

CLUSTER INTERNATIONAL CONFERENCE

**NEW DESIGN FOR
A SUSTAINABLE
BUILT ENVIRONMENT:
INDUSTRIAL PROCESSES,
INFRASTRUCTURES,
BUILDINGS COMPONENTS,
ENERGY MANAGEMENT
IN RESEARCH AND
INNOVATION ACTIONS**

COORDINATOR: PROF.SSA ANNARITA FERRANTE

ORGANIZING COMMITTEE: ANASTASIA FOTOPOULOU AND CECILIA MAZZOLI

16TH DECEMBER

Aula Prodi

Dipartimento di Storia Culture Civiltà

Università di Bologna

Piazza San Giovanni in Monte 2, Bologna, Italy



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DIPARTIMENTO DI ARCHITETTURA
DIPARTIMENTO DI ECCELLENZA MIUR
(L.232 DEL 1/12/2016)

architettibologna 



KEYWORDS

SMART FACADE

INDUSTRIAL PROCESSES FOR THE DEEP RENOVATION OF BUILDINGS

RECYCLABLE MATERIALS AND COMPONENTS FOR CIRCULAR ECONOMY

RENEWABLE ENERGY SYSTEMS

HVAC SYSTEMS

SMART GRID

The Department of Architecture of the University of Bologna is promoting a clustering event in relation to the most updated experiences connected to energy efficiency in **building's technological design**.

The clustering event is an important opportunity to focus on the scientific researches that have led to **major technological innovations**, as Plug & Play, high performance and energy saving solutions, new tools and strategies to encourage large scale deep renovation and major transformation of existing buildings and promote new energy efficient design in the EU.

For the full success of this initiative, Universities, Industries and Public Bodies that have participated as coordinators or partners in **Innovative Actions funded by European Research** projects (completed or in progress) are warmly invited to share and discuss the outcomes of the researches on the design and prototyping of innovative elements in the building sector.

These outcomes are intended to be representative of **new components and materials, new design processes, new industrial methods for manufacture and assembly building and infrastructural components, new design strategies**. They should be related to:

- reduction of environmental impact;
- control of energy consumption;
- renewable energy systems and smart grids;
- business model and exploitation;
- circular economy.

The scope of this initiative is to provide a comprehensive framework of the state of art related to existing or in progress **innovative technologies for energy efficiency and circularity in the building sector**.

Stakeholders such as building owners, local authorities, urban planners, investors, design firms and other supply and technological solution providers, as well as important industrial actors in Prefab Plug & Play systems will be invited as they have an important role in the implementation and dissemination of the project results.

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/ Program

16th December 2019

- 09.30 – 10.00 *Welcome and Introduction (Prof. Annarita Ferrante)*
- 10.00 – 10.40 **Keynotes from Module 1 – Smart Façade**
- 10.00 – 10.20 “TES Energy Façade (Timber-based Element System for improving the energy efficiency of the building envelope)”
TUM Department of Civil, Geo and Environmental Engineering, Technical University of Munich - Stephan Ott
- 10.20 – 10.40 “MORE-CONNECT (Development and advanced prefabrication of innovative, multifunctional building envelope elements for MODular RETrofitting and CON-NECTions)”
Huygen Installatie Adviseurs - Simona D’Oca
- 10.40 – 11.20 **Keynotes from Module 2 – Industrial processes for the deep renovation of buildings**
- 10.40 – 11.00 “ReCo2ST - Residential Retrofit assessment platform and demonstrations for near zero energy and CO2 emissions with optimum cost, health, comfort and environmental quality”
Technical University of Crete, School of Environmental Engineering - Angeliki Mavrigiannaki
- 11.00 – 11.20 “RenoZEB - Accelerating Energy renovation solutions for Zero Energy buildings and Neighbourhoods”
RINA Consulting Spa - Daniela Riccardo
- 11.20 – 11.40 Coffee break
- 11.40 – 12.20 **Keynotes from Module 3 – Construction processes and technology building blocks**
- 11.40 – 12.00 “P2Endure - Plug-and-Play product and process innovation for Energy-efficient building deep renovation”
DEMO Consultants B.V. - Oana Schippers-Trifan

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- 12.00 – 12.20 “4RinEU - Robust and Reliable technology concepts and business models for triggering deep Renovation of Residential buildings in EU”
EURAC Research, Institute for Renewable Energy - Roberta Pernetti
- 12.20 – 14.00 Lunch
- 14.00 – 14.40 **Keynotes from Module 4 – Renewable energy and HVAC systems**
- 11.40 – 12.00 “TESSe2b - Thermal Energy Storage Systems for Energy Efficient Buildings. An integrated solution for residential building energy storage by solar and geothermal resources”
Polytechnic Institute of Setubal, Mechanical Engineering Department
Luís Coelho
- 12.00 – 12.20 “ZERO-PLUS - Achieving near Zero and Positive Energy Settlements in Europe using Advanced Energy Technology”
National and Kapodistrian University of Athens, Department of Physics
Margarita Assimakopoulou
- 14.40 – 15.20 **Keynotes from Module 5 – Smart grid**
- 14.40 – 15.00 “SMART GEMS Energy Network”
Technical University of Crete, School of Environmental Engineering
Kostas Gobakis
- 15.00 – 15.20 “GridAbility”
MANGROVIA Blockchain Solutions - Alex D’Elia
- 15.20 – 15.40 Coffee break
- 15.40 – 17.40 **Posters presentation and interdisciplinary focus**
- 17.40 – 18.00 *Closing the conference*
- 18.00 – 19.00 *Farewell networking & Cocktail buffet*

JOIN OUR CLUSTER CONFERENCE!

The Web Conference will begin at 9.30 am on 16th December 2019.

Log in to <https://webconference.unibo.it/cluster2019/> and enter your name.

The online room will be accessible starting a few minutes before the beginning of the web conference.

Due to limited time, individual technical problems cannot be verified. We advise you to:

- make sure in advance that your device is equipped with the computer tools necessary to listen and see the materials that will be shown on video;
- verify that your device is equipped with Adobe Connect / Flash Player 11.2 or later. Adobe Connect requires the plug-in for Flash Player version 11.2 or later. Make sure you have downloaded and installed it in time for the start.

In case of problems, try switching browsers.

As an alternative to browsers we recommend the ANDROID and IOS smartphone app: <http://www.adobe.com/it/products/adobeconnect/feature-details/adobe-connectmobile.html>"

Participation in the conference will entitle to 5 course credits (CFP) for Engineers and Architects.

For **Architects**: registration on the website <https://eventi.unibo.it/cluster-event-da>.

For **Engineers**: registration on the website <https://formazione.ordingbo.it/>.

In case of impossibility to participate, it is mandatory to cancel in order to allow the participation of other potential interested colleagues.

To obtain the CFP it is necessary to participate in the entire event.

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