

NB: Conference sessions will be held in English or Spanish with simultaneous interpretation into Spanish or English.

June 20, WEDNESDAY

8:00 - 9:00 Registration			
9:00 - 9:10 Opening and Welcome of the Congress: Iñaki San Sebastian - CEO of TECNALIA / Pablo Garcia Astrain - Director of Housing and Architecture of the Basque Government			
ROOM 1+2		ROOM 1+2	
9:10 - 9:30		9:10 - 9:30	
9:30 - 10:00		9:30 - 10:00	
10:00 - 10:30		10:00 - 10:30	
10:30 - 11:00		10:30 - 11:00	
11:00 - 11:30			
ROOM 3 / ICT + FACADES		ROOM 4+5 / THERMAL IN BUILDING CONSTRUCTION	
11:30 - 11:45		11:30 - 11:45	
11:45 - 12:00		11:45 - 12:00	
12:00 - 12:15		12:00 - 12:15	
12:15 - 12:30		12:15 - 12:30	
12:30 - 12:45		12:30 - 12:45	
12:45 - 13:00		12:45 - 13:00	
13:00 - 13:15		13:00 - 13:15	
13:15 - 13:30		13:15 - 13:30	
13:30-15:00			
NEW DEVELOPMENTS		CALCULATION - SIMULATIONS	
15:00 - 15:15		15:00 - 15:15	
15:15 - 15:30		15:15 - 15:30	
15:30 - 15:45		15:30 - 15:45	
15:45 - 16:00		15:45 - 16:00	
16:00 - 16:15		16:00 - 16:15	
16:15 - 16:45			
16:45 - 17:00		16:45 - 17:00	
17:00 - 17:15		17:00 - 17:15	
17:15 - 17:30		17:15 - 17:30	
17:30 - 17:45		17:30 - 17:45	
English			Language
Facades: past, present and future use of aluminium - marking 50 years of FAECF - Justin Furness (FAECF)		Shaping the Built Environment of Tomorrow. How and Who - Norbert Praille (ED. Züblin AG)	
WASL Tower, computational solutions for a complex façade - Ger Gijzen (UNStudio)		The envelope, a decisive element in a sustainable building certification - Patrick NOSSENT (CERTIVEA-CERWAY)	
COFFEE BREAK, B2B MEETINGS			
Towards a digital workflow for special façade constructions Juan Sebastián Sepúlveda - (SCHÜCO International KG)		An analysis of the potential for envelope-integrated solar heating and cooling technologies for reducing energy consumption in European climates - Peru Elguezabal, Beñat Arregi - (TECNALIA)	
BIM based software tools for the design and simulation of building-integrated photovoltaic systems Philippe Alamy ¹ , Van Khai Nguyen ¹ , Maider Machado ² , Ingrid Weiss ³ - (CADCAMation SA - ² TECNALIA - ³ WIP Renewable Energies)		Building guidelines to provide as-designed solutions for energy-efficient envelopes Benedetta Marradi ¹ , Emanuele Piaia ² , Rizal Sebastian ³ , Eva Kassotaki ³ - (¹ University of Pisa and AICE Consulting, ² University of Ferrara, ³ DEMO Consultants)	
BIM from concept design to fabrication: An optimized methodology for façade consultancies Ana Gállego Fernández, Miguel A. Núñez Díaz, A. Mateo Marcos Núñez - (ENAR, Architectural Envelopes)		Concept for adaptive wall elements with switchable U- and g-value Nikolaus Nestle ¹ , Thibault Pflug ² , Christoph Maurer ² , Frank Prissok ³ , Andreas Hafner ⁴ , Frank Schneider ⁵ - (1BASF SE Advanced Materials and Systems Research - 2Fraunhofer ISE - 3BASF Polyurethanes GmbH - 4BASF Schweiz AG - 5Okalux GmbH)	
Dynamic Façade Albert López Crespo - (SOMFY)		Un glazed Solar Thermal Systems for building integration, coupled with District Heating Systems. Conceptual Definition, Cost & Performance Assessment - Mikel Lumbreras ¹ , Roberto Garay ² , Koldobika Martín ¹ - (University of the Basque Country - ² TECNALIA)	
An ICT energy management system for the management of innovative ventilated envelopes José L. Hernández, Roberto Sanz, Álvaro Corredra, Susana Gutiérrez, Ricardo Palomar, Isabel Lacave (CARTIF technology centre)		Transpired solar air heating & cooling collector Alfonso Pérez Carballo, Almudena Galiana ¹ y J. Emilio Vega ² , Isabel Lacabe ³ (¹ SolarWall Spain, ² Acciona Construcción)	
IOT and Data Analytics: Saving potential for Building Envelopes and Occupancy based office building management Ivan Araquistain, Unai Saralegui, Miguel Angel Antón, Amaia Castelruiz, Jose Manuel Olaizola - (TECNALIA)		Low Temperature Solar Thermal System for Building Envelope Integration Marina Palacios ¹ , Roberto Garay ² , Ignacio Gomis ¹ , Paul Bonnamy ³ , Saed Raji ² , Koldobika Martín ¹ - (Euskal Herriko Unibertsitatea - ² TECNALIA - ³ Nobatek-Inef)	
Les Pavillons des Boulingrins, example of parametric ephemeral architecture. 3d cladding modelling with re-usable criteria C.Valderrama, M.Plociekiewicz, J.Ocampo, F.Cottaz - (Aciroid S.A.)		Structural Glass Connections Carles Teixidor, Jordi Torres, Francesc Arbós - (Bellpart S.A.U.)	
