



# 14<sup>th</sup> Conference on Advanced Building Skins

28-29 October 2019, Bern, Switzerland

13:45		Opening: Dieter Moor, Ertext Solar, Austria, Member of the Conference Committee					
14:00		Keynote: Shigeru Ban, Shigeru Ban Architects, Tokyo, Japan					
A1 15:00	Smart Materials for Intelligent Building Envelopes <i>Chair: Daniela Trauninger, Danube University Krems, Austria</i>	B1 15:00	Green Walls <i>Chair: Andrew Jenkins, Queen's University Belfast, United Kingdom</i>	C1 15:00	Architectural Membranes for High-performance Envelopes <i>Chair: Timothy Liddell, Politecnico di Milano, Italy</i>		
<p><b>The intelligent pore in the building envelope for passive cooling</b> <i>Daniela Trauninger, Danube University Krems, Austria</i></p> <p><b>SmartStability - Multi-agent-based simulation of smart building clusters</b> <i>Monika Hall, University of Applied Sciences and Arts Northwestern Switzerland, Muttenz</i></p> <p><b>Brief presentations:</b> <b>Applications of smart mineral insulation material</b> <i>Hannes Stolzlechner, Geolyth, Austria</i></p> <p><b>Thermal performance of engineered wood flooring impregnated with phase-change materials</b> <i>Damién Mathis, Ai Environnement, Paris, France</i></p> <p><b>Novel material for smart sustainable building envelope</b> <i>Vincenzo Sapienza, University of Catania, Italy</i></p>		<p><b>Positive effects of green building envelopes</b> <i>Rudi Scheuermann, Arup, Berlin, Germany</i></p> <p><b>Reduction in building energy use as a result of food production within a double-skinned glazed façade</b> <i>Andrew Jenkins, Queen's University Belfast, United Kingdom</i></p> <p><b>Experience with green wall projects</b> <i>Zdeněk Fránek, Fránek Architects, Brno, Czech Republic</i></p> <p><b>Brief presentation:</b></p> <p><b>Green Walls 3D Modeling</b> <i>Gabriel Pérez, University of Lleida, Spain</i></p>		<p><b>Adaptive membrane façades</b> <i>Christina Eisenbarth and Walter Haase, Stuttgart University, Germany</i></p> <p><b>CAD-integrated approach for the design of structural membranes</b> <i>Ann-Kathrin Goldbach, Technical University of Munich, Germany</i></p> <p><b>Programmable textiles for building façade applications</b> <i>Timothy Liddell, Politecnico di Milano, Italy</i></p> <p><b>Brief presentation:</b></p> <p><b>Sustainable waterproofing of expansion joints</b> <i>Tomasz Kozłowski, Soba Inter, Baden, Switzerland</i></p>		<p><b>Optimierung der Gebäudehülle mit nachhaltigen Fassaden</b> <i>Chair: Roland Krippner, Technische Hochschule Nürnberg, Germany</i></p> <p><b>Neuinterpretation des Fensterladens mit biogenen Werkstoffen</b> <i>Roland Krippner, Technische Hochschule Nürnberg, Germany</i></p> <p><b>Intelligente Fassaden</b> <i>Stefan Rappold, Behnisch Architekten, Stuttgart, Germany</i></p> <p><b>Hanfsteine: monolithische Bauweise für Langlebigkeit</b> <i>Werner Schönthaler, Schönthaler Bausteinwerk, Eys, Italy</i></p>	
15:45		Coffee Break					

