AMANAC PROGRAMME

VII INTERNATIONAL CONGRESS ON ARCHITECTURAL ENVELOPES

27 and 28 May 2015

Palacio de Congresos y Auditorio Kursal
Donostia - San Sebastián, España / Spain
ICAE URL: http://www.icae-architecturalenvelopes.eu/en/

Wednesday, 27 May 2015

Room C

"AMANAC projects special session" (11.30 – 18.30)

(Organizers: Miriam García-González miriam.garcia@tecnalia.com, Maria Founti mfou@central.ntua.gr

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AMANAC Session – Oral Presentations (11.30 – 13.30) **Chairperson: Monique Levy**		
	Presentation Title	**Related Project**
11.30 – 11.40	**AMANAC and the EC** **Monique Levy, EC**	
11.40 - 11.55	A Roadmap to Conformable Super Insulation Systems Pierre-André Marchal ENERSENS, France	AEROCOINS
11.55 - 12.15	Reactive powder concrete for facade elements - A sustainable approach **Urs Mueller**[1], Natalie Williams Portal[1] , Valle Chozas[3], Mathias Flansbjer[2], , Iñigo Larraza[3], Nelson Da Silva[1], Katarina Malaga[1] [1]CBI Cement and Concrete Research Institute, Sweden [2]SP Technical Research Institute of Sweden, Sweden [3]ACCIONA Technological Centre, Spain	SESBE
12.15 – 12.30	Lightweight sustainable and energy-efficient concrete with all waste aggregates Alessandro Largo[1], Agnese Attanasio[1], **Sonia Saracino**[1], Valle Chozas[2], Inigo Larraza[2], Francesco Sonzogni[3], Marco Preda[3], Lucian Balaceanu[4], Longin Balaceanu[4] [1]Department of Materials and Structures Engineering CETMA – Engineering, Design & Materials Technologies Center, [2]Concrete Group ACCIONA Infrastructure, Technological Innovation Division, [3]Magnetti Building Spa IRIDEX Group Plastic Srl, Romania	SUSCON
12.30 – 12.50	Sol-gel based coatings for low ice spreading on HVAC systems **Jacob A. Hansen**[1], Stefan Holberg[1], Ricardo Losada[1], N. Arconada, M. Hernaiz, E. Rodriguez, R. Ortiz [1]Danish Technological Institute, Denmark, [2] IK4-Tekniker, Spain	EnE-HVAC
12.50 – 13.10	Environmental Assessment of Building Materials for Good Indoor Air Quality **Miriam García-González** [1], Sarka Langer[2], Anna Widheden[2]	OSIRYS

