

## **8TH INTERNATIONAL CONGRESS ON ARCHITECTURAL ENVELOPES**

19.06.2018

### **TECNALIA brought together over 70 experts in San Sebastian to analyse the arrival of Industry 4.0 to façades**

*From tomorrow and until Friday, the Kursaal will host the forum that will address the use of robotics, artificial intelligence and innovative materials in the design and creation of façades 4.0.*

**San Sebastian, 19th June 2018.** Digitalisation has burst into the world of façades to create more efficient designs in energy and production terms. This tendency has given rise to façades 4.0, which will be the main feature of the 8th International Congress on Architectural Envelopes, ICAE 2018, organised by the TECNALIA research and technological development centre, will take place from tomorrow, Wednesday, until Friday at the Kursaal Congress Palace in San Sebastian. Over 70 international experts will be present to address the possibilities that the use of Industry 4.0 offers to the world of architectural envelopes.

Over three days, this international conference will cover the use of innovative materials on facades, new façade installation methods with robots or the use of innovative technological solutions in the field of renovation. It will also look at the use of renewable energy in architectural envelopes, fire safety of façades, smart windows, new types of sensors for connected envelopes and new manufacturing methods, such as 3D printing.

Among the innovations to be presented, it is worth highlighting the launch of "eco-materials" onto the market to construct healthier buildings, designed by TECNALIA with the collaboration of the Basque Government's public company, VISESA. These materials, of which more than 60% derive from natural and renewable raw materials, have a dual purpose: increase the air quality inside the buildings, preventing illnesses deriving from damp or harmful chemical substances; and foster thermal insulation, which allows for energy savings of 25%. There are currently prototypes in three buildings: two in the Basque Country, in Kubik, the TECNALIA demonstrator building located in Derio; in a residential building that is being constructed by VISESA in the Morlans neighbourhood of San Sebastian; and a third one in Tartu (Estonia), a building annexed to a sports complex.

### **INTERNATIONAL SPEAKERS**

Among the presentations, it is worth highlighting that of Norbert Praille from Züblin AG, who will speak about the change that the façade sector faces thanks to the presence of the leading technological companies; Ger Gijzen from UNStudio will reveal how the new technologies affect the design process of a skyscraper and Jorge Beroiz from Callison RTKL will speak about the importance of envelopes in the design of this type of building; Anna Wendt from BuroHappold will explain the design process of a unique roof, such as that of the new Louvre in Abu-Dhabi; and Erik Rasker from Reynaers will talk about the effect

of the digital era on façades. Carlos Ferrater (OAB) and Manuel Aires Mateus (Aires Mateus e Associados) will also give their vision of the world of façades and its relationship with architecture.

The congress will be rounded off with an exhibition of the latest developments by more than 20 companies from the sector, such as Alucoil, Alumán Group, Heidelbergcement Hispania, etc.

The 8th International Congress on Architectural Envelopes is organised by TECNALIA, in collaboration with the Spanish Association of Manufacturers of Light Façades and Windows (ASEFAVE), the European Façade Network, the Federation of European Window and Curtain Wall Manufacturers' Associations (FAECF), the Master's degree in Light Façades, the gallery of materials of the Official Association of Architects of Madrid, and the Basque Government.

## **ABOUT TECNALIA**

TECNALIA is a leading Research and Technological Development Centre in Europe, with 1,400 experts representing 30 different nationalities, focusing on transforming technology into GDP to improve people's quality of life, by creating business opportunities for companies. [www.tecnalia.com](http://www.tecnalia.com)