<b>A2</b> <b>16:30</b> <b>Double Skin and Cavity Façades</b> <i>Chair: Bharat Patel, Harley Ellis Devereaux, Los Angeles, United States</i>	<b>B2</b> <b>16:30</b> <b>Biomimetics for the Building Envelope</b> <i>Chair: Estelle Cruz, CEEBIOS - French Network in Biomimetics, Paris, France</i>	<b>C2</b> <b>16:30</b> <b>Performance of the Building Envelope</b> <i>Chair: Ryan Krug, Pie Consulting &amp; Engineering, United States</i>	<b>D2</b> <b>16:30</b> <b>Thermal Energy from the Building Skin</b> <i>Chair: Thomas Friedrich, Innogration GmbH, Germany</i>
<p><b>The next generation of closed-cavity façades</b> <i>Bernhard Rudolf, Josef Gartner, Germany</i></p> <p><b>A Double Skin Cavity Façade for a sustainable mid-rise building retrofit</b> <i>Daniel McKelvey, Ayers Saint Gross Architects, Baltimore, United States</i></p> <p><b>Sustainable architecture at the heart of the University of Calgary</b> <i>Robert Claiborne, Dialog, San Francisco, USA</i></p> <p><b>Double skin façade with BIPV</b> <i>Zoheir Haghighi, TUDelft, Netherlands</i></p> <p><b>Electrochromic glass for Closed Cavity Façades</b> <i>Jürgen Schade, PORR Suisse, Switzerland</i></p> <p><b>Active Cavity Transition Façade – Interior sun shading for energy-efficient fully glazed façades</b> <i>Paul-Rouven Denz, Priedemann Facade-Lab, Germany</i></p> <p><b>Performance of heat recovery using an Active Double Skin Façade</b> <i>Michael Bulander and Kishore Patel, Harley Ellis Devereaux, Los Angeles, United States</i></p> <p><b>Brief presentation:</b></p> <p><b>Optimization of air cavity of a double-skin transparent façade for HVAC strategy</b> <i>Jakub Curpek, Slovak University of Technology, Bratislava, Slovakia</i></p>	<p><b>A framework for bio-inspired façade design</b> <i>Hisham Elkadi, University of Salford, Manchester, United Kingdom</i></p> <p><b>Feedback of bio-inspired projects in real estate</b> <i>Pauline Philippe, Elan, France</i></p> <p><b>Composite lightweight structures based on biological principles</b> <i>Valentin Koslowski, Stuttgart University, Germany</i> <i>Niccolò Dambrosio, Stuttgart University, Germany</i></p> <p><b>A bio-inspired solution to raise the efficiency of kinetic façades</b> <i>Steven Ware, Art &amp; Build Architects, Paris, France</i></p> <p><b>Quantitative evaluation of bio-inspired building skins</b> <i>Estelle Cruz, CEEBIOS - French Network in Biomimetics, Paris, France</i></p> <p><b>Brief presentation:</b></p> <p><b>BRANE Architecture - Skin and bones as one</b> <i>Eric Chan, EDArch Studio, Hong Kong, China</i></p>	<p><b>Implementing a quality assurance program for sustainable buildings</b> <i>Don Neff, LJP Construction Services, Irvine, USA</i></p> <p><b>Measuring the impact of enclosure thermal bridging on whole building energy models</b> <i>Ken Roko, RWDI, Portland, United States</i> <i>Chiara Pozzuoli, RWDI, Milano, Italy</i></p> <p><b>Thermal comfort modeling and its impact on building energy performance</b> <i>Vikram Sami, Olson Kundig, Seattle, United States</i></p> <p><b>Energy Code Compliance and effects of more stringent codes on envelope design</b> <i>Inna Dolottseva, Interface Engineering, USA</i></p> <p><b>Impact of façade components on its acoustic performance</b> <i>Fabien Dalzin, Saint-Gobain, Compiègne, France</i></p> <p><b>Building Enclosure Commissioning - Process, Current State, and Future</b> <i>Ryan Krug, Pie Consulting &amp; Engineering, USA</i></p> <p><b>Brief presentations:</b></p> <p><b>Customized cost-efficient building skin design</b> <i>Adria Mateo Fornés, University of Lleida, Ponts, Spain</i></p> <p><b>Evaluating energy, environmental impact and costs</b> <i>Carlotta Dolzani, Agenzia per l'Energia, Bolzano, Italy</i></p> <p><b>Passive window ventilation openings</b> <i>Caroline Hoffmann, FHNW, Muttenz Switzerland</i></p> <p><b>Energy-efficient building envelope design features</b> <i>Kuladeep Kumar, Indian Institute of Technology</i></p> <p><b>Voxel-based computational morphogenesis in urban context</b> <i>Ilona Darmon, Nobatek/INEF4, France</i></p>	<p><b>Adjustable thermal insulation - The manufacturer's viewpoint</b> <i>Michael Fischer, König Metall, Germany</i></p> <p><b>Application for a concrete based thermal storage element with vacuum insulation</b> <i>Theresa Schmitt, Innogration GmbH, Germany</i></p> <p><b>Transient thermal behavior of switchable vacuum insulation panels</b> <i>Martin Kiesche, TU Kaiserslautern, Germany</i></p> <p><b>Structure and properties of supported vacuum insulation</b> <i>Jobst Kerspe, TEB-Kerspe, Germany</i></p> <p><b>Decentralized thermal storage container</b> <i>Thomas Friedrich, Innogration GmbH, Germany</i></p> <p><b>Multifunctional components for energetic active use of the building envelope</b> <i>Tillman Gauer, TU Kaiserslautern, Germany</i></p>

