

# Conference Program ADVANCED BUILDING SKINS 2015

<p><b>8:30 - 10:00</b></p> <p><b>8:30 Opening:</b> Andreas Hempel, <i>International Academy of Architects; former President Association of German Architects BDA</i> Walter Steinilinger, <i>President, Commission for Technology and Innovation, Bern, Switzerland</i> Daniel Schafar, CEO, <i>ewb - Energie Wasser Bern, Switzerland</i></p>						
<p><b>10:00 - 10:45</b></p>						
<p><b>A1 - Room 2</b></p>	<p><b>B1 - Room 3</b></p>	<p><b>C1 - Room 4</b></p>	<p><b>D1 - Room 1</b></p>	<p><b>E1 - Room 6</b></p>	<p><b>F1 - Room 7</b></p>	
<p><b>10:45 - 12:30</b></p>	<p><b>B1P 1 - Energy Performance of Façades with Photovoltaics</b> Chair: Heiko Schwarzbarger, Editor-in-Chief, photovoltaik, Berlin, Germany</p>	<p><b>Enhanced Energy Performance and Daylighting of Building Envelopes for Hospitals</b> Chair: Marilene Andersen, Ecole Polytechnique Fédérale de Lausanne, Switzerland</p>	<p><b>Eco Materials for the Building Skin</b> Chair: Bruce Dvorak, Texas A&amp;M University, USA</p>	<p><b>Advanced Building Skin Design</b> Chair: Andreas Hempel, International Academy of Architects; former President Association of German Architects BDA</p>	<p><b>Advanced Fenestration Technology</b> Chair: Urs Buehlmann, Bern University of Applied Sciences, Switzerland</p>	<p><b>Nachhaltigkeit von Hochhaussfassaden</b> Moderator: Marvin King, Technik &amp; Architektur Hochschule Luzern, Schweiz</p>
	<p><b>Envelope performance analyses for low energy buildings with BIPV</b> Alejandra Stochetti, Adran Smith + Gordon Gill Architecture, Chicago, USA</p>	<p><b>Impacts of building envelope options on hospital energy performance</b> Heather Surges, University of Washington, USA</p>	<p><b>Conserving energy with biodiverse building skins</b> Bruce Dvorak, Texas A&amp;M University, USA</p>	<p><b>London Sky Garden</b> Bernhard Rudolf, Head of Engineering, Josef Gartner GmbH, Germany</p>	<p><b>Discomfort glare with complex fenestration systems and the impact on energy use when using daylighting control</b> Sabine Hoffmann, University of Kaiserslautern, Germany</p>	<p><b>Ein Beurteilungs- und Entscheidungsinstrument zur Erstellung nachhaltiger Fassaden mehrgeschossiger Gebäude</b> Christian Höniger, Giuliano Höniger Architekten, Zürich, Schweiz</p>
	<p><b>Benefits of translucent building envelope made of DSC-integrated glassblocks</b> Luca Pastore, Università degli Studi di Palermo, Italy</p>	<p><b>A double skin to stimulate the healing environment of a new state-of-the-art hospital</b> Michel Van der Beek, VS-Architectes - Ingénierie de l'Enveloppe, Lille, France</p>	<p><b>Passivhaus with modular straw panels</b> Björn Kierulff, Creater, Senec, Slovakia</p>	<p><b>United façade assemblies for high rise residential buildings</b> Ron Fitch, Trimo UK Ltd.</p>	<p><b>Structural sealant glazing: reinventing the wooden window</b> Marc Donzé, Bern University of Applied Sciences, Switzerland</p>	<p><b>Aus- und Wechselwirkungen von Fassadenentscheiden in frühen Konzept- und Planungsphasen</b> Patrick Ernst, brücker-ernst gmbh, Schweiz</p>
	<p><b>Moisture evaluation system for BIPV façades</b> María Rosas, Fraunhofer IWES, Kassel, Germany</p>	<p><b>Reducing the length of stay in hospitals with daylight optimization</b> Helmut Köster, Köster Tageslichtplanung, Frankfurt, Germany</p>	<p><b>Environmental implications of cork as thermal insulation in façade retrofits</b> Jorge Sierra-Pérez, Universitat Autònoma de Barcelona, Spain</p>	<p><b>The dynamic response of the semi-closed cavity skin to changing of load condition</b> Fumihiko Chiba, University of Technology, Toyohashi, Japan</p>	<p><b>Thermal properties of door and window access systems</b> Wolfgang Rädle, Bern University of Applied Sciences, Switzerland</p>	<p><b>Energie- und Ökobilanzen von Hochhäusern</b> Güntrico Settembrini, Technik &amp; Architektur Hochschule Luzern, Schweiz</p>
	<p><b>Glazed photovoltaic-thermal component for building envelope structure</b> Tomás Matuška, Czech Technical University, Prague, Czech Republic</p>	<p><b>Daylight quality in healthcare design</b> Sahar Diab, University of Jordan, Amman, Jordan</p>	<p><b>The potential application of agro-based polymers in building façades</b> Marjatta Einiemi, Illinois Institute of Technology, Chicago, USA</p>	<p><b>Brief presentations:</b> Innovative block on housing in the Mediterranean climate Cologero Montalbano, Politecnico di Bari, Italy</p>	<p><b>New material for an ecological solution for wooden window frame enlargements</b> Urs Uehlinger, Bern University of Applied Sciences, Switzerland</p>	<p><b>Qualitative Wegweiser in der Fassadenplanung</b> Thomas Wüest, Technik &amp; Architektur Hochschule Luzern, Schweiz</p>
