

Joint R&D contributions for the modern, sustainable building

Date/Time: Monday, 09/09/24, 10:00-13:15

Venue: Multipurpose Hall, Aimilios Riadis, Thessaloniki International Fair area (free entry)

Event scope:

55% of the world's population lives in urban areas and this number is estimated to increase to 66% by 2050 based on United Nations Department of Economics and Social Affairs study. As far as Europe is concerned, 72% of the EU 28 citizens live in cities and urban areas. Continuous urbanization along with global challenges like climate change, cleaner energy and local technologies for smart & sustainable buildings will continue and will remain complex and strong.

Smart buildings play a crucial role in the functioning of smart cities by optimizing resources usage and improving residents' experience. From optimized energy usage to lighting and indoor air quality, smart building technology can help buildings become flexible and reactive to needs and demands, i.e. sustainable, ensuring both comfort and efficiency. In particular, using advanced cool materials in the urban built environment allows mitigating heat islands and improving thermal comfort.

The coexistence of such multifaced and interdependent technologies aimed to modernize buildings and make them more sustainable provides a very good R&D context enabling researchers to adopt more holistic approaches and solve more complex problems. Moreover, with technologies such as connected buildings, IoT and digital twins the scale up of smart cities modeling and smart cities experiments has been possible. This creates an ideal context for all quadruple helix stakeholders (industry, academia/research, government and society) to study and analyse modern buildings with a broader view and scope to support municipalities and their citizens to modernize their urban spaces & infrastructures by adopting new concepts about cities and buildings.

How does the research community in Europe aim to respond to these joint challenges? Where and how the required research infrastructures able to simulate smart buildings and soon smart cities should be created to tackle such important societal challenges? Thess INTEC, as a big 4th generation Technology Park can provide both the space and the proper R&D context to both Greek and German research organizations to joint efforts, simulate real buildings and develop substantial innovations following the concept 'test before invest'. The event aims to bring together industrial and research stakeholders from Germany and Greece to discuss and mature this idea and identify any possible opportunity to make it a reality.

Sponsors



Final Agenda: Monday, 9th of September, Multipurpose Hall Aimilios Riadis at TIF

- 09:45-10:00 Registrations
- 10:00-10:15 Co-organizers' addresses
- Dr. Nikos Efthymiadis, Thess INTEC Chairman
 - Professor Johannes Orphal, Karlsruhe Institute of Technology
- 10:15-10:30 **Keynote speech:** Professor Mattheos Santamouris, University of New South Wales, Australia
- 10:30-11:50 ***Perspectives of Industries & Research Institutions***
- Presentations from CERTH, KIT and 4-5 Greek and German Industries active in several modern building's technical areas (building materials, chemicals & mortars, elevators, metals, panels, frames, sensors and control systems etc)*
- Coordinator:** Professor Nicolas Moussiopoulos, AUTH, Advisor to Thess INTEC
- ISOMAT, Konstantinos Aslanis, R&D and Technical Support Director
ALUMIL, Alexandros Mylonas, Group Sales Director
SIEMENS A.G, Charis Toloumis, Head of Digital Solutions
KLEEMANN, Stavros Petridis, R&D Electronics Senior Manager
CERTH, Dimos Ioannidis, Researcher B'
KIT/Institute of Regional Science, Professor Michael Janoschka,
KIT/Institute of Building Design & Technology, Professor Dirk Hebel (online)
Thess INTEC, Nikos Katsiadakis, Ecosystem Development
- 11:50-12:10 Coffee break
- 12:10-12:30 ***Panel: Prospects of synergetic activities to be hosted by Thess INTEC***
- Professor Johannes Orphal, Karlsruhe Institute of Technology
Dr. Dimitrios Tzovaras, CERTH Chairman
Professor Nicolas Moussiopoulos, AUTH, Advisor to Thess INTEC
- 12:30-13:15 Panel discussion (all previous speakers)
- Panel Coordinator:** Dr. Nikos Efthymiadis, Thess INTEC Chairman
- Light lunch and networking

Please register by using this [link](#) (registration is required **until 6/9/24**)