19:00

Conference Dinner 



**Kanton Bern**  
**Canton de Berne**



**ADVANCED**  
**BUILDING SKINS**



**energie schweiz**  
Unser Engagement: unsere Zukunft.

# Conference Day 2 – 29<sup>th</sup> October 2019

<b>A3</b> <b>08:30</b> <b>Responsive and Adaptive Building Skins</b> <i>Chair: Charles Cooke, Populous, London, United Kingdom</i>	<b>B3</b> <b>08:30</b> <b>Dynamic Glazing for Sustainable Building Skins</b> <i>Chair: Michele Manca, LEITAT Technological Center, Spain</i>	<b>C3</b> <b>08:30</b> <b>Integrating Solar Technologies into the Building Envelope</b> <i>Chair: Stephen Wittkopf, ÜserHuus, Hergiswil, Switzerland</i>	<b>D3</b> <b>08:30</b> <b>New Forms of Concrete for the Building Envelope</b> <i>Chair: Robert Schmitz, RPS Structural Engineering, LLC, Brookfield, United States</i>
<p><b>Responsive and interactive façades on the next generation of entertainment venues</b> <i>Charles Cooke, Populous, London, United Kingdom</i></p> <p><b>Wind-induced noise caused by adaptive façade elements</b> <i>Monika Rychtarikova, KU Leuven, Ghent, Belgium</i></p> <p><b>Climate responsive building envelope – Adaptation and mitigation options</b> <i>Susan Draeger, WS GreenTechnologies, Stuttgart, Germany</i></p> <p><b>Agency in the presence of intelligence: the case of occupants and adaptive skins</b> <i>Zein Al-Doughmi, Cardiff University, United Kingdom</i></p> <p><b>Adaptive façades impact on workplace comfort</b> <i>Maria Meizoso, Arup, London, United Kingdom</i></p>	<p><b>Smart dynamic windows</b> <i>Aline Rougier, University of Bordeaux, France</i></p> <p><b>Comparison of two dynamic glass technologies - liquid crystal and electrochromic</b> <i>Aliki Papasifaki, Elementa Consulting, United Kingdom</i></p> <p><b>Electrochromic window: The importance of control</b> <i>Tanguy Timmermans, Halio International, Belgium</i></p> <p><b>Advanced control strategies for active modulation of solar radiation in buildings</b> <i>Fabio Favoino, Politecnico di Torino, Italy</i></p> <p><b>Designing for restorative spaces with dynamic glass</b> <i>Eloise Sok, Saint-Gobain, Courbevoie, France</i></p> <p><b>Combining electrochromic glazing with PV</b> <i>Rory Back, NSG Pilkington, Lathom, United Kingdom</i></p> <p>Brief Presentations on Solar Shading systems:</p> <p><b>Ceramic skin of Sant Pau Research Institute</b> <i>Zuzana Prochazkova, pichArchitects, Barcelona, Spain</i></p> <p><b>Determining shading with a thermal comfort model</b> <i>Anton Hendrix, BAU, Stockholm, Sweden</i></p> <p><b>Solar-thermal venetian blind for adaptive sun protection in a double-skin façade</b> <i>Simon Frederik Haeringer, Fraunhofer ISE, Germany</i></p>	<p><b>PV façade integration - The architect's perspective</b> <i>Jochen Weick, Avancis, Germany</i></p> <p><b>Solar-aesthetics beyond glass</b> <i>Patrick Hofer-Noser, 3S Solar Plus, Gwatt, Switzerland</i></p> <p><b>BIPV as the primary energy source for future schools and offices</b> <i>Dave Worsley, Swansea University, United Kingdom</i></p> <p><b>Transparent PV with quantum dots surface</b> <i>Lovro Denona, ML System, Poland</i></p> <p><b>Multi-functional solar-roof membranes</b> <i>Maximilian Rosner, DAS Energy, Austria</i></p> <p><b>Novel, semi-transparent BIPV-modules with new design features</b> <i>Johannes Eisenlohr, Fraunhofer ISE, Germany</i></p> <p><b>Energy harvesting by invisible solar façade collector</b> <i>Bart Erich, TNO, Eindhoven, Netherlands</i></p> <p>Brief presentations:</p> <p><b>Impact of multiple PV technologies on the techno-economic optimization</b> <i>Jennifer Adami, EURAC Research, Bolzano, Italy</i></p> <p><b>Performance of semi-transparent PV windows</b> <i>Roland Valckenborg, TNO, Eindhoven, Netherlands</i></p>	<p><b>Concrete curtain walls - Status, benefits and visions</b> <i>Stephan Giesser, Solidian, Germany</i></p> <p><b>Fabric-formed concrete structures</b> <i>Robert Schmitz, RPS Structural Engineering, LLC, Brookfield, United States</i></p> <p><b>Ultra-high performance concrete and carbon tendons for façades</b> <i>Milan Schultz-Cornelius, TU Kaiserslautern, Germany</i></p> <p><b>Green Roof 2.0</b> <i>David Duffus, GR2 Architecture, Copenhagen, Denmark</i></p> <p><b>New development for a pre-stressed façade panel</b> <i>Cristina Parda March, Universitat Politècnica de Catalunya, Barcelona, Spain</i></p> <p>Brief presentation:</p> <p><b>Glassfibre reinforced concrete</b> <i>Simon Hertzum, International Glassfibre Reinforced Concrete Association, United Kingdom</i></p>