	<p><b>Energy, daylight and thermal analysis of a geodesic dome with a photovoltaic envelope</b> Marco Lovati, EURAC Research, Bolzano, Italy</p>		<p><b>Innovative pre-coated steels for aesthetical, durable and sustainable building skins</b> Jérôme Guth, ArcelorMittal - Global R&amp;D, Luxembourg</p>	<p><b>Acceptance by durability: Quality assurance and innovation towards the use of innovative façades</b> Iris M. Reuther, Technische Universität Graz, Austria</p>	<p><b>Brief Presentations:</b> Modelling complex fenestration systems in TRNSYS – a comparison between a simplified and a detailed thermal model Giuseppe De Michele, EURAC Research, Bolzano, Italy</p>	<p><b>Planung und Entwicklung von Gebäudehüllen hoher Häuser</b> Reto Gloor, gpk Fassadentechnik AG, Schweiz</p>
	<p><b>Brief Presentations:</b> Solar-driven form finding - Functionality and aesthetics of a solar integrated building envelope Wolter Klász, University of Innsbruck, Austria</p>		<p><b>Optimum solutions to satisfy preference façades and energy consumption of an office building</b> Ali Alajmi, College of Technological Studies, Mishref, Kuwait</p>	<p><b>Improvement of indoor air quality using photocatalytic cement-based mortars</b> Chiara Giordano, Università Politecnica delle Marche, Ancona, Italy</p>	<p><b>Analysis of potential biometric applications of skin and shell analogies on the building envelope</b> Leopoldo Sauerwald, Technical University Munich, Germany</p>	<p><b>Gesamtheitliche Betrachtungen der Nachhaltigkeit von Hochhaussfassaden</b> Marvin King, Technik &amp; Architektur Hochschule Luzern, Schweiz</p>
	<p><b>Designing energy generating building envelopes</b> Daniel Matos, University of Lisbon, Portugal</p>		<p><b>Functional lightweight and air purifying concrete</b> Jos Bruwens, Eindhoven University of Technology, Netherlands</p>	<p><b>Infra-lightweight concrete in multi-story adaptive building envelope</b> Claudia Lösch, Technische Universität Berlin, Germany</p>	<p><b>Adaptive architectural envelopes for temperature, humidity and CO2 control</b> Marlen Górriz, University of Oviedo, Gijón, Spain</p>	
	<p><b>Building skins for the I-Generation: Vision - Design - Product</b> Stefano de Angelis, deltaZERO, Lugano-Paradiso, Switzerland</p>		<p><b>Experimental investigation of thermal mass in hemp-lime concrete walls</b> Oliver Kinnane, Queen's University, Belfast, United Kingdom</p>	<p><b>Thermal and acoustic insulation properties of Wood-cement compounds</b> Alireza Fadaei, Vienna University of Technology, Austria</p>	<p><b>Design for façade adaptability – Towards a unified and systematic characterization</b> Roel Loonen, Eindhoven University of Technology, Netherlands</p>	
	<p><b>The importance of the basic material research for the development of innovative BIPV</b> Michele Pellegrino, CR ENEA Portici, Italy</p>		<p><b>Ultramarine blue pigment with thermal storage for buildings</b> María Isabel Ariortua, Universidad del País Vasco, Bizkaia, Spain</p>	<p><b>Economic and ecological performance of wood-cement compound-based wall elements</b> Wolfgang Winter, Vienna University of Technology, Austria</p>	<p><b>Design for façade adaptability – Towards a unified and systematic characterization</b> Roel Loonen, Eindhoven University of Technology, Netherlands</p>	
	<p><b>Technical challenges for the cell interconnection in a customized BIPV module</b> Wendelin Springer, Fraunhofer Institute for Solar Energy Systems, Freiburg, Germany</p>					
<p><b>12:30 - 14:00</b></p>						
	<p><b>A2 - Room 7</b></p>	<p><b>B2 - Room 3</b></p>	<p><b>C2 - Room 4</b></p>	<p><b>D2 - Room 6</b></p>	<p><b>E2 - Room 1</b></p>	<p><b>F2 - Room 2</b></p>
<p><b>14:00 - 15:30</b></p>	<p><b>Lessons learned from the Solar Decathlon Competitions 2014 and 2015</b> Chair: Hans-Martin Henning, Fraunhofer Institute for Solar Technologies, Germany</p>	<p><b>Façade Design for Optimized Daylighting</b> Chair: Helmut Köster, Köster Tageslichtplanung, Frankfurt, Germany</p>	<p><b>Integration and Performance of Phase Change Materials (PCM) in the Building Envelope</b> Craig Farham, College of Human Life Science, Osaka City University, Japan</p>	<p><b>New Developments in Concrete for Smart and Energy-Efficient Building Envelopes</b> Chair: Oliver Kinnane, Queen's University, Belfast, United Kingdom</p>	<p><b>Adaptive and Dynamic Building Skin Design</b> Chair: Maria Elychi, University of Cyprus, Nicosia, Cyprus</p>	<p><b>BIPV 2 - Integration of Photovoltaik in die Gebäudehülle</b> Moderator: Christian Renken, CREnergie, Schweiz</p>
