

NETWORKS, MARKETS & PEOPLE - NMP2024

THEMATIC SESSIONS - TS

TS-22-SUPERSESSION INTERCLUSTER SITDA TSECA2- TECH-DRIVEN ARCHITECTURAL TRANSITIONS FOR FUTURE CITIES

Keywords: Sustainable Environmental Urban Design, Technological Integration, Net Zero Energy, Climate and Carbon Neutrality, Digital and Cognitive Integration, Resilient Infrastructure.

The „Tech-Driven Architectural Transitions for Future Cities“ session calls for applied research papers that investigate the confluence of environmental technology with sustainable architectural and urban design. Our theme prioritizes the transformative integration of techno-environmental insights into designs that embody energy efficiency, aiming for Net Zero and Positive Energy standards. Participants will engage with the shift towards Carbon & Climate Neutrality, examining how applied research can optimize design within cultural, social, and bio-physical contexts to meet the exigencies of climate change. The session is particularly interested in systemic, scalable innovations in technological and environmental design, the refinement of energy and environmental protocols, and the bolstering of urban resilience.

We encourage submissions that provide insights into eco-efficient governance, smart community development, and the deployment of digital and cognitive technologies for lifecycle management of the built environment. Papers should underscore novel approaches to sustainable urban renewal, the impact of green cities initiatives, and computational modeling techniques that offer new dimensions of control and integration in complex architectural processes. This session will be a forum for interdisciplinary dialogue, showcasing research that bridges the gap between traditional practices and the digital frontier, steering the global architectural narrative towards a future of sustainable, intelligent, and adaptive cities.

CHAIRS

Corrado Trombetta - Mediterranea University of Reggio Calabria, Italy.

Between 1989 and 2000, he carried out activities in the DASTEC of the Mediterranean University in the SSD ICAR/12. Since 2013 he has been working in the dArTe and has participated in research with companies admitted to financing on a competitive basis, securing several of them. Important is his activity as Scientific Director of the BUILDING FUTURE Lab., funded for €8.6 million, which allows him to access research such as the HORIZON2020 project “METABUILDINGSLab.”, still in progress, or the CHINA-ITALY InnovationWeek. Since 2023 he has been on the TEAM of Experts for the Evaluation of MiUR/PON Research Infrastructures. In 2021, he is a member of the SCIENTIFIC COMMITTEE for the COBEE22 Conference in Canada.

Cesare Sposito - Palermo University, Italy.

Cesare Sposito, Architect and PhD, is an Associate Professor of Architectural Technology at the Department of Architecture, University of Palermo (IT). He is the Scientific Director of AGATHÓN | International Journal of Architecture, Art and Design, and of the publishing series Project | Essays and Researches (Palermo University Press); he is a founding member of DEMETRA Ce.Ri. Med. (Euro-Mediterranean Centre for Documentation and Research), and SITdA (Italian Society of Architectural Technology).

Filippo Angelucci - ‘Gabriele d’Annunzio’ University, Italy.

Filippo Angelucci, Architect, PhD on Environmental Design, is Associate Professor of Architectural Technology at the Department of Architecture of the “G. D’Annunzio” University of Chieti-Pescara. He is member of SITdA – Società Italiana della Tecnologia dell’Architettura/Italian Society of Architectural Technology in which, from 2020, is member of the Directive Council and delegate of the Commission “Techne Journal and Publications”. Before his academic activities, he has carried out professional works as a consultant and team-component in the field of environmental design and planning.

Stefano Cascone - Mediterranea University of Reggio Calabria, Italy.

Stefano Cascone is a fixed-term researcher pursuant to Article 24, paragraph 3, letter a) of Law 240/2010 at the Department of Architecture and Territory of the Mediterranean University of Reggio Calabria. In 2016, he undertook a research collaboration at Werner Sobek AG in Stuttgart, Germany, for a period of six months. In December 2019, he obtained his PhD in „Evaluation and Mitigation of Urban and Territorial Risks“ from the University of Catania, presenting a thesis entitled „Innovative Solutions and Performance Assessment of Green Roofs“ in the context of the Competitive Sector 08/C1. For the academic year 2023/2024, he is the lecturer of the university course „BIM and Management of the Built Environment“. He is part of several research groups characterized by national-level collaborations.