **Thermal resistance of an innovative prefabricated wall: in-situ measurements**  
Fabio Sciurpi¹, Andrea Rocchetti¹, Leone Pierangiolì², Adriano Milazzo¹,*  
¹Dept. of Industrial Engineering, ²Department of Architecture, University of Florence, Italy

09:30 – 10:00 **Development and Business opportunities in Mediterranean countries by valorising agricultural biomass in the context of Circular Economy and Industrial Symbiosis**  
Anastasia Zabaniotou, Department of Chemical Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece

10:00 – 10:30 **Solar Adsorption Cooling System for Residential Buildings in Mediterranean Climate**  
Angelo Freni, Salvatore Vasta, Valeria Palomba, Andrea Frazzica, Fabio Costa, Giovanni Restuccia, CNR - Istituto di Tecnologie Avanzate per l'Energia Messina, Italy

10:30 – 10:40 **Study on landform-reconstruction method of building volume in cold area under the landscape horizon**  
Chen Shuo, Zhang Xiangning, School of Architecture, Harbin, China

10:30 – 11:00 COFFEE BREAK
11:00 – 13:00 Invited Speakers – Main Theatre  
Chairman: Prof Runming Yao

11:00 – 11:30 Users experiences with comfort in sustainable homes: regulating for reduced energy demand at the tipping point  
Neveen Hamza, School of Architecture, Planning & Landscape, Newcastle University, New Castle, UK

11:30 – 12:00 Energy Building Performance Certification the Portuguese practices, using Ethical and Moral issues.  
Manuel Correia Guedes, Department of Civil Engineering and Architecture, Portugal

12:00 – 12:30 Learning Sustainability from the Arab Gulf Vernacular Architecture  
Khaled A. Al-Sallal, Architectural Engineering, UAE University, Al-Ain, UAE

12:30 – 13:00 the RENAISSANCE Project: Renewable Energy & Sustainable Environment  
Fernando RECALDE L, ABITA, Università Degli Studi di Firenze, Florence, Italy

11:00 – 13:00 Invited Speakers – First Floor Theatre  
Chairman: Prof Federico Butera

11:00 – 11:30 Supporting Electro-mobility in Smart Cities Using Solar EV Charging Stations  
Kaldellis J.K., G. Spyropoulos, St. Liaros, Environmental Protection Lab, TEI of Piraeus, Athens, Greece

11:30 – 12:00 HOW ELECTRICITY SYSTEMS LARGELY BASED ON RENEWABLES WILL LOOK LIKE  
Reinhard Haas, Vienna University of Technology, Vienna, Austria

12:00 – 12:30 Solutions for sustainable transport: Renewable energy sources and electric vehicles  
Amela Ajanovic1,a *, Reinhard Haas1,b 1Vienna University of Technology, Vienna, Austria

12:30 – 13:00 new environmentally friendly chlorine-free solar-grade silicon production technologies  
Sergey M. Karabanov, Victor I. Yasevich, Andrey S. Karabanov, Dmitriy V. Suvorov, Evgeniy V. Slivkin, Gennadiy P. Gololobov, Ryazan State Radio Engineering University, Ryazan Russia

11:00 – 13:00 Invited Speakers – Room (1)  
Chairman: Mr Rainer Hinrichs-Rahlwes

11:00 – 11:30 Teaching environmental conscious design: developing, innovation and performances, Integrated education of architects in the use of environmental strategy in the project  
P. Gallo1, 1: University of Florence, Dept. of Architecture, Florence Italy
11:30 – 12:00  **ASPECTS OF SUSTAINABILITY IN THE VERNACULAR ROMANIAN ARCHITECTURE – DOBROGEA COUNTY**  
Ruxandra CRUȚESCU, Spiru Haret University, Faculty of Architecture, Bucharest, Romania

12:00 – 12:30  **Environmental Aspects for Green Building Design**  
H.H. El-Ghetany\(^a\), H.M.S. Hussein\(^a\) and K. Nassar\(^b\), \(^a\) Solar Energy Department, National Research Centre, Egypt, \(^b\) Department of Architecture Engineering, New Cairo, Egypt

12:30 – 13:00  **Materials for sustainable architecture in the Mediterranean region.**  
Francesca Scalisi, Cesare Sposito, Dept. of Architecture, Univ. of Palermo, Palermo Italy

11:00 – 13:00  **Invited Speakers – Room (2)  
Chairman: Prof Ali Hamzeh**

11:00 – 11:30  **Biomass Small Power Generation in the Archipelagic Islands of Indonesia which have the third largest forest in the World**  
Herliyani Suharta, Adiarso*, Andika Prastawa and Nurdi Energy Technology Center (B2TE)-BPPT, PUSPIPEK, *Pusat Teknologi Pengembangan Sumber Daya energi Indonesia

11:30 – 12:00  **Business Model Innovation for High Performance Buildings Supported by Whole Life Optimisation**  
Umberto Battista, Stam S.r.l. - Piazza della Vittoria, Genova - Italia

12:00 – 12:30  **Assessment of air flows in a school building with mechanical ventilation using active and passive tracer gas methods**  
Jessika Steen Englund\(^a,b\), Jan Akander\(^a\), Mikael Björling\(^b\), Bahram Moshfegh\(^a,b\)  
\(^a\) Division of Building, Energy and Environment Tech., Univ. of Gävle, Gävle,  
\(^b\) Division of Energy Systems, Linköping University, Linköping, Sweden

12:30 – 13:00  **LIQUID AND GAS BIOFUELS FROM THE CATALYTIC REFORMING OF PYROLYSIS BIO-OIL IN SUPERCRITICAL WATER. EFFECT OF THE OPERATING CONDITIONS ON THE PROCESS**  
Javier Remón\(^a,b\), Pedro Arcelus-Arrillaga\(^b\), Jesús Arauzo\(^a\), Lucía García\(^a\), Marcos Millan Agorio\(^b\), “Thermochemical Processes Group (GPT), Universidad Zaragoza. Zaragoza, Spain, “Department of Chemical Engineering, Imperial College London, London, UK

