

International Conference on Sustainability in Energy and Buildings

Invited Session

Title of Session:

HyRES and BIM for Med Green Energy and Sustainable Buildings

Name of Chair: N. K. M'Sirdi Professor Aix Marseille University

co chairs: Aziz Naamane (Polytech Marseille) and Aziz Boukara (Architect from ENSAMarseille)

Description:

The Mediterranean countries have their specificities linked to geography meteorology and cultures. This has an important impact on the renewable energy resources and the energy uses and demand. Using existing solutions need very often an adaptation and adjustments and are not compatible ; We must also keep in mind the evolution and progress of the cities and buildings. Simulation and design tools are more and more powerful and complex, mixing several skills and specialities (in architecture, civil engineering, social communities' topics among others), all of them involved in buildings design energy harnessing and optimization and sustainability. The question of BIM (Building Information Modelling) is how to gather, share and distribute information, parameters and collaboration in an optimal way with flexible inter-operability.

This is a main point in the interest of the Mediterranean green energy network and the Mediterranean researchers and the members of the HyRES Lab.

This session has the objective to point out some specific problems related to Energy demand and production and then try to define specific solutions and research methodologies.

The topics of the papers in this session are mainly :

- HyRES: Hybrid Renewable Energy Sources and Systems for buildings
- Control and monitoring of multiple energy systems
- Prediction of energy production and demand
- heating, HVAC, thermal envelop of buildings
- Simulation analysis and control of buildings systems
- software tools, BIM and BEM (Building Energy Modelling and management)
- System adaptation for grid connections
- Smart grids and energy distribution and sharing
- Smart and multi-layer grids
- Optimal control and connections adaptation.

Website URL (if any): <http://nkms.free.fr/MGEF/MGEN.htm>

The RMEI Network <http://rmei.info/index.php/en/>

Email & Contact Details:

Nacer K M'Sirdi, professor AMU (Aix Marseille University & RMEI member, Dean of the MERIE Group in the RMEI and the HyRES Lab.

nacer.msirdi@rmei.eu or nacer.msirdi@lsis.org