10:00 | Coffee Break



A4 10:45	Advanced Building Skin Design <i>Chair: Michael Garrison, University of Texas at Austin, United States</i>	B4 10:45	Dynamic Façade Design with Simulation Tools <i>Chair: Per Sahlin, EQUA Simulation, Stockholm, Sweden</i>	C4 10:45	Colored Photovoltaics: Performance and Aesthetics <i>Chair: Janne Halme, Aalto University, Espoo, Finland</i>	D4 10:45	New Materials for the Building Skin <i>Chair: Sven Mumme, U.S. Department of Energy, Washington DC, United States</i>
<p><b>Holistic approach to building envelope and mechanical system design</b> <i>Sean O'Brien, Simpson, Gumpertz &amp; Heger, New York, United States</i></p> <p><b>Two concepts for zero-net-energy buildings for affordable housing in Austin, Texas</b> <i>Michael Garrison, University of Texas at Austin, United States</i></p> <p><b>Sustainable façades in wood – Competitive and durable through precise prefabrication</b> <i>Hansueli Schmid, Lignum, Zürich, Switzerland</i></p> <p><b>Design for fabrication for a specialty mega-panel façade system</b> <i>Sanjeev Tankha, Walter P Moore, Los Angeles, United States</i></p> <p><b>Dynamic morphing of traditional screen design</b> <i>Muhammad Moussa, OBM International, Miami, United States</i></p> <p><b>Design recommendations for Bypass Double Skin Façades</b> <i>Frank Wellershoff, HafenCity University Hamburg, Germany</i></p> <p><b>Nodable - 3D Printed nodes for freeform steel façades</b> <i>Lia Tramontini, Jansen, Switzerland</i></p> <p><b>Corrugated-geometry copper and glass façade: From concept to construction</b> <i>John Jackson, Simpson Gumpertz &amp; Heger, Washington DC, United States</i></p>	<p><b>Why shading must be dynamic</b> <i>Anders Hall, Somfy, Sweden</i></p> <p><b>Successful façade design by simulation</b> <i>Sven Moosberger, EQUA Solutions, Switzerland</i></p> <p><b>Holistic, multi-dimensional analysis of shading impacts on an all-glass office building</b> <i>Jason Kirkpatrick, Interface Engineering, San Francisco, United States</i></p> <p><b>Advanced daylight modeling of façade systems for energy and comfort analysis</b> <i>David Geisler-Moroder, Bartenbach GmbH, Aldrans, Austria</i></p> <p><b>Glazing and shading that make the difference</b> <i>Oskar Storm, Saint-Gobain Glass, Sweden</i></p> <p><b>Activating optical behavior of cellular lattices in glass sandwich façades</b> <i>Nebojsa Jakica, University of Southern Denmark, Odense</i></p> <p><b>Predictive controls for HVAC systems</b> <i>Urs Grossenbacher, Pronoó AG, Switzerland</i></p> <p><b>Design of an angular