INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:

Advanced Assessment Methods, Tools and Design Solutions for users' Well-Being in Buildings

Name, Title and Affiliation of Chair:

Prof. Elisa Di Giuseppe, Università Politecnica delle Marche (Italy)
Dr. Arianna Latini, Università Politecnica delle Marche (Italy)

Details of Session (including aim and scope):

As buildings account for **40% of total energy use** and people in industrialized countries spend more than **90% of time indoors**, there is a growing need to: i) properly assess the influence of **indoor environmental conditions** on individuals' living and working conditions; ii) and develop solutions to optimise **people well-being** while limiting environmental impacts and costs.
Several drivers related to building characteristics (e.g., building and systems design, layout and colours, Indoor Environmental Quality) strongly influence users' productivity, well-being, health, comfort and behaviour, with huge social, environmental and economics consequences.
International policies push towards less energy-consuming buildings while creating more liveable spaces. This means develop suitable strategies to reach economic and environmental targets while increasing end-users' comfort, satisfaction, health and productivity in buildings.
Therefore, this session aims to **disseminate significant contributions on methodologies, tools and design solutions to address and improve users' well-being, health, behaviour and working efficiency in buildings**.
Review, methodological, computational and experimental papers are invited for consideration on the following topics (but not limited to):

- Laboratory-based and real-case studies on human comfort, behaviour, and work-efficiency: from short-term to long-term monitoring campaign;
- Interdisciplinary and multi-domain (cross-modal and combined effects) investigations;
- Innovative research tools to enhance **«**human factors**»** assessment in the built environment (e.g. Virtual Reality, Augmented Reality, etc.);
- Objective measurements (e.g. tasks, behavioural response) and subjective evaluations (e.g., longitudinal field-survey) of human responses in buildings;
- Physical (e.g. body temperature, heart rate, EEG, etc.) and psychological status (e.g. mood) investigations.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Website URL of Call for Papers (if any):

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