

# FACADE 2018 - Adaptive!

Final Conference COST TU1403 "Adaptive Facades Network"

PROGRAM DAY 2 / Nov 27, 2018

08:30 - 09:00 Welcome and Registration				
09:00 - 10:20 COST TU1403 Session 2				
	<b>Session 2.1 - Strategies for Design</b> <b>Auditorium</b> <i>Session chair: Thaleia Konstantinou</i>	<b>Session 2.2 - Products and Materials</b> <b>Room 3+4</b> <i>Session chair: Josemi Rico Martinez</i>	<b>Session 2.3 - Performance Assessments</b> <b>Room 5+6</b> <i>Session chair: Shady Attia</i>	<b>Session 2.4 - Experimental Tests</b> <b>Room 7+8</b> <i>Session chair: Marco Perino</i>
09:00 - 09:20	<b>Passive Adaptive Façades – Examples from COST TU1403 Working Group 1</b> <i>Enrico Sergio Mazzucchelli, Rosa Romano, Laura Aelenei, Maria da Gloria Gomes, Theoni Karlessi, Mark Alston, Daniel Aelenei</i>	<b>Parametric Nodes from idea to realization</b> <i>Alamir Mohsen, Ulrich Knaack</i>	<b>Comparison of conventional and adaptive façades: Increasing application of adaptive facades in Macedonia</b> <i>Aleksandar Petrovski, Aleksandra Krstić-Furundžić</i>	<b>An innovative adaptive multilayer façade: evaluation in the test cell LABIMED</b> <i>Rosa Romano Paola Gallo, Alessandra Donato</i>
09:20 - 09:40	<b>Practitioners' View on the Implementation Potential of Adaptive Façades with focus on The Netherlands</b> <i>Christian Struck, Twan Rovers, Roy Exterkate, Mark Voortman, Marwan Al Alkam, Robert Timmerman</i>	<b>Development of an adaptive shading device based on flexible structural elements and SMA springs</b> <i>Gianluca Ranzi, Francesco Fiorito, Osvaldo Vallati</i>	<b>Who is Driving an Adaptive Building Envelope</b> <i>Peter Lenk, Robert Buck</i>	<b>Study of Building Integrated Photovoltaic/Thermal Double-Skin Façade for Commercial Buildings in Sydney, Australia</b> <i>Siliang Yang, Francesco Fiorito, Alistair Sproul, Deo Prasad</i>
09:40 - 10:00	<b>Energy efficient and user oriented pre-fabricated facade extensions</b> <i>Dimitra Papadaki, Silvia Ruggiero, Rosa Francesca De Masi, Theoni Karlessi, Anastasia Fotopoulou, Annarita Ferrante, Margarita-Niki Assimakopoulos</i>	<b>Possibilities and constraints for the widespread application of solar cooling integrated facades</b> <i>Alejandro Prieto Hoces, Ulrich Knaack, Tillmann Klein, Thomas Auer</i>	<b>Opportunities and challenges for performance prediction of dynamic Complex Fenestration Systems (CFS)</b> <i>Giuseppe de Michele, Roel Loonen, Hemshikha Saini, Fabio Favoino, Stefano Avesani, Luca Papaiz, Andrea Gasparella</i>	<b>Ageing of adhesive connections for façade application</b> <i>Klara V. Machalická, Miroslav Vokáč, Martina Eliášová</i>
10:00 - 10:20	<b>Designing an adaptive shading pavilion for hot arid climates</b> <i>Marta D'Alessandro, Ingrid Paoletti</i>	<b>Possible benefits of capillary flow glazing in translucent wall elements</b> <i>Nikolaus Nestle, Sorin Pulberea, Mark Alston</i>	<b>Analysis of heating effects and deformations for a STAF panel with coupled CFD and FEM simulation method</b> <i>Daniel Brandl, Helmut Schober</i>	<b>Possibilities and challenges of different experimental techniques for airflow characterization in the air cavities of facades</b> <i>Emanuela Giancola, M. Nuria Sánchez, Matthias Friedrich, Olena Kalyanova Larsen, Allesandro Nocente, Stefano Avesani, Francesco Babich, Francesco Goia</i>