selective and switchable textile shading system</b> <i>Bruno Bueno, Fraunhofer ISE, Freiburg, Germany</i></p>	<p><b>Optimizing the performance of colored BIPV</b> <i>Janne Halme, Aalto University, Espoo, Finland</i></p> <p><b>High-performing coloured BIPV modules with anti-glare coating</b> <i>Thomas Kroyer, Fraunhofer ISE, Germany</i></p> <p><b>Digitally printed multi-colored BIPV</b> <i>Stephen Wittkopf, ÜserHuus, Hergiswil, Switzerland</i></p> <p><b>Coloring of solar modules by a photonic pigment layer</b> <i>Sebastian Barth, Merck, Germany</i></p> <p><b>Energy façades of tomorrow</b> <i>Peter Röthlisberger, Solaxess, Switzerland</i></p> <p><b>Colored PV solutions for active façades</b> <i>Laure-Emmanuelle Perret, EPFL, Switzerland</i></p> <p><b>Nano-particle coatings for directional low-loss colored PV</b> <i>Verena Neder, Amolf, Amsterdam, Netherlands</i></p> <p><b>Brief Presentations on Photovoltaic-thermal systems for the building skin:</b></p> <p><b>Integration of semi-transparent PV in building-integrated PV/T roofs</b> <i>Samson Yip, Concordia University, Montreal, Canada</i></p> <p><b>Producing heat and power in the building skin</b> <i>Corry de Keizer, TNO-SEAC, Eindhoven, Netherlands</i></p> <p><b>Envelope-integrated solar electric/thermal cooling system with storage</b> <i>Mohannad Bayoumi, KAU, Jeddah, Saudi Arabia</i></p>	<p><b>Long-lasting protection through functionalized building materials</b> <i>Pedro Kaiser, Evonik Resource Efficiency GmbH, Switzerland</i> <i>Susanne Martens-Kruck, Evonik Resource Efficiency, Germany</i></p> <p><b>High-reflectance pigments in thermal enhanced exterior finishing systems</b> <i>Joana Maia, Faculty of Engineering, University of Porto, Portugal</i></p> <p><b>Advanced thermal management: A dynamic and tunable systems approach for building envelopes</b> <i>Sven Mumme, U.S. Department of Energy, Washington DC, United States</i></p> <p><b>Digital ink print on 3D metallic effect powder coating</b> <i>Dieter Holzinger, TIGER Coatings, Wels, Austria</i> <i>Nora Pollmann, TIGER Coatings, Wels, Austria</i></p> <p><b>The building envelope of the future</b> <i>Werner Jager, Hydro Building Systems, Germany</i></p> <p><b>Circular economy optimised energy-efficient building skins for residential construction</b> <i>Gerard Finch, Victoria University of Wellington, New Zealand</i></p> <p><b>Brief Presentation on 3D Print of the Building Envelope:</b></p> <p><b>3D-printed façade panel with integrated electric infrastructure</b> <i>Hyunchul Kwon, ETH Zurich, Switzerland</i></p>				