13:00 – 14:30  **LUNCH BREAK**
14:30 – 16:00 Contributors Presentation  Main Theatre  Chair: Prof Khaled Al-Sallal

14:30 – 15:00 Building integrated renewable energy systems, or rediscovering forgotten principles
Ana-Maria Dabija, University of Architecture and Urbanism, Bucharest, Romania

15:00 – 15:20 The Cheap Type Solar Bioclimatic Individual Houses for Residential Areas.
Teofil MIHAILESCU, “Transilvania” University of Brasov, Faculty of Constructions, Brasov, Romania


15:40 – 16:00 Vernacular Design Solutions in Hot Regions: A Study on Erbil Citadel in Iraq
Hala Ali Abdulrazaq, Manuel Correia Guedes, Department of Civil Engineering and Architecture, Instituto Superior Técnico, Portugal

14:30 – 16:00 Contributors Presentation  First Floor Theatre  Chair: Prof Manuel Guedes

14:30–14:50 Exploitation of Wave Energy Potential in Aegean Sea – Greece
Xanthaki F., Giannaraki Chr., Kaldellis J.K.
Lab of Soft Energy Applications & Environmental Protection, TEI of Piraeus, Greece

14:50 – 15:10 ANALYSIS OF WINDBREAK THAT IMPACT MICRO-CLIMATE IN THE SEVERE FREEZING RURAL AREAS OF CHINA
Hong Jin, Huanyu Lv, Harbin Institute of Technology School of Architecture Harbin, China

15:10 – 15:30 Development of renewable energy in Morocco, energy transition and technological perspectives
Mohammed GAROUM SAAD RAEFAT, NAJMA LAAROUSSI
Équipe « Acoustique, Thermique, Énergétique et Matériaux »
École Supérieure de Technologie de Salé. Université Mohammed V Rabat, Morocco

15:30 – 16:00 ENERGY REFURBISHMENT TOWARDS NEARLY ZERO ENERGY TERRACE HOUSES, FOR THE MEDITERRANEAN REGION
D.K.Serghides¹, M.Michaelidou², Stella Demetriou³, M.C.Katafygiotou⁴
Cyprus University of Technology/Dept. of E. Science and Tech., Limassol, Cyprus
14:30 – 16:00  Contributors Presentation  Room (1)  Chair: Prof Helmut F O Mueller

14:30 – 14:50  Proposal of urban requalification in order to the adjustment to the Sustainable Energy Action Plan of Palermo
Tiziana Firrone, University of Palermo, Department of Architecture, Italy

Richard Piacentini, Phipps Conservatory and Botanical Garden, Pittsburgh, USA

15:10 – 15:30  Analysis of the procedures of passive calculation of cooling and definition of an Effective control tool
Eleonora Laurini, Universita degli Studi dell’Aquila, L’Aquila, Italy

15:30 – 15:50  DESIGN WITH ENVIRONMENTAL DATA: ADAPTIVE AND OPTIMIZED TECHNOLOGICAL SYSTEMS FOR SUSTAINABLE RENOVATION OF HOUSING HERITAGE IN THE MEDITERRANEAN AREA
Angelo Figliola, University of Rome “La Sapienza” Rome, Italy

14:30 – 16:00  Contributors Presentation  Room (2)  Chair: Dr John Lowry

14:30 – 14:50  Experimental Assessment of the Impact of Songhua River onto the Regional Micro-climatic Condition in Harbin City
Zheming Liu¹, Xudong Zhao¹,², Hong Jin¹
1. School of Architecture, Harbin Institute of Technology, Harbin 150001, China;
2. School of Engineering, University of Hull, UK

14:50 – 15:10  Office Building Ventilation Optimization of the Atrium Based on the Skylight Design in Cold Region
Tiantian Du, Jianfei Chen
School of Architecture, Harbin Institute of Technology, China

15:10 – 15:30  Investigation of Urban Microclimate Parameters of City Square in Harbin
Peng Cui, Hong Jin, Meng Huang
(School of Architecture, Harbin Institute of Technology), China

15:30 – 15:45  Renewable Energy Applications in Oil & Gas Industry
Ali Al-Alawi, Petroleum Development Oman, Oman

15:45 – 16:00  Architectures for Meditation : the Exploration of the Application of a kind of Sustainable Humanistic Spirit
Liu Yang* and Li Guiwen**, *Harbin Institute of Technology and Northeast Dianli University, **Harbin Institute of Technology, China

16:00 – 16:30  COFFEE BREAK
16:30 – 18:00  Contributors Presentation  Main Theatre  Chair: Prof P Gallo

16:30 – 16:50  
**Energy and environmental aspects of a sustainable programming for school building**
Giacomo Chiesa,1, Mario Grosso,a,2
a Dipartimento di Architettura e Design, Politecnico di Torino, Torino, Italy.

16:50 – 17:10  
**Urban sustainable development in Mediterranean area. The case of Sestri Ponente, Genoa**
Katia Perini, Adriano Magliocco
Università degli Studi di Genova - Dipartimento di Scienze per l’Architettura, Italy

17:10 – 17:30  
**An expert system for the thermal assessment of architectural building design in Portugal**
Mariana Pereira, UPorto, Prof. Manuel Correia Guedes, Department of Civil Engineering and Architecture, Instituto Superior Técnico, Portugal

17:30 – 17:50  
**Optimum Switch Temperature for Buildings Incorporated Phase Change Materials in Mediterranean Climates**
El Hadi Bouguerra a and Nouredine Retiel b
a Mechanical Department, Blida I University, Algeria
b LMNEPM Mechanical Department, University of Mostaganem, Algeria

16:30 – 18:00  Contributors Presentation  First Floor Theatre  Chair: Prof M Christou