	[1] TECNALIA R&I, [2] IVL Swedish Environmental Research Institute, Sweden	
13.10 -13.30	Composite UHPC-AAC/CLC façade elements with modified interior plaster for new buildings and refurbishment **Lorenzo Miccoli**[1], Patrick Fontana[1], Nelson Silva[2], Andrea Klinge[3], Christer Cederqvist[4], Oliver Kreft[5], Dirk Qvaeschning[6], Christer Sjöström[7] [1]BAM Federal Institute for Materials Research and Testing, Berlin, Germany, [2] CBI Swedish Cement and Concrete Research Institute, Borås, Sweden, [3] Roswag Architekten GvA mbH, Berlin, Germany, [4]Aercrete Technology AB, Bankeryd, Sweden, [5] Xella Technology and Research, Kloster Lehnin, Germany, [6] Dyckerhoff GmbH, Wiesbaden, Germany, [7]Svenska Aerogel AB, Gävle, Sweden	H-HOUSE
13.30 -14.45	**Lunch Break**	
AMANAC Session – Poster Presentations (14.45 – 16.25) **Chairperson: Maria Founti** **5 min oral presentation of each work**		
14.45 – 15.05	Graphene nanoplatelets biocomposites for advanced pultrusion profiles adapted to building envelope **I. Roig**, O. Menes and B. Monje AIMPLAS – Instituto Tecnológico del Plástico, Spain	OSIRYS
	Effects of flame retardants on flammability of flax fibre-reinforced composites **NayraUranga Loredo**, Javier Sacristan Bermejo Polymers and composites Group, ACCIONA, Spain	BioBuild
15.05 -15.25	Numerical investigation of the effect of vacuum insulation panels on the thermal bridges of lightweight drywall envelopes Dimos A. Kontogeorgos, **Ioannis A. Atsonios**, Ioannis D. Mandilaras and Maria A. Founti Lab. of Heterogeneous Mixtures & Combustion Systems, School of Mechanical Engineering National Technical University of Athens, Greece	ELISSA
	Monitoring of Health Related Parameters in Indoor Environments **Manuela Reichert**, Jürgen Frick Materials Testing Institute, University of Stuttgart	CETIEB
15.25 - 15.45	Structural behaviour of RPC sandwich façade elements with GFRP connectors Mathias Flansbjer[1], Daniel Honfi[1], **Urs Mueller**[2], Lech Wlasak[3], Natalie Williams Portal[2], Jan-Olof Edgar[4], Iñigo Larraza[5] [1]SP Technical Research Institute of Sweden, [2]CBI Cement and Concrete Research Institute, Sweden, [3]Mostostal Warszawa, Poland, [4]Projekten-gagemang, Sweden, [5]ACCIONA Infrastructure Technological Centre, Spain	SESBE
	Low Embodied Energy Insulation Materials and Masonry Components for Energy Efficient Buildings **A. Gaki**[1], M. Taxiarchou[1], D. Panias[1], I. Douni[1], C. Panagiotopoulou[1], A. Pasquali[2], C. Dedeloudis[3], Valerie Spaeth[4], C. Chatziastrou[5], J. Geduhn[6] [1] School of Mining and Metallurgical Engineering, NTUA, Greece; [2]Morando S.r.l, Italy, [3]S&B Industrial Minerals SA, Greece; [4]Redco NV, Belgium, [5]FIBRAN SA, Greece, [6]Schlagmann Baustoffwerke, Germany	LEEMA
	New Materials for Smart Windows Glazing – Optical and Mechanical Properties **M. Willert-Porada**[1], K. Kyrgyzbaev[1], A. Saberi[1], B. Scharfe[1], Ch. Wehmann[2], F, Rieg[2], M. Arnold[3] [1]Chair of Materials Processing, [2]Chair of Computer Aided Design, University of Bayreuth, Germany; [3]InGlas GMBH, Germany	HARWIN
	Active paints to improve indoor air quality **Michaela Müller**, Iris Trick Fraunhofer-Institute for Interfacial Engineering and Biotechnology, Germany	-

15.45 – 16.05	The INTASENSE Project Approach for Toxic Gas Detection Indoors **G.G.Mandayo**[1], J.Gonzalez-Chavarri[1], I.Castro-Hurtado[1], I. Ayerdi[1], E.Castaño[1], E.Hammes[3],P.Ryser[4], H.Knapp[3] [1] Ceit and Tecnun (Universidad de Navarra), Spain [3]CSEM Alpnach, Switzerland [4]Ecole Polytechnique Fédérale de Lausanne, Lab.of Microengineering for Manufacturing, CH	INTANSENSE
16.05 - 16.25	Fostering energy efficiency in buildings through aerogel based renders **Mohamad Ibrahim**[1], Etienne Wurtz[2], Patrick Achard[1], Pascal H. Biwole[1,3] [1] MINES ParisTech, PSL Research University, PERSEE, Centre Procédés, Energies Renouvelables et Systèmes Energétiques, France, [2] CEA-INES, LEB – Building Energy Lab, France, [3] Department of Mathematics and Interactions, France	HOMESKIN
	Mechanically robust pectin-silica nanocomposite aerogels: potential materials for thermal superinsulation **S.Zhao**[1], A. Demilecamps[2], A.Rigacci[3], L.Huber[1], T. Budtova[2],*, M.M. Koebel[1]* [1]Lab. for Building Energy Materials and Components, EMPA, CH; [2]MINES ParisTech, Centre de Mise en Forme des Matériaux, France [3]MINES ParisTech, Centre procédés, energies renouvelables et systems énergétiques, France	AEROCOINS
	Full scale performance evaluation of Aerogel products and systems for building insulation Ignacio del Val[1] Roberto Garay[2], Ewa A. Zukowska[1] , **Eunate Goiti**[2] [1] Acciona Infraestructuras, Spain, [2] Tecnalia Research & Innnovation, Spain	AEROCOINs
16.25 – 16.50	**Coffee Break**	
AMANAC Session – Oral Presentations (16.50 – 18.30) **Chairperson: Eunate Goiti Ugarte**		
16:50 - 17:10	Long-term performance of super-insulating materials in building components & systems **Dr. Daniel Quenard** CSTB, France	ANNEX 65
17:10 - 17:30	Bio-aerogels: new promising materials for thermal superinsulation Cyrielle Rudaz[1], Arnaud Demilecamps[1], Georg Pour[1], Margot Alves[1], Arnaud Rigacci[2], Christian Beauger[2], Claudia Hildenbrand[2], Gudrun Reichenauer[3], **Tatiana Budtova**[1] [1]Centre for Materials Forming (CEMEF), MINES ParisTech, France; [2]Centre procédés, énergies renouvelables et systèmes énergétiques (PERSEE), MINES ParisTech, France; Bavarian Center for Applied Energy Research, Germany	AEROCOINS
17:30 - 17:50	Fire Behaviour of Drywall Systems Incorporating Phase Change Materials and Vacuum Insulation Panels Dimos A. Kontogeorgos, Georgios K. Semitelos, Ioannis D. Mandilaras and **Maria A. Founti** School of Mechanical Engineering, NTUA, Greece	ELISSA
17:50 - 18:10	Structural façade system in biocomposite materials **Guglielmo Carra**[1], Morten N. Lund[2] [1]Department of Materials Consulting Arup Deutschland GmbH, Germany; [2]GXN Innovation, Kanonbådsvej 8, Copenhagen, Denmark	BioBuild
18.10 - 18.30	How to design an adaptive wall panel for retrofitting with multiple innovative technologies **Isabel Lacave Azpeitia**[1], Rodriguez Pando[1], Rogier Donkervoort[2], Tim Dijkmans[2] [1]ACCIONA Infraestructuras S.A., Madrid, Spain, [2]Netherlands Organisation for Applied Scientific Research TNO, Delft, The Netherlands	ADAPTIWALL