	<p><b>Photovoltaic technologies used in the prototypes of the Solar Decathlon Europe 2014</b> Núria Sánchez-Pantaja, University Jaume I, Castelló, Spain</p>	<p><b>A parametrical study for the optimization of daylighting in advanced façades</b> Nelly Moenssens, University of Leuven, Ghent, Belgium</p>	<p><b>Thermal performance of lightweight walls with phase change materials (PCM)</b> Efrain Moreles, National Autonomous University of Mexico, Morelos, México</p>	<p><b>Shrinkage and temperature effects in glass-concrete composite panels</b> Pietro Crespi, Politecnico di Milano, Italy</p>	<p><b>Energy Frames - A new technology for intelligent glazed façades</b> Frederik V. Winther, Rambøll, Copenhagen, Denmark</p>	<p><b>Die Zukunft der Energiefassade - Von der Gebäudehülle zum Energiesystem</b> Florian Fey, Bosch Solar CISTech GmbH, Deutschland</p>
	<p><b>The EkHhouse: an energy self-sufficient house based on passive design strategies</b> Rafael Hernández, University of the Basque Country, San Sebastián, Spain</p>	<p><b>Control strategies and user acceptance of innovative daylighting and shading concepts</b> Michela Reim, Bavarian Center for Applied Energy Research, Germany</p>	<p><b>Difficulties of heat transfer from PCM type board to ambient room</b> Martin Zilešák, Tomas Bata University, Zlín, Czech Republic</p>	<p><b>Improvement of indoor air quality using photocatalytic cement-based mortars</b> Chiara Giordano, Università Politecnica delle Marche, Ancona, Italy</p>	<p><b>Biometric principles for thermally adaptive façades: thermal adaptability in nature and engineering</b> Susanne Gösztony, Lund University, Sweden</p>	<p><b>Photovoltaik - ein Baustoff mit Charme</b> Patrick Hofer-Noser, Geschäftsführer, Meyer Burger Energy Systems, Schweiz</p>
	<p><b>NexusHaus: prototype for a green alley flat</b> Petra Liedt, School of Architecture, University of Texas at Austin, USA</p>	<p><b>Building envelope design for enhanced daylight distribution</b> Claudia Lösch, Universidade Presbiteriana Mackenzie, São Paulo, Brazil</p>	<p><b>Simulation of the thermal performance of translucent phase change materials and whole-building energy implications</b> Philipp Kräuchi, Lucerne University of Applied Science and Arts, Switzerland</p>	<p><b>Functional lightweight and air purifying concrete</b> Jos Bruwens, Eindhoven University of Technology, Netherlands</p>	<p><b>Analysis of potential biometric applications of skin and shell analogies on the building envelope</b> Leopoldo Sauerwald, Technical University Munich, Germany</p>	<p><b>Von „Building integrated“ zu „Building oriented“ Photovoltaik</b> Urs Muntwyler, Leiter, Labor für Photovoltaik, Berner Fachhochschule, Schweiz</p>
	<p><b>RhOME for denCity - Inertial mass for lightweight drystone stratigraphy</b> Chiara Tonelli, University of Roma TRE, Rome, Italy</p>	<p><b>Light and outside vision at restaurants</b> Ulrica Uriarte, Universitat Politècnica de Catalunya, Barcelona Tèc, Spain</p>	<p><b>Application of PCM panels of different solidus temperatures on inner wall surfaces to reduce seasonal heating/cooling loads</b> Craig Farham, College of Human Life Science, Osaka City University, Japan</p>	<p><b>Infra-lightweight concrete in multi-story adaptive building envelope</b> Claudia Lösch, Technische Universität Berlin, Germany</p>	<p><b>Adaptive architectural envelopes for temperature, humidity and CO2 control</b> Marlen Górriz, University of Oviedo, Gijón, Spain</p>	<p><b>Gebäudeintegrierte dynamische Photovoltaiksysteme</b> Ulrich Köhl, Vertriebsleiter Solar Shading Europe, Colt International, Berlin, Deutschland</p>
	<p><b>The Solar Decathlon knowledge for new urban development strategies</b> Iliana Montella, University of Roma TRE, Rome, Italy</p>	<p><b>Brief Presentations:</b> Parans solar lighting system Rawan Allouaf, Ministry of Public Works and Housing, Amman, Jordan</p>	<p><b>A comprehensive approach to Passive House envelope design</b> Juan F. Rodríguez, University of Castilla, La Mancha, Spain</p>	<p><b>Experimental investigation of thermal mass in hemp-lime concrete walls</b> Oliver Kinnane, Queen's University, Belfast, United Kingdom</p>	<p><b>Lightweight modular structure for an energy-efficient adaptive building envelope</b> Maria Elychi, University of Cyprus, Nicosia, Cyprus</p>	<p><b>Hybrides, stromproduzierendes und transluentes Fassadensystem</b> Reto Giovanelli, GJW ARCHITEKTUR, Bern, Schweiz</p>