16:30 – 16:50  
**Assessing the Environmental Impact of Governmental Resettlement Housing in Northern Africa – The Case of Morocco**
Khadija, Manuel Correia Guedes, Dept. of Civil Engineering and Architecture
Instituto Superior Técnico, Portugal

16:50 – 17:10  
**BUILDING THERMAL EXERGY ANALYSIS**
(a) Lorenzo Leoncini, (b) Marta Giulia Baldi,
(a) & (b) Departement of Industrial Engineering, University of Florence, Florence Italy,

17:10 – 17:30  
**DEVELOPMENT OF ENERGY DEVICES BASED ON PHOTOVOLTAIC PANELS WITH EXTRA CONSUMER PROPERTIES**
Mikhailov L., Mikhailova S.1, Ismailova G.2, Sokolov S.
Al-Farabi Kazakh National University, Physico-Technical Faculty, Kazakhstan

17:30 – 17:50  
**PHOTOVOLTAIC SYSTEM PERFORMANCE INSTALLED IN A COMERCIAL OFFICE.**
*Igor C. TORRES, Chiguetu TIBA, Elielza Moura S. BARBOSA
Universidade Federal de Alagoas, Brasil., Universidade Federal de Pernambuco,
Departamento de Energia Nuclear, Brasil, Universidade Federal de Pernambuco,
Departamento de Energia Nuclear, Brasil.
16:30 – 18:00  Contributors Presentation (Room 1)  Chair: Prof Ana - Maria Dabija

16:30 – 16:50  the research on the sustainability of campus construction land in extreme cold region based on optimized particle swarm optimization
Chang Liu, Hongyuan Mei, School of Architecture, Harbin Institute of Technology, China

16:50 – 17:10  Soundscape Features of Guizhou Traditional Habitant Environment
Linqing Mao, Bin Liu, SHI JIA ZHUANG TIE DAO UNIVERSITY
HEBEI NGREEN ARCHITECTURAL DESIGN CO., LTD, China

17:10 – 17:30  SIMULATION MODELS FOR SUNLIGHT ANALYSIS AND EVALUATION LIKE SUPPORTS FOR MAKING DECISION DURING THE DESIGN STAGE
Beatriz S. Garzon de Jimenez, CONICET – MinCyT- Argentina

17:30 – 17:50  Designing Urban Agriculture in Mediterranean area - The case of Villaseta (Sicily)
Rosa Maria Vitrano, University of Palermo, Faculty of Architecture, Italy

16:30 – 18:00  Contributors Presentation (Room 2)  Chair: Dr Abdul Salam Darwish

16:30 – 16:50  DEVELOPMENT OF DESIGN A DROP-IN HYDROGEN FUELING STATION TO SUPPORT THE EARLY MARKET BUILDOUT OF HYDROGEN INFRASTRUCTURE
Abdul hakim Gall [1]*; Tarek Hamad [1]; Sushrut G. Bapat [1]; Yousif Hamad [1]; John W. Sheffield [2]
[1] Department of Mechanical and Aerospace Engineering, Missouri University of Science and Technology, Rolla, MO, USA
[2] Department of Mechanical and Aerospace Engineering, Missouri University of Science and Technology, Rolla, MO, USA

16:50 – 17:10  POLLUTION EATING CELLS
PRIYAJIT GHOSH, ASANSOL ENGINEERING COLLEGE, ASANSOL, WEST BENGAL, INDIA, VAMSHI RATNALA, BC ROY, ENGINEERING COLLEGE, DURGAPUR, WEST NEGAL, INDIA

17:10 – 17:30  Effect of Chenodeoxycholic Acid (CDCA) on the Photovoltaic Performance of Dye-Sensitized Solar Cell
Ramshah Ahmad and Muhammad Hassan Sayyad
Faculty of Engineering Sciences, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi, Pakistan

17:30 – 17:50  Solar Driven Storage units to reduce Food Waste
Sraisth, Sraisth, TU Berlin, Germany
Friday 28 August

09:00-10:30 Main Theatre Chairman: Prof Antonella TROMBADORE

09:00 – 09:30 A SUSTAINABLE MODULAR BUILDING FOR RESEARCH DEVELOPMENT IN THE ANTARCTIC
Manuel Correia Guedes, Department of Civil Engineering and Architecture, Portugal

09:30 – 10:00 Analysis and Certification of Low Energy Residential Buildings
Helmut F.O. Müller, Francesco Sasso, Green Building R&D, Düsseldorf, Germany

10:00 – 10:30 Smart-Sustainable-Green Building Aspects and Innovations
Abdul Salam Darwish, Phoenix Renewable Energy Centre Manchester, UK

09:00-10:30 First Floor Theatre Chairman: Prof Riadh Al-Dabbagh

09:00 – 09:30 Building Integrated and Distributed Energy and Water Infrastructure: Findings for Transit-Oriented Developments in Western Australia
Martin Anda, Max Ploumis, Kuruvilla Mathew and David Goodfield, School of Eng. & Information Technology, Murdoch University, Western Australia, Perth, Australia

09:30 – 10:00 CARBON FREE TRANSPORT
John Lowry, Swindon, UK

10:00 – 10:30 Sustainable Rural development by Renewable Energies and Energy Efficiency in Afghanistan
Robert Dilger, GIZ-ESRA, Zabiullah Tahirzada, GIZ-ESRA, Deputy Director of Energy Program of Afghanistan, Kabul, Afghanistan

10:30 – 11:00 COFFEE BREAK

11:00 – 13:00 Invited Speakers – Main Theatre Chairman: Prof Anastasia Zabaniotou

11:00 – 11:30 For a more Sustainable University of Computer Sciences
Dania González Couret*, Nataly González Milian, Elizabeth Rodríguez García, Mónica Llovet Salazar, Fac. of Arch., Havana, Cuba

11:30 – 12:00 INFORMATION TECHNOLOGIES FOR CHANGE IN THE PROJECT
Gisella Calcagno, Dept. di Architettura DIDA, Univ. degli Studi di Firenze, Italy

12:00 – 12:30 Climate adapted in NZEB retrofitting for residential buildings
Lucia Ceccherini Nelli¹, Marco Sala², DIDA Dept, ABITA, Univ. of Florence, Italy
12:30 – 13:00 Life Cycle Performance Costing as argument for Green Buildings and renewable energy application
Willem Zeiler, Ann Vanderveen and Wim Maassen, Unit Building Physics and Systems Eindhoven, the Netherlands

11:00 – 13:00 Invited Speakers – First Floor Theatre Chairman: Dr Hamdy Hassan El-Ghetany

11:00 – 11:30 Transparent Conducting Oxides for Solar Cell Applications
Shadia J. Ikhmayies, Al Isra University, Faculty of Information Technology, Amman, Jordan.