10:20 - 10:50 Coffee break				
10:50 - 12:10 COST TU1403 Session 3				
	<b>Session 3.1 - Products and Materials</b> <b>Auditorium</b> <i>Session chair: Daniel Aelenei</i>	<b>Session 3.2 - Strategies for Design, Bionik</b> <b>Room 3+4</b> <i>Session chair: Tillmann Klein</i>	<b>Session 3.3 - Experimental Tests, Glass</b> <b>Room 5+6</b> <i>Session chair: Marcin Brzezicki</i>	<b>Session 3.4 - Performance Assessments</b> <b>Room 7+8</b> <i>Session chair: Frank Wellershoff</i>
10:50 - 11:10	<b>Solar Energy Balanced Façade</b> <i>Thomas Wüest, Andreas Luible</i>	<b>Biological strategies for adaptive building envelopes</b> <i>Estelle Cruz Kalina Raskin, Fabienne Aujard</i>	<b>Innovations in façade engineering and a glass façade for the future</b> <i>Daniel Pfanner, Ümit Esiyok, Teodora Vatahska</i>	<b>Dynamic Analysis of Climatic Conditions for deriving suitable Adaptive Façade responses</b> <i>Miren Juaristi, Roel Loonen, Aurora Monge-Barrio, Tomás Gómez-Acebc</i>
11:10 - 11:30	<b>An initial study for the development of an adaptive timber device for moisture buffering applications</b> <i>Gianluca Ranzi, Osvaldo Vallati, Arianna Brambilla, Giulia Spalletti, Giorgio Frigerio</i>	<b>Multi-functional biomimetic adaptive façades: Part I - Developing a framework</b> <i>Aysu Kuru, Francesco Fiorito, Philip Oldfield, Stephen P. Bonser</i>	<b>Application of Hollow Glass Blocks for Facades, Full Scale Test of Wall Created with Witrilock System</b> <i>Zdeněk Sokol, Martina Eliášová</i>	<b>Optimizing parameters for dynamic solar shading</b> <i>Christiane Wermke</i>
11:30 - 11:50	<b>Adaptive window block for residential use: optimization of energy matching and user's comfort</b> <i>Annalisa Andaloro, Stefano Avesani, Annamaria Belleria, Maider Machado, Marco Lovati</i>	<b>Multi-functional biomimetic adaptive façades: Part II - A case study</b> <i>Aysu Kuru, Francesco Fiorito, Philip Oldfield, Stephen P. Bonser</i>	<b>Thermo-mechanical analysis of GFRP-glass sandwich facade components</b> <i>Chiara Bedon, Fabio Favoino, Mauro Overend</i>	<b>Modelling envelope components integrating Phase Change Materials (PCMs) with Building Performance Simulation tools: a state of the art</b> <i>Albert Castell, Marc Medrano, Francesco Goia</i>
11:50 - 12:10	<b>ACT Façade – Interior sun shading for energy efficient fully glazed façades.</b> <i>Paul-Rouven Denz, Wolfgang Priedemann, Lars Anders</i>	<b>The role of geometry for adaptability: Comparison of shading systems and biological role models</b> <i>Susanne Gosztonyi</i>	<b>Thermal assessment of glass facade panels under radiant heating- Experimental and preliminary numerical studies</b> <i>Chiara Bedon, Marcin Kozłowski, Dániel Honfi</i>	<b>Performance Evaluation of Adaptive Facades: A case study with electrochromic glazing</b> <i>Shady Attia, Senem Bilir</i>
12:10 - 13:30 Lunch break				