	<p><b>A critical review of the Solar Decathlon: origins, evolution, and future</b> Jamie Russell, EPFL, Lausanne, Switzerland</p>	<p><b>Daylight performance analysis for building skin improvement and energy demand reduction</b> Norberr Hormati, University of Novi Sad, Serbia</p>				
<p><b>15:30 - 16:15</b></p>						
	<p><b>A3 - Room 7</b></p>	<p><b>B3 - Room 3</b></p>	<p><b>C3 - Room 4</b></p>	<p><b>D3 - Room 6</b></p>	<p><b>E3 - Room 1</b></p>	<p><b>F3 - Room 2</b></p>
<p><b>16:15 - 17:45</b></p>	<p><b>BIPV 4 - Architectural Integration of Photovoltaics into the Building Skin</b> Chair: Dieter Moor, ertex solartechnik, Austria</p>	<p><b>Modeling and Simulation for Enhanced Daylight Performance</b> Chair: Mitsuru Udagawa, Prof. emer. Kogakuin University, Tokyo, Japan</p>	<p><b>Applications of PCMs in Buildings for Energy Savings and Control of Thermal Loads</b> Chair: Jan Hany, Building Enclosure Program Lead, Fraunhofer UST, Boston, MA, USA</p>	<p><b>Wood-cement Compounds for Building Skins - Structure, Building-physics and Sustainability</b> Chair: Leo W.M. Lau, Green Energy Technology R&amp;D Center, Chengdu, China</p>	<p><b>Future Adaptive Building Envelopes</b> Chair: Andreas Lubbe, Lucerne University of Applied Science and Arts, Switzerland</p>	<p><b>Textile Membranen für die Gebäudehülle der Zukunft</b> Moderator: Robert Rothmayr, TensileEvolution, Österreich</p>
	<p><b>Integration of photovoltaics in a load-bearing timber-glass façade</b> Vlajko Roslavkovic, Vienna University of Technology, Austria</p>	<p><b>Optimised solar shading control systems for passive houses in cold climates</b> Søren Gedas, Eichsen &amp; Horgen, Oslo, Norway</p>	<p><b>Year-round comfortable environment in a multi-storey building by melting and solidification of PCM</b> Vladim Dubový, Ben-Gurion University of the Negev, Beer-Sheva, Israel</p>	<p><b>Mechanical properties of wood-cement compounds</b> Daria Zwicky, University of Applied Sciences, Fribourg, Switzerland</p>	<p><b>Adaptive Façades Network</b> Andreas Lubbe, Lucerne University of Applied Science and Arts, Switzerland</p>	<p><b>Textile Architektur: Entwurf bis Realisierung</b> Robert Rothmayr, TensileEvolution, Österreich</p>
	<p><b>Building integrated PV applications</b> Dominik Müller, solvetec AG, Switzerland</p>	<p><b>Measurement method for solar heat gain coefficient of high-performance façades using small solar spectroradiometers</b> Takemiyo Yokota, Nikken Sekkei Ltd, Tokyo, Japan</p>	<p><b>Optimization of PCMs installed on walls and ceilings for light-weight residential buildings</b> Paulo Tabares, University of Denver, Colorado, USA</p>	<p><b>Wood-cement compound-based load-bearing wall elements</b> Nicola Macchi, University of Applied Sciences, Fribourg, Switzerland</p>	<p><b>Monitoring energy and comfort performance of transparent adaptive façades</b> Valentina Serra, Politecnico di Torino, Italy</p>	<p><b>Textile Architektur: Materialeigenschaften bauen und Energieübertragung</b> Rainer Blum, Stuttgart, Deutschland</p>
	<p><b>Photovoltaics in architecture: separating facts from fiction</b> Dieter Moor, ertex solartechnik, Austria</p>	<p><b>Geometric focalization of sun rays in residential building applications</b> Alexandra Saranti, Technical University of Crete, Polytechnicoulpos, Greece</p>	<p><b>Aerogel insulation enhanced with phase change material for energy conservation in structures</b> George Gould, Aspen Aerogels, USA</p>	<p><b>Thermal and acoustic insulation properties of Wood-cement compounds</b> Alireza Fadaei, Vienna University of Technology, Austria</p>	<p><b>Experimental facilities for adaptive façades parametric approach design</b> Francesco Goldi, Norwegian University of Science and Technology, Trondheim, Norway</p>	<p><b>Die Haut des Pterosauriers</b> Hans Dürr, TensileEvolution, Konstanz, Deutschland</p>
	<p><b>Baukulturelle Potentiale von Solararchitektur in der energetischen Sanierung</b> Roland Kröpfer, Technische Hochschule Nürnberg, Deutschland</p>	<p><b>Comparing the efficiency of solar shading devices in reducing building cooling needs</b> Olivier Dartevielle, Architecture et Climat, Université Catholique de Louvain, Belgium</p>	<p><b>Implementation and application of a PCM model in a thermo-thermal building simulation software</b> Mathias Winkler, Fraunhofer Institute for Building Physics, Germany</p>	<p><b>Numerical simulations of the overall building-physical performance of wood-cement compound-based building skins</b> Joachim Nathanael Mackler, Vienna University of Technology, Austria</p>	<p><b>Adaptive façade systems - A review of performance requirements, design approaches, use cases and market needs</b> Christian Struck, Saxion University of Applied Sciences, Enschede, Netherlands</p>	<p><b>Konzepte für mechanisch vorgepannte Membran- und Folien-Konstruktionen in Verbindung mit standardisierten Fassadensystemen</b> Marcel Ebert, Bauhaus-Universität Weimar, Deutschland</p>
