

NETWORKS, MARKETS & PEOPLE - NMP2024

THEMATIC SESSIONS - TS

TS-22-SUPERSESSION INTERCLUSTER SITDA TSPA1 - REGENERATIVE DESIGN AND IMPACT ASSESSMENT FOR CLIMATE ADAPTATION

Keywords: Impact; Regenerative; Simulations; Digital Technologies; Co-Design.

In a climate change regime, regenerative design is the most complex but also the most powerful translation of advanced sustainable design. That which experiments with the ‘resilience of urban systems, buildings and public spaces in the built environment’, in fact changes the very concept of the hybrid system, in the architecture of its possible forms and materials and contextual spaces, in its functions as an urban device, as an ecological and technological device, or even as a device for ‘living’ or ‘carrying out activities’. In this sense, it is necessary to ask whether there is a real ‘climate dimension of resilience’ that, by measuring itself in local contexts, in terms of the effects that mitigation and adaptation actions must trigger, can have a global impact on the causes and effects that they generate, through an approach that is as much strategic as it is design-oriented. The session proposes to trace, in the experiences of applied scientific and academic research, trajectories that illustrate the predictive and forecasting characteristics of the project at its design levels, in innovative scenarios of the self-reliant approach, the error-friendliness approach, the dynamic-responsive approach, in which the assessment systems adopted are also used for the purpose of the project. Thus, co-design practices mark a different participation of users in contributing to the production of new levels of energy and environmental efficiency and production, towards adaptation and participation in the reduction of climate risk impacts.

CHAIRS

Consuelo Nava - Mediterranea University of Reggio Calabria, Italy.

Consuelo Nava, architect, Associate Professor and PhD in Technological and Environmental Design in Architecture at the Department of Architecture and Territory of the Mediterranean University of Reggio Calabria; she is coordinator of the Master’s of degree in Architecture and Deputy Director of the Department. Coordinator of the local Cluster “Environmental Design” and member of Italian Society of Architectural Technology (SITdA). She is PI and lead team, also evaluator of national and international tenders and leads teams in highly innovative research paths. She is the director of the master class ‘Regenerative Digital Design for Climate Change’, a high level training programme at national level.

Mario Losasso - University of Naples Federico II, Italy.

Mario Losasso, architect, Full time Professor of Architectural Technology, Head of the Department of Architecture, University of Naples Federico II from 2013 until 2018. From 2021, is Rector’s Delegate for Building, maintenance and new settlements, University of Naples Federico II; from 2022 is coordinator of the Spoke “Urban and metropolitan settlements” of PNRR PE3 “Progetto “Multi-Risk sciEnce for resilient commUnities under a changiNg climate (RETURN)”; from 2020, is Delegate for External Relations of Scuola Politecnica e delle Scienze di Base, University of Naples Federico II; Erasmus Coordinator, Faculty of Architecture of the University of Naples Federico II and Hochschule für Technik Berlin - University of Applied Sciences.

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Full Professor in Technology of Architecture and Environmental Design, PDTA Dept., Faculty of Architecture, “Sapienza” University of Rome (structured since 2001), where he is: Director of the Department Planning, Design, Technology of Architecture (since 2021); Director of the II level Master in Environmental Technological Design (since 2020); Coordinator of the Curr. Environmental Technological Design of the PDTA PhD Program (since 2020); Scientific Supervisor for Doctorate International Exchanges with the Ecole Nationale Supérieure d’Architecture (ENSA) of Grenoble, Toulouse, Nancy and Paris-Malaquais, and with the Politechnica University of Tirana (since 2019); Scientific Director and Conference Coordinator of 50 International Conferences (since 2001).

Valeria D’Ambrosio - University of Naples Federico II, Italy.

Valeria D’Ambrosio, Associate Professor at the Department of Architecture of the University of Naples Federico II, carries out studies on environmental design and technological retrofit at the building and urban scale with a focus on strategies and design solutions for the climate adaptation and mitigation in urban areas. Her expertise is on Innovation Technology applied to Building Sustainability and of Environment. She has developed knowledge on Building Technological Retrofit, with special focus on energy efficiency upgrading; on Sustainable Technology, and Modelling and Simulation Processes.

Giuseppe Mangano - Mediterranea University of Reggio Calabria, Italy.

Architect PhD, currently early career Researcher at the Department of Architecture and Territory of the Mediterranean University of Reggio Calabria. He has developed a qualified profile on the management of competitive projects in the field of EU policies and co-design on the field of environmental design, with a focus on the topics of innovation and sustainable development in urban and inland areas. He has expertise on the issues of project Sustainability Assessment with recognised protocols such as Minimum Environmental Criteria and principles DNSH, Agenda2030 and WELL and the application of decarbonisation and water resource management devices (NBS and SUDS).