

Humboldt Kolleg

Hilton Garden Inn Hotel, Doamnei St. 12, Bucharest
18-22 November 2020

Global Challenges of the 21st Century

- 1) Technological development and human health/ quality of life*
- 2) Climate change and environmental sustainability*
- 3) Democracy and cohesion in Europe*

The Use of Wholesome Human Thermo-physiological Indices to Access Existing and Future Thermal Risk Factors Associated to Climate Change

Within existing urban fabrics, the current risk factors associated to human biometeorological thresholds are continuing to reveal both: (1) the extent of the impacts upon urban thermal comfort levels; and, (2) the evidence of such aggravations as a result of climate change impacts. This presentation will discuss the role and application of wholesome assessment of such risk factors that are expected to continue to augment throughout the unravelling of the twenty-first century. Such risk factors will have direct and sequential consequences upon the specific human biometeorological system – that must be properly quantified as such atmospheric stimuli continue to amplify.

Within the presentation, thermo-physiological models and indices will be discussed as a means to identify and inform bottom-up local responses to such existing and future risk factors within specific climate typologies as stipulated through the Köppen Geiger classification system. The disclosed approach is one which feeds the increased need for interdisciplinary ‘bridging’ amongst different professionals, including with non-climate experts who shall also play an equally fundamental role in shaping the future conditions and safety of urban fabrics.

Andre Nouri is an Urban Designer with an Architectural background from the UK, who specialises in the examination and improvement of urban local human thermal comfort thresholds. Such a research focus is centred upon the pursuit of improving/maturing in-situ interdisciplinary bottom-up adaptation approaches that can address both: (1) existing human biometeorological risk factors; and in addition, (2) those to be expected as a result of potential climate change impacts exacerbating these identified human thermo-physiological conditions. After working in the UK within the private and

public sector, Dr Nouri obtained his PhD in Urbanism, at the Faculty of Architecture of the University of Lisbon – Portugal (FAUL), where he was also an associated Collaborative Researcher within the Research Centre for Architecture, Urbanism, and Design at FAUL. Beyond his research activities, he has also taught in various institutions, including within different faculties at the University of Lisbon and within the NICAI centre at the University of Auckland - New Zealand. Presently, he is an Assistant Professor at the Department of Interior Architecture and Environmental Design (IAED) of the Faculty of Art, Design and Architecture at Bilkent University, Ankara – Turkey.