			<p><b>Measuring thermal storage properties of PCMs</b> David W. Yarborough, R&amp;D Services, Cookeville, Tennessee, USA</p>	<p><b>Combustibility of wood-cement compounds</b> Daria Zwicky, University of Applied Sciences, Fribourg, Switzerland</p>	<p><b>Adaptive façades System Assessment</b> Shady Altas, University of Liège, Belgium</p>	
			<p><b>Application of phase-change materials in buildings</b> Rami Alsayed, Saudi Aramco, Saudi Arabia</p>		<p><b>Design for façade adaptability – Towards a unified and systematic characterization</b> Roel Loonen, Eindhoven University of Technology, Netherlands</p>	

## Sessions day 2

<p><b>8:30 - 10:00</b></p>	<p><b>A4 - Room 4</b></p>	<p><b>B4 - Room 2</b></p>	<p><b>C4 - Room 1</b></p>	<p><b>D4 - Room 7</b></p>	<p><b>E4 - Room 6</b></p>	<p><b>F4 - Room 3</b></p>
<p><b>10:00 - 10:45</b></p>	<p><b>BIPV 4 - Architectural Integration of Solar Technologies into the Building Skin</b> Chair: Cinzia Abbate, AeV Architetti, Rome, Italy</p>	<p><b>Energy-Efficient Building Refurbishment</b> Alex Terzich, HGA Architects &amp; Engineers, Minneapolis, USA</p>	<p><b>Improving the Envelope Performance with Materials</b> Chair: Andreas Hempel, International Academy of Architects; former President Association of German Architects BDA</p>	<p><b>Sustainable Cities: New Developments and Practical Operation</b> Chair: Leo W.M. Lau, Green Energy Technology R&amp;D Center, Chengdu, China</p>	<p><b>Digital Fabrication and Material Systems of the Building Envelope</b> Chair: Chris Knapp, Bond University, Queensland, Australia</p>	<p><b>Optimierung des Gebäude-Designs mit Simulationen des Gebäudeenergieverbrauchs</b> Moderator: Ina Marie Pappe, Institut Energie am Bau, Fachhochschule Nordwestschweiz, Muttenz, Schweiz</p>
	<p><b>A size-flexible, shade robust photovoltaic system for integration in roofs and façades</b> Josco Kester, ECN Solar Energy, Netherlands</p>	<p><b>Holistic Refurbishment</b> Stefan Oehler, Werner-Sobeck, Frankfurt, Germany</p>	<p><b>Light-weight panel for buildings: an integrated optimization process</b> Fabio Manzoni, Politecnico di Torino, Italy</p>	<p><b>Design of a zero-carbon town-subdivision in Guangdong in China</b> Jun Mei, Green Energy Technology R&amp;D Center, Chengdu, China</p>	<p><b>Prototyping of composite structural envelopes through CNC and robotic fabrication</b> Chris Knapp, Bond University, Queensland, Australia</p>	<p><b>Sonnenschutz und Behaglichkeit - Komfortgewinn durch Optimierung mittels Gebäudesimulation</b> Eva-Maria Pape, Leiterin, Institut für Energieeffiziente Architektur, Fachhochschule Köln, Deutschland</p>
	<p><b>Design of a photovoltaic sliding shutter for a historic mansion</b> Stephen Wittkop, Lucerne School of Engineering and Architecture, Horw, Switzerland</p>	<p><b>Differential rates of change as an opportunity in façade replacement</b> Alex Terzich, HGA Architects &amp; Engineers, Minneapolis, USA</p>	<p><b>Comparing the energy saving of timber frame construction of PCM</b> Zdeněk Fránek, Technical University Liberec, Czech Republic</p>	<p><b>Low and zero energy buildings - towards green cities in Australia</b> A.B. Sproul, University of New South Wales, Sydney, Australia</p>	<p><b>Advanced ceramic environmental screens</b> Yusuf Khatib, University of Liverpool and Amanda Warner, Leeds Beckett University, UK</p>	<p><b>Einfluss der Wärme-speicherfähigkeit auf die energetische Flexibilität von Gebäuden</b> Monika Hall, Institut Energie am Bau, Fachhochschule Nordwestschweiz, Muttenez, Schweiz</p>
	<p><b>Symbiosis between solar technologies in the building envelope</b> Chiara Tonelli, Università degli Studi Roma Tre, Rome, Italy</p>	<p><b>Smart façades for existing, non-residential buildings: An assessment</b> Konstantinos Panopoulos, International Hellenic University, Thessaloniki, Greece</p>	<p><b>A new stucco coating based on pearlescent pigments for improving wall thermal insulation</b> Alessandro Premier, Iuav University of Venice, Italy</p>	<p><b>Sustainable town development - the case of Sino-Singapore Tianjin Eco-city in the perspective of materials and building engineering</b> Quan Jiang, China Building Material Test &amp; Certification Group Co., Ltd., Beijing, China</p>	<p><b>Metal mesh shading devices optimization by parametric approach</b> Andrea Zani, Politecnico di Milano, Italy</p>	<p><b>Optimierung von Gebäude-Design mit Simulationen des Gebäudeenergieverbrauchs</b> Emil Grüniger, Soltherm AG, Altendorf, Schweiz</p>