Thursday, 28 May 2015

Room B

AMANAC General Assembly and AMANAC-CSA meeting (09.00 – 11.30)

(Organiser: Maria Founti mfou@central.ntua.gr)

AMANAC General Assembly Meeting (9:00-10.00)	
9.00 – 9.15	Welcome and overview of AMANAC Achievements (M. Founti, NTUA and AMANAC-CSA partners)
9.15 – 9.30	The role of Clusters and CSAs, expectations (M. Levy, EC)
9.30 – 10.30	Updates on Thematic Area achievements and Action Plans (5 min presentation each Thematic Area Leader + 5 min questions discussion) Presentation of the NANOLEAP project – Pilot Project thematic Area (5 min)
AMANAC – CSA Meeting (10.30-11.30) (Open to all AMANAC members)	
10.30 – 10.45	Review of Activities/Reporting/ Deliverables/Nomination of pilot thematic area representative/approach for "success stories"/ Collaboration with other CSAs (M. Founti, NTUA)
10.45 – 11.00	JAP (E. Goiti, Tecnalia) Committees (members & role) (T. Gkika, NTUA & A. Lukaszewska, FASADA) /Industrial Advisory Board Wi-ki (P. Walker, UBATH) Dissemination Plan (S. Naik, TWI) (COST collaborations, Wels Conf, other)/ Next large scale event-Wels? Standardization workshop
11.30 – 11.30	Discussion, Planning of activities

AMANAC FIRE Workshop (12.00 – 14.00)

(Organisers: Miriam García-González miriam.garcia@tecnalia.com, Maria Founti mfou@central.ntua.gr

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AMANAC FIRE WORKSHOP – INVITED LECTURES (CONTRIBUTING PROJECTS: ELISSA, AEROCOINS, NANOCOOL, OSIRYS) Chairperson: Miriam García-González	
12.00-12.30	New Trends in Fire Retardant Materials **Prof. Alberto Fina**, POLITO
12.30-13.00	Overview of the fire characterization of materials. Specific case of the fire development of WPC for façade applications. **Dr. Aitor Barrio**, Tecnalia Research&Innovation
13.00-13.30	Façade and Structural fire Testing: State of the Art and future needs **Prof. Michael Delichatsios**, FIRESERT-Ulster University
13.30-14.00	Computational tools for Fire Research: Potentials and link to Performance based Codes **Dr. Dionysis Kolaitis**, National University of Athens

Joint AMANAC and Indoor Environment Quality (IEQ) Cluster meeting (15:30 - 17:30)

(Organiser: Frick, Jürgen Juergen.Frick@mpa.uni-stuttgart.de)

- The main scope is to tighten the research links between the AMANAC and IEQ Clusters.
- It is planned to follow up the implementation and update the action plans for cluster joint activities.