11:30 – 12:00 Some of Physical Properties of Pure and Fluorine Doped Tin Oxide Films suitable for energy-conserving windows
Sayran A. Abdulgaifar¹, Kamil M. Youusif²∗. Dept. of Physics, Faculty of Science, Dohuk University, Dohuk, Kurdistan Region, Iraq

12:00 – 12:30 A Semi-Empirical Model for the Estimation of Global Solar Irradiance measurements in Morocco
N. Laaroussi∗¹, M. Garoumi², A. Hajji³, M. Tajayouti³
*Université Mohammed V Rabat, EST de Salé, Laboratoire d’Energétique, Matériaux et Environnement (LEME), Maroc

12:30 – 13:00 Potential of Solar Electricity in Algeria
Linda Hassaine and A. Mraoui, Maitre de recherche A Division Photovoltaïque CDER, Alger, Algérie

11:00 – 13:00 Invited Speakers – Room (1) Chairman: Dr Abdul Salam Darwish

11:00 – 11:30 Interactive envelopes for building ventilation. A case study
E. Marmonti∗¹, C. Balocco∗, Department of Industrial Engineering DIEF University of Florence, Italy.

11:30 – 12:00 Solar building systems for the Mediterranean area: research outputs between Italy and France
- Christian Cristofari, University of Corsica Pascal Paoli - IUT UMR CNRS,(France)
- Andrea Giachetta, Department of Sciences for Architecture - University of Genoa (Italy)
- Chiara Piccardo, Department of Sciences for Architecture - University of Genoa (Italy)

12:00 – 12:30 High Quality of Calibration Accuracy for Smart Building Energy Efficiency Opportunities
Giorgio Mustafaraj, International Energy Research Centre IERC, Tyndall Institute, University College of Cork, Ireland
12:30 – 13:00 EFFECTIVENESS OF THERMAL INERTIA IN SOUTH MEDITERRANEAN CLIMATE: RESIDENTIAL HOUSES
Giuseppina Alcamo, University of Florence, Department of Architecture DIDA, Centro ABITA, Florence, Italy

11:00 – 13:00 Invited Speakers – Room (2)  Chairman: Dr Ruxandra Crutescu

11:00 – 11:30 Comparison Study between Water Pumping System Entrained by PV Array and Diesel Generator
Sarah Abdourraziq, Sidi Mohammed Ben Abdellah University, Fez, Morocco

11:30 – 12:00 PYROLYSIS BIO-OIL UPGRADING TO RENEWABLE LIQUID FUELS BY CATALYTIC HYDROCRACKING. EFFECT OF OPERATING CONDITIONS ON THE PROCESS
Javier Remóna,b, Pedro Arcelus-Arrillagab, Jesús Arauzoa, Lucía Garcíaî, Marcos Millan-Agiorb
aThermochemical Processes Group (GPT), Universidad Zaragoza, Zaragoza, Spain.
bDepartment of Chemical Engineering, Imperial College London, UK

12:00 – 12:30 Thermal performance of vacuum glazing with tempered glass panes
Yueping Fang, Trevor J. Hyde, Neil Hewitt, School of the Built Environment, Ulster University, Northern Ireland, UK

12:00 – 13:00 Assessing PV Module Degradation and the Potential of Using Greenhouse Roofs for Supplemental PV Power Generation in Malta
Kristy Bartolo1 and Charles Yousif2: 1Institute of Earth Systems, University of Malta, Malta, 2Institute for Sustainable Energy, University of Malta, Malta

13:00 – 14:30 LUNCH BREAK

14:30 – 16:00 BUSINESS SESSION &Contributors Presentation  Main Theatre
Chair: Prof Antonella TROMBADORE

14:30 -14:50 Robustness of social houses in Ecuador facing global warming: prototyping and simulation studies in the macroclimatic regions of Amazons, Coast and Andes.
Massimo Palme1,2 and Andrea Lobato2
1Universidad Católica del Norte, School of Architecture, Antofagasta, Chile
2Instituto Nacional de Eficiencia Energética y Energías Renovables, Quito, Ecuador

14:50 – 15:10 School Buildings Energetic and Functional Upgrade
Paolo Giordani3, Alessandro Righi3, Tiziano Dalla Mora3, Fabio Peron4, Piercarlo Romagnoni4, “Università I.U.A.V. di Venezia, Italy
15:10 – 15:30 An Integrated Building Energy Management System
Carlos Henggeler Antunes, Ana Soares, Álvaro Gomes
Dept. of Electrical and Computer Engineering, University of Coimbra, Coimbra Portugal and INESC Coimbra, Coimbra, Portugal

15:30 – 15:50 URBAN LIVABILITY ACROSS DISCIPLINARY AND PROFESSIONAL BOUNDARIES
Mohamad Kashef, ALHOSN University, Abu Dhabi, UAE

15:50 – 16:00 BUSINESS SESSION

14:30 – 16:00 Contributors Presentation First Floor Theatre
Chair: Dr. Ananda S Amarasekara

14:30 – 15:00 LARGE-SCALE INTEGRATION OF MODERN BIOENERGY INTO SMART URBAN DISTRICTS
Giuliano Grassi, ETA, Florence, Italy