	<p><b>Simple models for architecture with BIPV or BIST</b> Christoph Maurer, Fraunhofer Institute for Solar Energy Systems, Freiburg, Germany</p>	<p><b>Energy performance of existent external walls in Istanbul</b> Özlem Karagoz, Istanbul Technical University, Turkey</p>	<p><b>Lime carbonation, environmental footprint and Life-Cycle Cost Analysis in mortar applications</b> Shiza Aurela, European Lime Association, Brussels, Belgium</p>	<p><b>Zero-energy urban quarter: experiences and results from a university teaching course</b> Udo Dietrich and Lena Knopp, HafenCity University Hamburg, Germany</p>	<p><b>Advanced BIM tools for building planning, collaboration and analysis</b> Vladeta Stojanovic, University of Liège, Belgium</p>	<p><b>Simulation des Eigenverbrauchs für gebäudeintegrierte Photovoltaik (BIPV)</b> Samuel Summermatter, Leiter Ingenieur-Abteilung, BE Netz AG, Schweiz</p>
	<p><b>Transformation of a historical coal bunker into a solar power station using multi-colored BIPV</b> Kerstin Müller, baubüiro in situ ag, Basel, Switzerland</p>	<p><b>Timber passive solar façade - an adaptive façade for the refurbishment of existing buildings</b> Antonio Spinelli, Politecnico di Torino, Italy</p>	<p><b>Soil as skin: ancient rammed earth and passive solar technologies in the modern age</b> Martin Knap, Atlin, British Columbia, Canada</p>	<p><b>Sustainable town development - the case of Sino-Singapore Tianjin Eco-city in the perspective of materials and building engineering</b> Quan Jiang, China Building Material Test &amp; Certification Group Co., Ltd., Beijing, China</p>	<p><b>Design for façade adaptability – Towards a unified and systematic characterization</b> Roel Loonen, Eindhoven University of Technology, Netherlands</p>	
<p><b>10:00 - 10:45</b></p>						
	<p><b>A5 - Room 4</b></p>	<p><b>B5 - Room 2</b></p>	<p><b>C5 - Room 1</b></p>	<p><b>D5 - Room 7</b></p>	<p><b>E5 - Room 6</b></p>	<p><b>F5 - Room 3</b></p>
<p><b>10:45 - 12:30</b></p>	<p><b>BIPV 5 - Innovative Business Models and Financing Mechanisms for PV Deployment</b> Chair: Zeger Vroon, PVPS Task 15, International Energy Agency, Paris, France</p>	<p><b>Performance-based Retrofit of the Building Envelope</b> Chair: Matteo D'Antoni, Eurac Research, Bolzano, Italy</p>	<p><b>New Materials for Energy-efficient Building Envelopes</b> Roberto Gary Martínez, Tecnalia, Spain</p>	<p><b>Sustainable Cities: New Developments and Practical Operation</b> Chair: Leo W.M. Lau, Green Energy Technology R&amp;D Center, Chengdu, China</p>	<p><b>Parametric Design and Simulation of the Building Envelope</b> Matei Thihsawat, Florida Atlantic University, Fort Lauderdale, USA</p>	<p><b>Materialien für Ökologische und Energieeffiziente Gebäudehüllen</b> Moderator: Andreas Hempel, International Academy of Architects; former President Association of German Architects BDA</p>
	<p><b>Transition towards sound business models for BIPV</b> Zeger Vroon, Zuyl University of Applied Sciences, Netherlands; International Energy Agency, PVPS Task 15</p>	<p><b>Resilience of Swiss offices to climate change: A comparison of four buildings with different façade typologies</b> Dominic Jurt, Lucerne University of Applied Science and Arts, Switzerland</p>	<p><b>Performance assessment of advanced materials in architectural envelopes</b> Roberto Gary Martínez, Tecnalia, Spain</p>	<p><b>Review and analysis of exemplary cases of sustainable town developments in the world</b> Leo W.M. Lau, Green Energy Technology R&amp;D Center, Chengdu, China</p>	<p><b>Exchanges between physical computing and performative parametric models</b> Matei Thihsawat, Florida Atlantic University, Fort Lauderdale, USA</p>	<p><b>Polypproyl: Zusätzliche Funktionen für Fassaden aus Biomaterialien</b> Michael Salzer, Unit Innovative Technology in Construction, Saxion University of Applied Science, Enschede, Niederlande</p>
	<p><b>Integration of photovoltaics in office and commercial buildings: economical and energy optimization</b> Valérie Cassagne, TOTAL - New Energies, Paris La Defense, France</p>	<p><b>Towards user-oriented plug &amp; play façades - Upgrading the energy performance of row houses</b> Meike Oostra, Hanz University of Applied Sciences, Groningen, Netherlands</p>	<p><b>Investigations on vacuum insulation panels based on medium sized powders</b> Roland Pags, VA-q-Tec, Germany</p>	<p><b>Energy self-sufficient Otaniemi campus Satu Kankaala, Aalto University Properties Ltd., Espoo, Finland</b></p>	<p><b>Application of interactive 3D visualization and computation for energy appraisal: enhancing BIM practices in small companies</b> Vladeta Stojanovic, Aberystwyth University, Dundee, United Kingdom</p>	<p><b>Biologisch-abbaubare Gebäudehüllen der Zukunft</b> Daniel Friedrich, Technik &amp; Architektur, Hochschule Luzern, Schweiz</p>