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13:30 - 14:50 COST TU1403 Session 4				
	Session 4.1 - Experimental Tests	Session 4.2 - Post Occupancy Evaluation	Session 4.3 - Products and Materials	Session 4.4 - Strategies for Design
	Auditorium	Room 3+4	Room 5+6	Room 7+8
	Session chair: Francesco Goia	Session chair: Uta Pottgieser	Session chair: Susanne Gosztonyi	Session chair: Julien Astudillo
13:30 - 13:50	<p><b>An insight on possible classification and metrics, experimental testing and numerical modelling for adaptive facades - Activity report from the 'Structural' Task Group</b></p> <p><i>Chiara Bedon, Dániel Honfi, Marcin Kozłowski, Martina Eliášová, Klára Vokáč Machalická, Miroslav Vokáč, Filipe Santos, Thomas Wüest</i></p>	<p><b>Post-Occupancy Evaluation of Adaptive Facades</b></p> <p><i>Shady Attia, Alessandra Luna Navarro, Miren Juaristi, Aurora Monge-Barrio, Susanne Gosztonyi, Zein Al-Doughmi</i></p>	<p><b>Responsive facades evolution - the microscale to the macroscale</b></p> <p><i>John E. Villegas, Juan Camilo Restrepo Gutierrez, Henry A. Colorado</i></p>	<p><b>Updated Urban Facade Design</b></p> <p><i>Holger Techen, Jochen Krimm, Ulrich Knaack</i></p>
13:50 - 14:10	<p><b>A simulation tool for the façade aesthetic appearance – BIO4ever project approach</b></p> <p><i>Anna Sandak, Jakub Sandak, Paolo Grossi, Marta Petrillo</i></p>	<p><b>Occupant-Adaptive Façade Interaction: Relationships and Conflicts</b></p> <p><i>Alessandra Luna Navarro, R.C.G.M. Loonen, Shady Attia, Miren Juaristi, Aurora Monge-Barrio, Mattia Donato, Roman Rabenseifer, Mauro Overend</i></p>	<p><b>Temperature-responsive systems: passive strategies for building envelopes</b></p> <p><i>Claudio Aresta</i></p>	<p><b>A Redesign Procedure to Manufacture Adaptive Facades with Standard Products</b></p> <p><i>Bahar Basarir, M. Cem Altun</i></p>
14:10 - 14:30	<p><b>Thermal response of the bionic façade in different climatic conditions</b></p> <p><i>Tomaž Šuklje, Ciril Arkar, Sašo Medved</i></p>	<p><b>Impact of office and facade types on user comfort and health in office buildings</b></p> <p><i>Aleksandra Krstić-Furundžić, Nikola Z. Furundžić, Dijana P. Furundžić</i></p>	<p><b>Potentials for the use of ferrofluids in instantly-reacting solar shading</b></p> <p><i>Marcin Brzezicki</i></p>	<p><b>Designing adaptive Facades with a new holistic Eco-Design Approach</b></p> <p><i>Nitisha Vedula, Laura Aelenei, Uta Pottgieser</i></p>
14:30 - 14:50	<p><b>Experimental Testing of Dissipative Façade Brackets</b></p> <p><i>Frank Wellershoff, Matthias Förch, Guido Lori, Marc Zobec, Daniele Casucci, Philipp Grosser</i></p>	<p><b>Future Façades of Hospital Buildings: A User-Centered Approach to Identify New Performance Requirements</b></p> <p><i>Viktoria Krastel, Winfried Heusler, Klaus-Peter Sedlbauer</i></p>	<p><b>Technological and Economic Assessment of Different Models of Geometrically Complex Forms of Glass Envelope</b></p> <p><i>Tatjana Kosic, Igor Svetel, Milena Stavric</i></p>	<p><b>Adaptive Façades and Topology Optimization</b></p> <p><i>Massimiliano Nastro, Ingrid Paoletti</i></p>
14:50 - 15:20	Coffee break			
15:20 - 16:20	COST TU1403 Session 5 / Auditorium			
	Session Chair: Andreas Lühle			
15:20 - 15:40	<p><b>Dynamic and Climate-Sensitive Bionic Façade</b></p> <p><i>Andreas Hammer</i></p>			
15:40 - 16:00	<p><b>Challenges and Future Directions of Smart Sensing and Control Technology for Adaptive Facades Monitoring</b></p> <p><i>Shady Attia</i></p>			
16:00 - 16:20	<p><b>Study of a BIPV adaptive system: combining timber and photovoltaic technologies</b></p> <p><i>Enrico Sergio Mazzucchelli, Mark Alston, Marcin Brzezicki, Luisa Doniacovo</i></p>			
16:20 - 16:30	Concluding remarks			
16:30	End of day 2			