15:00 – 15:20 Laser toxic-waste disposal and energy co-generation
Muhammad Muddasser S. Gualini, Università Islamica d’ Italia

15:20 – 15:40 A Study on Chinese Vocational Education Park Public Space Layout and Sustainable Design Based on an Urban Intensification Strategy
Qiushi Hao, Benchen Fu, Teng Fei, School of Architecture, Harbin, China

15:40 – 16:00 AN ADAPTIVE THERMAL COMFORT MODEL FOR THE ROMANIAN CLIMATE
Ioana UDREA, Ruxandra CRUȚESCU, Cristiana CROITORU, Ilinca NĂSTASE, Viorel BĂDESCU*, #UNIV. POLITEHNICA OF BUCHAREST, ROMANIA,
2 Spiru Haret University, Faculty of Architecture, Bucharest, Romania,
3 Technical University of Civil Engineering of Bucharest,
4Dept. of Building Services, Technical University of Civil Eng. of Bucharest,
5 Oancea Institute, University POLITEHNICA of Bucharest, Romania

14:30 – 16:00 Contributors Presentation (Room 1) Chair: Prof Bahram Moshfegh

14:30 -14:50 Passive cooling technologies: a review and tools for designers.
Giacomo Chiesa*, Mario Grosso*, #Dipartimento di Architettura e Design, Politecnico di Torino, Torino, Italy.

14:50 – 15:10 Modelling microclimate in urban square and assessing its influence on the performance of surrounding buildings
CUI Peng, JIN Hong and HUNG Meng, Harbin Institute of Technology, China

15:10 – 15:40 Passive cooling in Mediterranean Area for a Bioclimatic and Zero Energy Architecture
Fabrizio Tucci, University di Architecture, Department, Planning Design Technology Roma, Italy
15:40 – 16:00 Thermal Habitability Monitoring in Housing for Low-Income Families in Extreme Warm, Dry Weather
R. A. Romero-Moreno, G. Bojórquez-Morales, A. Luna, M. Corral, T. Gutiérrez-García, Faculty of Architecture and Design, Autonomous University of Baja California, Mexicali, México

14:30 – 16:00 Contributors Presentation (Room 2) Chair: Dr Shadia J Ikhmayies

14:30 – 14:45 Dynamic simulation use for increasing the efficiency of solar cooling system in Northern latitudes.
Peteris Shipkons¹, Janis Shipkons¹,² Andrejs Snegirjovs¹,², Galina Kashkarova¹, Kristina Lebedeva¹, Lana Migla¹, Institute of Physical Energetics¹, Riga Technical University², Lithuania

14:45 – 15:00 Effect of heat and light intensity on (I-V) characterization of Cu₂S film / p- Si heterojunction
M.M. Saadeldin¹, M.M. El-Nahass², K. Sawaby¹.
1. Physics Department, Faculty of Science, Cairo University, Giza, Egypt
2- Physics Department, Faculty of Education, Ain-Shams University, Cairo, Egypt

15:00 – 15:15 Effect of Shadow on the Performance of Solar Photovoltaics
Hussein A Kazem¹, Miqdam T Chaichan², Ali H Alwaeli¹, and Kavish Mani¹
¹Sohar University, Oman, ²University of Technology, Baghdad, Iraq

Anwar El Hadi¹; Ingi El Hadi Abdelrahman²; Mohammed Abdalwahid Ibrahim Alameer³: University of Bahri, Mech. Eng., &Business Int. and Res. Dev., Sudan

15:30 – 15:50 Design of a Solar PV-Diesel Mini-grid for Char Parbotipur, Bangladesh
A.K.M. Sadrul Islam, S Salehin, M M Rahman, S R Faysal
Mechanical & Chemical Engineering Dept, Islamic Univ. of Technology, Bangladesh

15:50 – 16:00 NUMERICAL STUDY OF THE EFFECT OF WIND LOADS ON SOLAR HELIOSTATS DESIGNED FOR GHARDAÏA ZONE IN ALGERIA
H. MERARDA¹, M. AKSAS²* and A. GAMA¹
¹Renewable Energy Applied Research Unit, URAER, CDER, 47133, Ghardaïa, Algeria; ²Energetics Applied Physics Laboratory, University of Batna, Algeria

16:00 – 16:20 BEST PRACTICES IN VALLEVECCHIA: A NEW LINK AMONG WATER, ENERGY, FOOD. Looking for a New Sustainable Nexus in forestry production, inspired by the "Green Benedictine Cathedrals"
Chiara Odolini – ABITA-UNIFI (in collaboration with Erich Roberto Trevisiol, Italy

16:00 – 16:30 COFFEE BREAK

16:30 – 18:00 BUSINESS SESSION
&Contributors Presentation Main Theatre Chair: Prof Marco Sala
16:30 – 16:50 Research on Optimized Construction of Sustainable Human Living Environment in Regions where People of a Certain Ethnic Group Live in Compact Communities in China
JUNYAN DONG¹,², WEN CHENG¹: 1- School of Architecture of, HIT, China
2-School of Architecture and Design, Changchun Institute of Technology, China

16:50 – 17:10 The “mantra” of Ecology in the practice of relations: humanistic approach to the territory
Patrizia Bottaro, Massimo Pica Ciamarra, Pica Ciamarra Associati, Napoli, Italy

17:10 – 17:30 Micro - aeolic in residential districts. A case study in S. Arsenio (South Italy)
Dora Francese, Emanuela Adamou Cittam, Italy

17:30 – 17:50 Energy-roof: Influence of thermal collector on PV laminate efficiency
Paul Kemme, Wim Zeiler – University of Technology Eindhoven, Netherlands

17:50 – 18:00 BUSINESS SESSION

16:30 – 18:00 Contributors Presentation  First Floor Theatre  Chair: Dr. Javier Remon