	<p><b>Unlocking the BIPV market</b> Géatann Moore, Director, Becquerel Institute, Belgium; International Energy Agency, PVPS Task</p>	<p><b>The use of BIM in the restoration of the Teatro Lirico</b> Lidia Pinti, Politecnico di Milano, Italy</p>	<p><b>Aerogel: a sustainable manufacture for building application</b> Francisco Ruiz, KEEY Aerogel, France</p>	<p><b>Zoning ordinances as tools for energy self-sufficiency</b> Anders Nereim, School of the Art Institute of Chicago, USA</p>	<p><b>Lighting performance simulation and adaptive control of an advanced building skin based on human behavior inputs</b> Kristis Alexandrou, University of Cyprus, Nicosia, Cyprus</p>	<p><b>Ökologische und energetische Aspekte von Fassadenelementen aus umgeformtem Textilbeton</b> Kevin Pidan, Lehrstuhl für Plastik, RWTH Aachen, Deutschland</p>
	<p><b>Fostering BIPV in the Mediterranean area</b> Giuseppe Desogus, University of Cagliari, Italy</p>	<p><b>Hygro-thermal performance assessment of prefabricated hemp-concrete walls</b> Timoja Becht, CE4-ines, France</p>	<p><b>Hygro-thermal performance assessment of prefabricated hemp-concrete walls</b> Timoja Becht, CE4-ines, France</p>	<p><b>APEC Low-Carbon Model Town Project: Progress and Prospect</b> Kazutomo Irie, Asia Pacific Energy Research Centre, Tokyo, Japan</p>	<p><b>Climate-based control strategies of adaptable ventilated double skin façades to reduce energy consumption</b> Adrienn Gelecz, ABUD Ltd, Budapest, Hungary</p>	<p><b>Phasenwechselmaterialien für die Klimatisierung eines Wohngebäudes</b> Kadage Vetterli, Zentrum für Integrale Gebäudetechnik, Technik &amp; Architektur, Hochschule Luzern, Schweiz</p>
	<p><b>Strategies to increase the deployment of PV in façades</b> Christian Renken, CR Energie Sarl, Collombey, Switzerland</p>	<p><b>Retrofitting building envelopes in warm regions</b> Carolina Caballero Roig, Universitat Jaume I, Castellón de la Plana, Spain</p>	<p><b>Aerogel insulation in refurbishment</b> Michal Genotajik, Slovak Academy of Technology, Bratislava, Slovakia</p>			<p><b>Building information Modeling bei der Ökobilanzierung der Gebäudeherstellung</b> Georg Reitschmidl, Fachgebiet Bauinformatik und Nachhaltiges Bauen, Technische Hochschule Mittelhessen, Giessen, Deutschland</p>
<p><b>12:30 - 14:00</b></p>						
	<p><b>A6 - Room 1</b></p>	<p><b>B6 - Room 3</b></p>	<p><b>C6 - Room 4</b></p>	<p><b>D6 - Room 3</b></p>	<p><b>E6 - Room 7</b></p>	
<p><b>14:00 - 15:30</b></p>	<p><b>BIPV 6 - From Design Concepts to Real Buildings: How Stakeholders Envision BIPV</b> Chair: Francesco Frontini, SUPSI, Switzerland; Alessandra Scognamiglio, ENEC, Italy</p>	<p><b>Envelope Performance Simulation and Modeling</b> Chair: Valentina Puglisi, Politecnico di Milano, Italy</p>	<p><b>Super Insulating Materials in Building Components and Systems</b> Daniel Quenard, Centre Scientifique et Technique du Bâtiment CSTB, France</p>	<p><b>Balancing Performance, Cost, and Maintenance: Designing Building Envelopes for Affordable Housing</b> Chair: Gianpiero Evola, University of Catania, Italy</p>	<p><b>Membranes for High Performance Building Skins</b> Chair: Kayhan Nadjli, Nadjli Architects Ltd., Canada</p>	
	<p><b>Building-integrated photovoltaics (BIPV) and Building Information Modelling (BIM) from the perspective of a general contractor</b> Robert Hecker, Züblin AG, Stuttgart, Germany</p>	<p><b>Resilience of Swiss offices to climate change: A comparison of four buildings with different façade typologies</b> Dominic Jurt, Lucerne University of Applied Science and Arts, Switzerland</p>	<p><b>VIP in building applications</b> Steffen Knall, Porextherm GmbH, Germany</p>	<p><b>The efficacy of policy instruments to reduce the energy use of privately owned dwellings</b> Brian Heenan, University of Twente, Enschede, Netherlands</p>	<p><b>Performance analyses of tensile membrane façades</b> Eve S. Lin, Tensile Evolution, Irvine, CA, USA</p>	
	<p><b>PV interpreted and recognized as a façade material</b> Tom Minderhoud, UN Studio, Amsterdam, Netherlands</p>	<p><b>Building envelope assessment and certification of its performance</b> Valentina Puglisi, Politecnico di Milano, Italy</p>	<p><b>Benefits Silica technology in building applications</b> Gabriele Gärtner, Evonik Industries AG, Germany</p>	<p><b>Policies to reduce market barriers for building parametric design</b> Irene Boles, Christchurch Polytechnic Institute of Technology, New Zealand</p>	<p><b>Architectural membrane for insulation of the building envelope</b> Kayhan Nadjli, Nadjli Architects Ltd., Canada</p>	