12:30 Lunch

A5 14:00	Integrated 3D Design of a Timber Construction with PV <i>Lutz Schöne, LEICHT Structural Engineering</i>	B5 14:00	Glass for Advanced Building Envelopes <i>Chair: Jeremy Deale, Architectus, Sydney, Australia</i>	C5 14:00	Parametric Design and Digital Fabrication <i>Chair: David Frey, HOK, Los Angeles, United States</i>	D5 14:00	Building Retrofit: Policies, Prefabrication, Projects <i>Chair: Leo Lau, Green Energy Technology R&amp;D Center, Chengdu, China</i>
<p><b>Infinite geometry and hybrid construction: An exceptional façade design</b> <i>Lutz Schöne, LEICHT Structural Engineering, Germany</i></p> <p><b>From BIM to fabrication</b> <i>Fabian Scheurer, Design-to-Production, Zurich, Switzerland</i></p> <p><b>Free-form timber façade</b> <i>Franz Tschümperlin, SJB Kempter Fitze, Switzerland</i></p> <p><b>The role of the local architect in a complex international project</b> <i>Carolin Schaal, Itten + Brechbühl, Bern, Switzerland</i></p> <p><b>Complex 3D installation of Building Integrated Photovoltaics (BIPV)</b> <i>Dieter Moor, Ertex Solar, Austria</i></p> <p><b>System design of a complex BIPV skin</b> <i>Samuel Summermatter, BE Netz, Switzerland</i></p>	<p><b>Designing innovative high energy-performance glass façades</b> <i>Jeremy Deale, Architectus, Sydney, Australia</i></p> <p><b>Current developments in building skin design – A façade contractor’s perspective</b> <i>Erwin Trommer, Frener &amp; Reifer, Italy</i></p> <p><b>Water-glass building envelope - Design and energy aspects of adaptive hybrid envelopes</b> <i>Matyas Gutai, Loughborough University, United Kingdom</i></p> <p><b>New building glass envelope with light, colours and images</b> <i>Ion Luh, Consullux Lighting Consultants/CEL, Toronto, Canada</i></p> <p><b>IGUs with individual function and free design using 3D printing</b> <i>Frank Schneider, OKALUX GmbH, Germany</i></p> <p><b>Reinforced annealed glass</b> <i>Mithila Achintha, University of Southampton, UK</i></p> <p><b>Reactive thermoplastic spacer for energy-efficient cold-bent structural glazing façades</b> <i>Christian Scherer, Kömmerling, Germany</i></p> <p><b>Brief presentations:</b> <b>Heat build-up on shadow box: Assessment with 1-D and 2-D finite elements tools</b> <i>Simone Miriana, Eckersley O’Callaghan, UK</i></p> <p><b>Thermal stress in glazed façades</b> <i>Wout Parys, Physibel, Ghent, Belgium</i></p>	<p><b>Performative layers: Kolon One &amp; Only Tower</b> <i>Stan Su, Morphosis Architects, Los Angeles, United States</i></p> <p><b>Pixelated façades, curvatures by simple parts</b> <i>Roberto Fabbri, BIG - Bjarke Ingels Group, Copenhagen, Denmark</i></p> <p><b>Working with big data - The grid-shell glass roof at Changi Airport, Singapore</b> <i>Cristobal Correa, BuroHappold Engineering, New York, United States</i></p> <p><b>Parametric design and digital fabrication - Case study</b> <i>Stefano Rossi, Maffei Engineering, Zürich, Switzerland</i></p> <p><b>Mechanically enhanced parametric design of structures by iso-geometric analysis</b> <i>Anna M. Bauer, Technical University of Munich, Germany</i></p> <p><b>Industry disruption 4.0 - Mass customisation and digitalisation</b> <i>Vladimir Marinov, Define Engineers, London, United Kingdom</i></p> <p><b>Parametric performance analysis for cost optimization in design build delivery</b> <i>David Frey, HOK, Los Angeles, United States</i></p> <p><b>Brief presentation:</b></p> <p><b>Front load optimization on complex façade design</b> <i>Will Wang, Pelli Clarke Pelli Architects, United States</i></p>	<p><b>Optimising densification and renovation of the building stock in Switzerland</b> <i>Lionel Rinquet, University of Applied Sciences and Arts, Geneva, Switzerland</i></p> <p><b>Refurbishment strategies considering the utilization cycle for institutional investors</b> <i>Marvin King, Lucerne University of Applied Sciences and Arts, Switzerland</i></p> <p><b>Prefabricated net-zero energy retrofit of low-rise Canadian housing</b> <i>Mark Carver, Natural Resources Canada, Ottawa</i></p> <p><b>Prefabricated modular façade elements for refurbishment with integrated heat pump</b> <i>Fabian Ochs, University of Innsbruck, Austria</i></p> <p><b>Envelope retrofit of a university building</b> <i>Graeme Duffus, DSRA Architects, Halifax, Canada</i></p> <p><b>Brief presentation:</b></p> <p><b>Refurbishment of Dutch post-war stacked residential houses</b> <i>Frits Schultheiss, HAN University of Applied Sciences, Arnhem, Netherlands</i></p>				
15:30		Coffee break					