16:30 – 17:00 the possible shift between heating and cooling demand of buildings under Climate Change conditions: are some of the mitigation policies wrongly understood?
Massimo Palme, University Catolica del Norte, Antofagasta, Chile

17:00 - 17:20 Performance Analysis and Parametric Studies of a Bi-fluid Type Photovoltaic/Thermal (PV/T) Solar Collector in Simultaneous Mode using a Low-cost Solar Simulator and under Tropical Climate Conditions.
Hasila Jarimi¹,³*, Mohd Nazari Abu Bakar¹, Mahmod Othman², Mahadzir Hj Din¹
1-Faculty of Applied Sciences, Universiti Teknologi MARA, Perlis, Malaysia
2-Fac. of Computer Sciences and Math., Univ. Teknologi MARA Perlis, Malaysia
3-Faculty of Applied Sciences, Univ. Teknologi MARA Shah Alam, Malaysia

17:20 – 17:40 Bi-Fluid Photovoltaic/Thermal PV/T Solar Collector with Three Modes of Operation: Experimental Validation of a Theoretical Model
Hasila Jarimi¹,³*, Mohd Nazari Abu Bakar¹, Mahmod Othman², Mahadzir Hj Din¹
1-Faculty of Applied Sciences, 2-Fac. of Computer Sciences and Math., and 3-Faculty of Applied Sciences, Univ. Teknologi MARA Shah Alam, Malaysia

17:40 – 18:00 Performance Analysis of the 10 kW Solar PV Facility at King Faisal University, KSA
Mounir ouzguenda¹ Qusai M. Aldoghan² Mohamed H. Shwehdi³ Abdallah I. Smadi⁴
College of Engineering, King Faisal University, Hasa, Saudi Arabia
16:30 – 18:00 Contributors Presentation (Room 1) Chair: Dr Kamil M Yousif

16:30 – 16:45 Sustainable Design Solutions for Equatorial Regions: The Cases of S. Tomé e Príncipe and East Timor
Manuel Correia Guedes, Department of Civil Engineering and Architecture
Instituto Superior Técnico, Portugal

16:45 – 17:00 ANALYSIS OF ENERGY PERFORMANCE OF AN HIGH PERFORMANCE BUILDING IN A LOCAL CLIMATIC CONTEXT MEDITERRANEAN
Maria Teresa Lucarelli, Caterina Claudia Musarella
dArTe Department, Mediterranea Univ. of Reggio Calabria, Salita Melissari, Italy

17:00 – 17:15 an Optimized Framework for Building Generation
Vasco Portugal, Manuel Correia Guedes, Department of Civil Engineering and Architecture
Instituto Superior Técnico, Portugal

17:15 – 17:30 Laser toxic-waste disposal and energy co-generation
Muhammad Muddassi S. Gualini, Islamic University of Italy

17:30 – 17:45 The Housing Retrofit Market in Italy: constraints and barriers to development
Riccardo Pollo, Politecnico di Torino, Dept. of Arch. and Design.
Torino, Italy

17:45 – 18:00 PLANNING THE PARADISE: GALAPAGOS ISLANDS SUSTAINABLE LAND PLANNING IN HIGHLY VULNERABLE AREAS: AN INTERVENTION EXPERIENCE IN THE GALAPAGOS.
Andres Carlos Bastida Tudela
University Camilo Jose Cela, Madrid (Spain), Galapagos (Ecuador USA)

16:30 – 18:00 Contributors Presentation (Room 2) Chair: Dr Herliyani Suharta

16:30 – 16:45 Incubators of Public Spaces -Self-Awareness tool for renewable energy production in mixed-use urban tissues in Mediterranean zone.
Luca Caneparo¹, Federica Bonavero¹, Barbara Melis¹
Department of Architecture and Design, Politecnico di Torino, Torino, Italy

16:45 – 17:00 The integration of renewable energy sources in the built minor heritage.
Pierluigi De Berardinis¹, Chiara Marchionni², ¹&² DICEAA_Department of Civil, Architecture, Environmental Engineering, University of Studies of L’Aquila, Italy

17:00 – 17:15 EVALUATION OF THERMAL PERFORMANCE, ENVIRONMENTAL IMPACT AND COST EFFECTIVENESS OF AN XLAM COMPONENT FOR RETROFITTING IN EXISTING BUILDING
Tiziano Dalla Mora¹, Alessandro Righi¹, Fabio Peron¹, Piercarlo Romagnoni²
¹Università I.U.A.V. di Venezia,Italy
17:15 – 17:30 **Hydrothermal comfort behavior within heritage buildings subject to a change of use**
R. David Beltrán *, Isabel Miño-Rodríguez , Andrea Lobato, Andrés Gallardo, Carlos Naranjo-Mendoza


17:30 – 17:45

17:45 – 18:00 **A method for economic and energy optimization using dynamic simulation and evolutionary algorithm**
Valentina Coccia, Department of Astronautical, Electrical and Energy Engineering (DIAEE), Sapienza University of Rome, Rome, Italy

**16:30 – 18:00 Contributors Presentation  (ROOM -3) Chair: Prof Dania G. Couret**

16:30 – 16:45 **Variable Step Size Algorithm using single sensor applied for Photovoltaic system**
Dr Mohamed Amine, Ecole Mohammadia d'Ingénieurs, Mohammed V, Rabat, Morocco

16:45 – 17:00 **Runoff treatment system planning in low carbon campus using mathematical analytical tools- A case study in Environmental Management Campus of China**
Tong Wu, Rong Guo
School of Architecture, Harbin Institute of Technology, Harbin, Heilongjiang, China

17:00 – 17:15 **Field Measurement of Songhua River Effects on Micro-climate of Urban Blocks in Harbin City**
Xudong Zhao1,2, Zheming Liu1, Hong Jin1, 1. School of Architecture, Harbin Institute of Technology, Harbin 150001, China; 2. School of Engineering, University of Hull, UK

