

ANNOUNCEMENT AND CALL FOR PAPERS

30° NATIONAL CONFERENCE IN BOLOGNA

BEYOND ENERGY CERTIFICATION: BUILDING-PLANT SYSTEM PLANNING AND MANAGEMENT AIMED AT OPTIMIZATION OF COMFORT AND ENERGY CONSUMPTION

Friday, October 19, 2012 - Bologna - SAIE BolognaFiere

The 2012 edition of AiCARR National Conference, to be held under International Building Exhibition SAIE and the energy and sustainability theme area SAIENERGIA, is dedicated to the topic:

Beyond energy certification: building-plant system planning and management aimed at optimization of comfort and energy consumption

The new target of "nearly zero energy buildings" and the improvement of the energy performance of the existing ones requires integrated solutions between building envelope and technical systems, considering the integration of renewable sources too.

Beyond the analytical evaluations for the energy classification of buildings, the complexity of the building-plant system requires a careful evaluation, especially in the design phase, about the effect of the adopted solutions on the provided comfort conditions, assessed with reference to the year-round management of HVAC plants.

The hygrothermal comfort conditions (and, in general, all the aspects relating to IEQ) are strongly affected by the capacity of the HVAC system to adapt quickly to seasonal and daily climate variations, that often occur in our country. Comfort levels are also affected by the influence of effective conditions of a natural and/or forced ventilation, and by different needs and use profiles that occupant can request.

These factors have strong impacts on the building's actual energy needs, often resulting in significant differences compared to the forecasting assessments carried out by semi-stationary models and in standard reference conditions, typically quite different from actual time profiles of climatic and plants employment variables.

In this context, the role of the control and management systems becomes fundamental: in addition to the specific performance of the adopted hardware system, the management software should be able to allow the user's requirements by adapting plants operation to the characteristics of the building, and, at the same time to allow an efficient use of available renewable energy sources.

AiCARR conference explores different aspects related to comfort conditions, while providing reflections on the right choice of the plant system, on the use of renewable energy sources, and on the proper management of the plant, which should ensure high performances and energy savings.

FREE PAPERS – ABSTRACT SUBMISSION

Free papers will be closely related to the conference theme and bring practical experiences with analysis on the following aspects: health, energy saving, ventilation, renewable energy sources, plant managing and supervising, energy monitoring, energy management systems.

Those interested should submit an abstract (1'500 characters including spaces) by June **4th, 2012**, via the site www.aicarr.org , section "Convegni" >Area Relatori/Author Area > Invio Abstract / Send abstracts".

Abstracts submitted via e-mail, fax or otherwise will not be accepted.

Abstracts submitted after the deadline will not be accepted.

In order to submit an abstract and its report you need to access a restricted area of the site.

AICARR members can log on with their usual username and password; non-members have to register themselves by entering the required personal details.

Acceptance of abstracts will be notified by June 18th, **2012**.

Authors who have received the acceptance of abstract will send the report, again via the website, no later than **July 16th, 2012**. **Acceptance will be notified by July 30, 2012**.

The free papers of particular interest and relevant to the conference theme will be included in the oral presentations program.

For all free papers a space for presentation of posters is provided. It requires the presence of the author (or coauthor) to answer questions from the audience.

Authors are required to access the speakers area ("Area Relatori") sub-section, in the conference ("Convegni") section of the site www.aicarr.org in order to:

- examine how to attend the AiCARR conference;
- download the templates to be used for compiling the report and poster.

For information: Gabriella Lichinchi (gabriellalichinchi@aicarr.org)