	<p><b>Building Integrated Photovoltaic as a multifunctional façade system: experiences from research and laboratory tests</b> Tilmann Kuhn, Fraunhofer Institute for Solar Energy Systems, Freiburg, Germany</p>	<p><b>Comparing the energy efficiency of a timber curtain wall with an aluminium system</b> Nebaja Buljan, Permasteelica Group, Rijeka, Croatia</p>	<p><b>Evaluation of architectural VIP in Japan</b> Atsushi Iwamoto, Kindai University, Osaka, Japan</p>	<p><b>Energy performance of buildings in Santiago, Chile: results of unregulated and high solar radiation context</b> Claudio Vásquez Zaldivar, Universidad Católica de Chile, Santiago, Chile</p>	<p><b>Coated textiles: smart wraps for old and new buildings</b> Katja Berner, Mehler Technologies GmbH, Germany</p>	
	<p><b>New design possibilities with HJT solar cells</b> Christof Erban, Meyer Burger Energy Systems, Thun, Switzerland</p>	<p><b>Optimal characteristics and dimensions of glazing components in building skins</b> David Kammer, Bern University of Applied Sciences, Switzerland</p>	<p><b>Application of Vacuum Insulation Panels in Canada's North</b> Doug MacLearn, Energy Solutions Centre, Whitehorse, Canada</p>	<p><b>The user's benefit as financial reference for building refurbishments</b> Carmen Alonso, Spanish National Research Council, Madrid, Spain</p>	<p><b>Performance analyses of the Ducati superbike pavillion</b> Mariangela De Vita, Università degli Studi dell'Aquila, Italy</p>	
	<p><b>Making the building skin active: the experience of the construction industry</b> Oliver Schwarz, Strabag, Switzerland</p>	<p><b>Simulation-based optimization of vertical static shading for improved thermal performance</b> Moua Mohammed Al Kaabi, Masdar Institute of Science and Technology, Abu Dhabi, United Arab Emirates</p>		<p><b>The influence of end user perception on the economic feasibility of sustainable building skin refurbishment</b> Bob Bogers, University of Technology, Delft, Netherlands</p>		<p><b>Wirkung von dampfdurchlässigen und strahlungsreflektierenden Materialien auf Feuchtigkeitshaushalt, Wärmeübertragung und Dauerhaftigkeit von Fassaden</b> Heinrich Thielmann, HTC, Grenoble, Frankreich</p>
<p><b>12:30 - 14:00</b></p>						
	<p><b>A7 - Room 1</b></p>	<p><b>B7 - Room 3</b></p>	<p><b>C7 - Room 4</b></p>	<p><b>D7 - Room 3</b></p>	<p><b>E7 - Room 7</b></p>	
<p><b>16:15 - 17:45</b></p>	<p><b>Architectural Integration of Solar Thermal Technologies into the Building Skin</b> Chair: Stephen Wittkop, Lucerne School of Engineering and Architecture, Switzerland</p>	<p><b>Building Energy Performance Simulation and Modeling</b> Chair: Umberto Alibrandi, Nanyang Technological University, Singapore</p>	<p><b>Aerogel-based Solutions and Adaptive Insulation of the Building Envelope</b> Chair: Samuel Brunner, Empa, Switzerland</p>	<p><b>Balancing Performance, Cost, and Maintenance: Designing Building Envelopes for Affordable Housing</b> Chair: Gianpiero Evola, University of Catania, Italy</p>	<p><b>Natural and Mixed Ventilation for Increased Comfort and Energy Saving</b> Chair: Mario Grosso, Polytechnic University of Turin, Italy</p>	
	<p><b>Performance analysis of solar air heating systems for the refurbishment of commercial buildings</b> Benoit Sire, Lucerne University of Applied Sciences and Arts, Switzerland</p>	<p><b>Thermal bridging assessment and its impact on the envelope</b> Katerina Tskoloukaki, Aristotle University of Thessaloniki, Greece</p>	<p><b>Aerogel based solution for energy efficiency on the building envelope</b> Samuel Brunner, Empa, Switzerland</p>	<p><b>Optimization through life cycle costs analysis - A case study of office buildings</b> Angela Poletti, Politecnico di Milano, Italy</p>	<p><b>Climate-dependent wind-driven passive ventilative cooling potential in Central and Southern Europe</b> Mario Grosso, Polytechnic University of Turin, Italy</p>	
	<p><b>Venetian blinds as a solar thermal collector in a mechanically ventilated transparent façade</b> Alfredo Guardo Zabaleta, Polytechnic University of Catalonia, Barcelona, Spain</p>	<p><b>Commissioning and optimization of a new office building</b> Niels Radisch, Rambøll, Copenhagen, Denmark</p>	<p><b>Impact of infiltrations in energy demand of a dwelling: Sensitivity to infiltrations for Mediterranean climate</b> Silvia Guillén-Lambea, University of Zaragoza, Spain</p>	<p><b>Retrofit</b></p>		