17:15 – 17:30 **Urban Agriculture: soil less and traditional growing technologies**
Chiara Casazza, Unifi, Università degli Studi di Firenze, Florence, Italy

17:30 – 17:45 **Soil-less Urban Agriculture as a strategy for brownfield sites requalification**
Leonardo Boganini , Chiara Casazza, Centro ABITA, Florence, Italy

17:45 – 18:00 **BUILDING ENVELOPE-SYSTEMS INTEGRATED MODELS**
Fabio Conato, Dipartimento di Architettura, Università degli studi di Ferrara, Italy
### Friday 28 August

#### BUSINESS SESSION ITALIAN TECHNOLOGY

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Website</th>
<th>Speaker/Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>ABITA</td>
<td><a href="http://www.centroabita.unifi.it">www.centroabita.unifi.it</a></td>
<td>Marco Sala</td>
</tr>
<tr>
<td>09:10</td>
<td>ANCE</td>
<td><a href="http://www.toscana.ance.it">www.toscana.ance.it</a></td>
<td>Carlo Lancia</td>
</tr>
<tr>
<td>09:40</td>
<td>Sannini Cotto</td>
<td><a href="http://www.sannini.it">www.sannini.it</a></td>
<td>Guido Bondielli</td>
</tr>
<tr>
<td>10:00</td>
<td>La Cost</td>
<td><a href="http://www.lacost.it">www.lacost.it</a></td>
<td>Luisa Costantini</td>
</tr>
<tr>
<td>10:20</td>
<td>Frangerini</td>
<td><a href="http://www.frangerini.it">www.frangerini.it</a></td>
<td>Stefano Frangerini</td>
</tr>
<tr>
<td>10:30</td>
<td>Question time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>Velux</td>
<td><a href="http://www.velux.com">www.velux.com</a></td>
<td>Andrea Impavido</td>
</tr>
<tr>
<td>11:20</td>
<td>Ferotech</td>
<td><a href="http://www.ferotech.com">www.ferotech.com</a></td>
<td>Maurizio de Lucia</td>
</tr>
<tr>
<td>11:40</td>
<td>Fabb. del Sole</td>
<td><a href="http://www.lafabbricadelsole.it">www.lafabbricadelsole.it</a></td>
<td>Emiliano Checchini</td>
</tr>
<tr>
<td>12:00</td>
<td>Davini</td>
<td><a href="http://www.daviniprojects.it">www.daviniprojects.it</a></td>
<td>Elio Merciadri</td>
</tr>
<tr>
<td>12:30</td>
<td>STO</td>
<td><a href="http://www.sto.com">www.sto.com</a></td>
<td>Francesco Romano</td>
</tr>
<tr>
<td>14:30</td>
<td>Era Energia</td>
<td><a href="http://www.eraenergia.it">www.eraenergia.it</a></td>
<td>Carlo Meccoli</td>
</tr>
<tr>
<td>14:50</td>
<td>Isfol</td>
<td><a href="http://www.isfol.it">www.isfol.it</a></td>
<td>...</td>
</tr>
<tr>
<td>15:10</td>
<td>Simest</td>
<td><a href="http://www.simest.it">www.simest.it</a></td>
<td>Camillo Maria Pulcinelli</td>
</tr>
<tr>
<td>15:30</td>
<td>Question &amp; Round Table</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Saturday 29 August

BEST PRACTICE FREE TOUR - VISIT ITALIAN TECHNOLOGY
UNDER RESERVATION MAX 40 PAX

09:00  Entrance Faculty  Prof Fernando RECALDE L
Meyer Children Hospital  Florence Careggi
Wooden Eco Social Housing  Florence Novoli
ICT Business Incubator  Lucca (130km from Florence)
Vallisneri School retrofitting  Lucca

13:30 – 14:30  LUNCH BREAK c/o Frangerini Construction Co. Livorno
Advanced Historical Retrofitting  Livorno (60km from Lucca)
Mall Esselunga  Florence (Galluzo)
Hospital Building  Florence