SPONG3D: Developing an integrated 3D-printed façade for thermal regulation in complex geometries - Maria-Valentini Sarakinioti ¹ , Thaleia Konstantinou ¹ , Michela Turrin ² , Martin Tenpierik ³ , Roel Loonen ³ , Marie L. de Klijen-Chevaleras ⁴ , Ulrich Knaack ¹ - (1Delft University of Technology - 2Eindhoven University of Technology)		High-quality edge enameling for architectural glass Ralf Greiner - (Guardian Glass Europe)	
LUNCH, B2B MEETINGS			
EZVENT: an energy efficient ventilated façade retrofitting system. Presentation of the embedded energy storage system A. Dugué ¹ , A. Navarro ¹ , S. Raji ² , P. Bonnamy ³ , D. Bruneau ² (¹ Nobatek/INEFA - ² EnsapBx, GRECAU)		Simulation-based performance prediction of an energy-harvesting façade system with selective daylight transmission Hemshikha Saini, Roel C.G.M. Loonen, Jan L.M. Hensen (Eindhoven University of Technology)	
Innovative curtain wall with solar preheating of ventilation air and integrated control system - Diego González ¹ , Beñat Arregi ² , Roberto Garay ² , Izaskun Álvarez ² , Gorka Sagarduy ¹ - (UXAMA Fachadas Singulares - ² TECNALIA)		Characterisation of the thermal performance of the roof ridge Sunridge® solar hot water system - E. Fuentes, J. Salom - (Catalonia Institute for Energy Research (IREC))	
On the development of a façade-integrated solar water storage D'Antoni M., Bonato P. and Fedrizzi R. - (Eurac Research)		Façade impulse: experimental methods for stretching the envelope beyond human comfort - A. Luna-Navarro ¹ , M. Meizoso ² , H. De Bleecker ³ , Y. Verhoeven ⁴ , M. Donato ² , M. Overend ² - (¹ University of Cambridge - ² Ove Arup, London - ³ Pernasteeleisa group)	
BRESAER. Breakthrough Solutions for Adaptable Envelopes in Building Refurbishment Imanol Aguirre ¹ , Asier Azpiazua ¹ , Isabel Lacave ² , Izaskun Álvarez ² , Roberto Garay ³ - (Department of Innovation, LKS - ² Acciona Infraestructuras - ³ TECNALIA)		OPTIMUS, physics simulations for optimal design Quim Moya Sala - (APOGEA)	
An optimized system that combines industrialized waterproof roofing with high thermal performance insulation in one prefabricated solution - Valérie Huet ¹ , Guillermo Sebastian ² , Didier Broudoux ³ - (¹ Advanced Coatings & Construction Solutions - CRM GROUP, ² ArcelorMittal Construcción España Distribution Solutions Iberia, ³ ArcelorMittal Global Research & Development)		Hybrid numerical and experimental performance assessment of structural thermal bridge Roberto Garay Martinez - (TECNALIA)	
COFFEE BREAK, B2B MEETINGS			
Smart modular heat recovery unit (smhru) installed in the cavity of a ventilated façade Alberdi Lizaso, H. Urza Mardaras, I. Martinez Urrutia, A. - (TECNALIA)		Façade taxonomy: A shared tool for new façade developments Cristina Pardal, Oriol Roig, Ignacio Paricio - (Polytechnic University of Catalonia)	
Design, fabrication and demonstration of a multifunctional module for sustainable façade lighting based on ETFE architecture - A. Menéndez ¹ , A.L. Martínez ² , A. Santos ³ , B. Ruiz ³ , K. Moritz ³ , I. Klein ³ , J. Diaz ² , A.R. Lagunas ³ , T. Sauermann ³ , J.R De Las Cuevas ³ , D. Gómez ² - (ITMA Materials Technology - ² Taiyo Europe GmbH - ³ Fundación CENER-CIEMAT - ⁴ OPVIUS GmbH - ⁵ ACCIONA INFRAESTRUCTURAS)		Refurbishment of light facades: Jacobo P-Campomanes Guilbert, Jesús M. Cerezo Miguel, A. Mateo Marcos Núñez - (ENAR, Architectural Envelopes)	
Solutions for facade noise transmission - Andrés Campos Ventanilla, Joaquín Lasiera Liarte - (ACV Ingeniería de Fachadas)		Façade Leasing: Drivers and barriers to the delivery of integrated facades-as-a-service: Azcarate-Aguerre, J.F. (B.Arch.Ir.), Klein, T. (Prof.Dr.-Ing), Den Heijer, A.C. (Prof.Dr.Ir.), Vrijhoef, R. (Dr.Ir.), Ploeger, H.D. (Prof.Dr.), Prins, M. (Dr.Ir.) - (Delft University of Technology, Faculty of Architecture and the Built Environment)	
Problems in the acoustic design of the Wanda Metropolitan Stadium envelopes - Sánchez Ayuso, J; García Ruiz, J. - (GREENBACK)		Integrated Building Energy Management System for devices into ventilated facades Francisco J. Miguel and Roberto Sanz - (Fundación CARTIF)	

