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CALL FOR PAPERS

There is a general awareness of the leading role played by HVAC in improving the health and quality of humans' life. In the past, most of the attention in the scientific literature has been devoted to energy consumption and environmental impact of air conditioning while preserving the comfort of occupants with a relatively lower attention for the repercussion on health. Nowadays, the pandemic caused by Covid-2019 has dramatically shifted a large amount of efforts of the HVAC sector towards the key role of HVAC in reducing the risk of virus infection. The consequence of this perspective change is twofold. First, it represents a unique opportunity to properly address the potential benefits of HVAC also on other relevant pathologies (cardiac, respiratory, infection by other pathogens, among others) while improving the comfort and the person productivity, with the consequent social and economic advantages. Second, it may play a key role to accelerate the transition towards new environmentally friendly technologies in compliance with the 2030 agenda. In general, there is a clear need of new integrated approach for the equipment, systems and building design under the paradigm of a healthy built environment.

This conference welcomes any contribution in the HVAC sector dealing with new components and systems, new design approaches, studies about the related impact on comfort and health of occupants and operators, new monitoring and control systems, insights about the relation between HVAC and pathologies or pathogens diffusion, environmental impact of the new technologies, economic and social consequences.

CONGRESS RULES

Abstracts acceptance will be communicated by April 16, 2021

Number of proposed topics:
max 2

Abstract sent via e-mail, fax etc. will not be accepted as well as those sent after the submittal deadline.

Rules of the Conference for the Authors are published on AiCARR website www.aicarr.org > *Eventi* > *area relatori* > *regole congressuali*

DEADLINES

April 16, 2021: abstracts acceptance notification

Mai 21, 2021: submission of first round manuscripts

June 18, 2021: completion of peer review

June 30, 2021: final papers submission

July 14, 2021: Final acceptance papers

CONSULTA INDUSTRIALE



CONFERENCE TOPICS

New HVAC components and systems

- ◆ Domestic, Commercial, and Industrial Refrigeration Heat Pumps
- ◆ Alternative Cooling and Heating Technologies
- ◆ Heat-Driven Refrigeration Technologies
- ◆ Power and Co-Generation Equipment
- ◆ Energy Storage Technologies
- ◆ Energy Recovery Technologies
- ◆ Innovative Building Materials

HVAC impact on comfort and health of occupants and operators

- ◆ Indoor Environment: Indoor Air Quality
- ◆ Thermal, Acoustic, and Visual Comfort
- ◆ Insights about the relation between HVAC and pathologies or pathogens diffusion
- ◆ Ventilation for infections control
- ◆ Filtration Systems for Contaminant Control
- ◆ Occupational health, environmental emissions and safety considerations

Environmental impact of the new technologies, economic and social consequences

- ◆ Best practices and risk evaluations and management in residential, commercial and industrial ventilation and air conditioning systems application
- ◆ Energy efficiency, productivity, sustainability

New design approaches

- ◆ Building Simulation and Systems Modeling
- ◆ Quasi-Steady & Dynamic HVAC Equipment Modeling
- ◆ Case Studies and Integrated Building Design
- ◆ AI applications, optimization models, data mining

New monitoring and control systems

- ◆ Smart Buildings, Controls and Automation
- ◆ Measurement and test & balancing techniques
- ◆ Building Data Analytics
- ◆ IoT Applications in Buildings

All papers will be presented in English