look out to the future



A6 16:15 Envelope as Symbiotic Ecosystem <i>Chair: Matthew Fineout, Smart Architecture, Pittsburgh, United States</i>	B6 16:15 Fluid-flow Façade Technology for Advanced Performance <i>Chair: Tin-Tai Chow, City University of Hong Kong, China</i>	C6 16:15 Sustainable Design with Building Information Modeling <i>William Russell, BKSK Architects, New York, United States</i>	D6 16:15 Retrofitting the Envelope of Mid-20th Century Iconic Buildings <i>Christopher Jend, Pei Cobb Freed &amp; Partners, New York, United States</i>
<p><b>The Desert Rose - When poesy meets technology</b> <i>Nassim Saoud, Trimble Consulting, Paris, France</i></p> <p><b>Building envelopes that minimizes energy</b> <i>Matthew Fineout, Smart Architecture, United States</i></p> <p><b>The hidden geometry of the airport envelope</b> <i>Nicolas Orellana, Envelope Team, Boston, USA</i> <i>Italo Veas, Envelope Team, Santiago, Chile</i></p> <p><b>Façade design for passenger comfort and energy efficiency in extreme climates</b> <i>Mustafa Chehabeddine, Kohn Pedersen Fox Associates, London, United Kingdom</i></p> <p><b>Engineering, Modelling and Fabrication of a Complex Parametric Envelope: The Kuwait International Airport T2</b> <i>Lucio Blandini, Werner Sobek, Stuttgart, Germany</i></p> <p><b>Façade engineering and soundscape</b> <i>Tommaso Crippa and Edoardo Dagnini, BuroHappold Engineering, London, United Kingdom</i></p> <p><b>OBox - A new way of living through autonomy</b> <i>Benoit Quevrin, FAAST think-tank, Brussels, Belgium</i></p>	<p><b>Liquid-flow glazed panel design</b> <i>Tin-Tai Chow, City University of Hong Kong, China</i></p> <p><b>Spectral and thermal problems of Water Flow Glazing</b> <i>Juan Antonio Hernandez, Technical University of Madrid, Spain</i></p> <p><b>Modular façade system for Water Flow Glazing façades</b> <i>Veneta Novakova, Etem, Sofia, Bulgaria</i></p> <p><b>Thermal performance of water medium window</b> <i>Yuanli Lyu, Xihua University, China</i></p> <p><b>Achieving nZEB by means of water-flow-glazing systems</b> <i>Belen Moreno, Technical University of Madrid, Spain</i></p> <p><b>Heat-pipe embedded façade for domestic water heating</b> <i>Wenjie Liu, City University of Hong Kong, China</i></p>	<p><b>Rationalization for construction of complex building envelope geometries</b> <i>Gustav Fagerstrom, Walter P Moore, United States</i></p> <p><b>Envelope Information Modeling: digitalization of the design process</b> <i>Ana Gallego, ENAR, Architectural Envelopes, Spain</i></p> <p><b>Building envelope cost analysis with BIM and UniModel</b> <i>Philip Larson, Project &amp; Cost Control, United States</i></p> <p><b>Circular façade systems developed with BIM</b> <i>Thomas Bögl, LIAG Architects &amp; Engineers, Netherlands</i></p> <p><b>Element-based life cycle Information Modeling for curved building skins</b> <i>Chihlin Hsu, Gomore Material Technology, Taiwan</i></p> <p><b>Sustainable façade design in New York landmarks historic districts</b> <i>William Russell, BKSK Architects, New York, USA</i></p> <p><b>Simulation-based tool to design refurbishment projects at district level</b> <i>Sonia Álvarez, CARTIF Technology Centre, Spain</i></p>	<p><b>Sustainable redevelopment of an iconic 20th century office building</b> <i>Ronan Phelan, Scott Tallon Walker Architects, Dublin, Ireland</i></p> <p><b>Recladding a mid-century modern icon for the 21st century workplace</b> <i>Katherine Bojsza, Pei Cobb Freed &amp; Partners, New York, United States</i></p> <p><b>Retrofitting of building envelopes with a view to heritage values</b> <i>Michel Pregardien, University of Mons, Belgium</i></p> <p><b>Envelope retrofit of historical buildings</b> <i>Raul Corrales, Biff SA, Lausanne, Switzerland</i></p>
17:45	End of Conference Day 2		

The conference will be held in English; session D1 will be held in German.

## Registration

The registration fee is €680 and includes lunches and the conference documentation including full manuscripts of the presentations.

“Early Birds” who register by 20<sup>th</sup> September, will receive a 10% discount (€612). Registration at: <https://abs.green/registration>.

### Conference venue

Conference Center Kursaal  
Kornhausstr. 3  
CH-3000 Bern  
Switzerland

### Organizer

Advanced Building Skins GmbH  
Zentral Str. 44  
CH-6003 Lucerne  
Switzerland

Tel Lucerne: +41 41 50 8 70 36  
Tel Munich: +49 89 20000-4161  
Tel Bolzano: +39 0471 34 00 50  
[info@abs.green](mailto:info@abs.green)