June 21, THURSDAY

ROOM 1+2					Language
9:00 - 9:30					English
9:30 - 10:00					Spanish
10:00 - 10:30					Spanish
10:30 - 11:00					Spanish
11:00 - 11:30					COFFEE BREAK, B2B MEETINGS
11:30 - 12:00					English
12:00 - 12:30					English
12:30 - 13:00					English
13:00 - 13:30					English
13:30 - 14:00					English
14:00 - 15:30					LUNCH, B2B MEETINGS
15:30 - 18:30	ROOM 4 - WORKSHOP 1 FIRE IN THE WORLD OF THE VENTILATED FACADES (Workshop sponsored by ALUCOIL)	ROOM 3 - WORKSHOP 2 FAÇADE RESTORATION, AN ALTERNATIVE MARKET (Workshop sponsored by GRUPO ALUMAN)	ROOM 2 - WORKSHOP 3 CONCRETE IN FACADES. NEW FEATURES FOR INNOVATIVE DESIGNS (Workshop sponsored by HEIDELBERGCEMENT HISPANIA)	ROOM 5 - WORKSHOP 4 - INDUSTRY 4.0 AND THE ENVELOPE (Workshop sponsored by SCHÜCO)	
	CONFERENCE Different standards and full-scale fire spread tests around the world Pablo Garmendia (TECNALIA) The importance of isolation products in fire spread Mercedes Sánchez - (ROCKWOOL) The influence of different panel products in fire spread Zigor Marroquin - (ALUCOIL) Specialist point of view of what's happening now and what will happen in future in ventilated facades due to Grenfell changes worldwide Nick Jenkins - (BOOTH MUIRIE) DISCUSSION	CONFERENCE Introduction and presentation of participants Xavier Ferrés (Ferrés architects and consultants) (10 min.) Short-presentations for contact and positioning (50 min.) - Ángel Cid. Architect. (2C Architects.) - Pablo Garrido (specialist in new Construction and refurbishment of large-format buildings - Universitat Politècnica de Catalunya) - Carlos Moreno Escofet - Project Management Inversores Director, CBRE España - David Troca García. Business development in the rehabilitation of architectural envelopes (Aluman Group) BREAK (20 min.) DISCUSSION (90 min.) CONCLUSIONS Xavier Ferrés (Ferrés architects and consultants) (10 min.)	CONFERENCE The void as a space that generates architecture Carlos Ferrater - (OAB) The unbearable lightness of the light facades Mario Sangalli (Estudio Peña Ganchegui) More sustainable enclosures with lightened architectural concrete Luis Ruano (PREHORQUISA) Prefabricated and industrialized concrete solutions for architectural envelopes: current state and projection Alejandro López (ANDECE) ROUND TABLE DISCUSSION AND DEBATE Participants: Manuel Aires Mateus, Carlos Ferrater, Luis Ruano, Mario Sangalli and Alejandro López Moderators: José Manuel Pozo and Daniel Rincón de la Vega FINAL CONFERENCE Projects: Manuel Aires Mateus (Aires Mateus e Asociados)	CONFERENCE Introduction and presentation of the participants Digital transformation in everything. Digital mentality in the industry Prof. Javier Zamora (Senior Lecturer IESE) The construction industry 4.0. Traditional construction vs Construction 4.0. Reality and future A. Mateo Marcos Núñez (ENAR Architectural Envelopes) Facade 4.0. The new life cycle of facades. Prof. Daniel Arztmann (Detmold University, Germany) and Juan Sebastián Sepúlveda (SCHÜCO International KG) DISCUSSION AND CONCLUSIONS	English
Language					English-Spanish
20:00					CONFERENCE DINNER (REAL CLUB TENIS)

June 22, FRIDAY

ROOM 1+2					Language
9:00 - 9:30					English
9:30 - 10:00					English
10:00 - 10:30					English
10:30 - 11:00					English
11:00 - 11:30					COFFEE BREAK, B2B MEETINGS
11:30 - 12:00					Spanish
12:00 - 12:30					Spanish
12:30 - 13:00					Spanish
13:00 - 13:30					Spanish
13:30 - 13:50					Spanish
13:50 - 14:00					Spanish
14:00 - 15:30					LUNCH - END OF CONGRESS

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