18:00  Entrance Faculty
<table>
<thead>
<tr>
<th>NAME</th>
<th>Day</th>
<th>Programme Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof Ali Sayigh - UK</td>
<td>Wednesday</td>
<td>4</td>
</tr>
<tr>
<td>Dr Ruxandra Crutescu - Romania</td>
<td>Wednesday, Friday</td>
<td>4, 16</td>
</tr>
<tr>
<td>Prof Bahram Moshfegh - Sweden</td>
<td>Wednesday, Friday</td>
<td>5, 17</td>
</tr>
<tr>
<td>Dr Neveen Hamza - UK</td>
<td>Wednesday</td>
<td>5</td>
</tr>
<tr>
<td>Prof Runmimg Yao - UK</td>
<td>Wednesday, Thursday</td>
<td>5, 8</td>
</tr>
<tr>
<td>Prof Mohsen Aboulnaga - Egypt</td>
<td>Wednesday</td>
<td>6</td>
</tr>
<tr>
<td>Dr Herliyani Suharta - Indonesia</td>
<td>Wednesday, Friday</td>
<td>6, 20</td>
</tr>
<tr>
<td>Prof Federico Butera - Italy</td>
<td>Thursday</td>
<td>7, 8</td>
</tr>
<tr>
<td>Mr Rainer Hinrichs – Rahlwes - Germany</td>
<td>Thursday</td>
<td>7, 8</td>
</tr>
<tr>
<td>Prof Ali Hamzeh – Jordan /Syria</td>
<td>Thursday</td>
<td>9</td>
</tr>
<tr>
<td>Prof Khaled Al-Sallal - UAE</td>
<td>Thursday</td>
<td>10</td>
</tr>
<tr>
<td>Prof Manuel C Guedes - Portugal</td>
<td>Thursday</td>
<td>10</td>
</tr>
<tr>
<td>Prof Helmut F O Mueller - Germany</td>
<td>Thursday</td>
<td>11</td>
</tr>
<tr>
<td>Dr John Lowry - UK</td>
<td>Thursday</td>
<td>11</td>
</tr>
<tr>
<td>Prof P Gallo - Italy</td>
<td>Thursday</td>
<td>12</td>
</tr>
<tr>
<td>Prof M Christou - Greece</td>
<td>Thursday</td>
<td>12</td>
</tr>
<tr>
<td>Prof Ana-Maria Dabija - Romania</td>
<td>Thursday</td>
<td>13</td>
</tr>
<tr>
<td>Dr Abdul Salam Darwish - UK</td>
<td>Thursday, Friday</td>
<td>13, 15</td>
</tr>
<tr>
<td>Prof Antonella Trombadore- Italy</td>
<td>Friday</td>
<td>14, 16</td>
</tr>
<tr>
<td>Prof Riadh Al-Dabbagh - UAE</td>
<td>Friday</td>
<td>14</td>
</tr>
<tr>
<td>Prof Anastasia Zabaniotou</td>
<td>Friday</td>
<td>14</td>
</tr>
<tr>
<td>Prof Hassan Nfaoui – Morocco</td>
<td>Friday</td>
<td>15</td>
</tr>
<tr>
<td>Dr Ananda S Amarasekara - USA</td>
<td>Friday</td>
<td>17</td>
</tr>
<tr>
<td>Dr Shadia J Ikhmayies - Jordan</td>
<td>Friday</td>
<td>18</td>
</tr>
<tr>
<td>Prof Marco Sala – Italy</td>
<td>Friday</td>
<td>18</td>
</tr>
<tr>
<td>Dr Javier Remon - Spain</td>
<td>Friday</td>
<td>19</td>
</tr>
<tr>
<td>Dr Kamil Yousif</td>
<td>Friday</td>
<td>20</td>
</tr>
<tr>
<td>Prof Dania G. Couret - Cuba</td>
<td>Friday</td>
<td>21</td>
</tr>
<tr>
<td>Prof Fernando Recarlde L. - Italy</td>
<td>Friday</td>
<td>22</td>
</tr>
</tbody>
</table>
Among the Sponsors

- ABITA
- WREC
- VERDIANA School of Architecture
- LUNGARNO Hotel Mediterranean
## Programme at Glance 25-29 August 2015

<table>
<thead>
<tr>
<th>DAY</th>
<th>TIME</th>
<th>Tuesday 25</th>
<th>Wednesday 26</th>
<th>Thursday 27</th>
<th>Friday 28</th>
<th>Saturday 29</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGISTRATION – School of Architecture</td>
<td>09:00 – 17:00</td>
<td>Mediterranean OPENING &amp; Plenary</td>
<td>Two Parallel Plenary – LEA at MT &amp; Renewable Energy at RE - First Floor Theatre</td>
<td>Two Parallel Plenary – LEA at MT which includes Business Session &amp; Renewable Energy -RE First Floor Theatre</td>
<td>All Day Outside</td>
<td>Free Trip visit to architectural Best Case application. Trip starts from School of Architecture At 9:00 hr</td>
</tr>
<tr>
<td>Exhibition Setting</td>
<td>09:00 – 10:30</td>
<td>Two Parallel Plenary – LEA - MT &amp; Renewable Energy - RE First Floor Theatre</td>
<td>Four parallel Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT &amp; LEA2 Ground Floor Room</td>
<td>Four parallel Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT which includes Business Session &amp; LEA2 Ground Floor Room</td>
<td>From 9 to 6 pm lunch &amp; guided Tour is provided We can have only Twenty Extra Persons</td>
<td></td>
</tr>
<tr>
<td>Coffee Break</td>
<td>10:30 – 11:00</td>
<td>Exhibition Setting</td>
<td>Four Parallel Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT &amp; LEA2 Ground Floor Room</td>
<td>Four Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT includes Business Session &amp; LEA2 Ground Floor Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lunch Break</td>
<td>11:00 – 13:00</td>
<td>Two Parallel Plenary – LEA - MT &amp; Renewable Energy - RE First Floor Theatre</td>
<td>Four Parallel Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT &amp; LEA2 Ground Floor Room</td>
<td>Four Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT includes Business Session &amp; LEA2 Ground Floor Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibition Setting</td>
<td>13:00 – 14:30</td>
<td>Twelve Parallel Plenary – LEA - MT &amp; Renewable Energy - RE First Floor Theatre</td>
<td>Four Parallel Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT &amp; LEA2 Ground Floor Room</td>
<td>Four Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT includes Business Session &amp; LEA2 Ground Floor Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tea Break</td>
<td>14:30 – 16:00</td>
<td>Exhibition Setting</td>
<td>Four Parallel Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT &amp; LEA2 Ground Floor Room</td>
<td>Four Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT includes Business Session &amp; LEA2 Ground Floor Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WREN COUNCIL Meeting Main Theatre – School of Architecture</td>
<td>16:00 – 16:30</td>
<td>Twelve Parallel Plenary – LEA - MT &amp; Renewable Energy - RE First Floor Theatre</td>
<td>Four Parallel Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT &amp; LEA2 Ground Floor Room</td>
<td>Four Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT includes Business Session &amp; LEA2 Ground Floor Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tea Break</td>
<td>16:30 - 18:00</td>
<td>Twelve Parallel Plenary – LEA - MT &amp; Renewable Energy - RE First Floor Theatre</td>
<td>Four Parallel Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT &amp; LEA2 Ground Floor Room</td>
<td>Four Technical Sessions RE1 –First Floor Theatre &amp; RE 2 – Ground Floor Room LEA1 – MT includes Business Session &amp; LEA2 Ground Floor Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17:30 – 18:00</td>
<td>WREN – Springer Dinner by Special Invitation Outside Venue</td>
<td>Gala Dinner*** By Tickets</td>
<td>Gala Dinner*** By Tickets</td>
<td>Gala Dinner*** By Tickets</td>
<td>CLOSING</td>
<td></td>
</tr>
</tbody>
</table>