

Conference Program **ADVANCED BUILDING SKINS 2016**

10 October 2016, Conference Day 1				10 October 2016, Conference Day 1								
	10:00	Opening: Andreas Hempel, International Academy of Architects, former President Association of German Architects BDA										
	10:45 Session A1 Arena	PV Façades: Design, Technologies, Visions Chair: Christian Renken, CR Energie, Switzerland	10:45 Session B1 Bellavista 3+4	Building Retrofits: Analysis, Strategies and Policies Chair: Giovanni Zemella, Ove Arup & Partners, London, United Kingdom	10:45 Session C1 Orione	3D Printing of the Building Envelope Chair: Alireza Borhani, Dep. of Architecture, Texas A&M University, USA	10:45 Session D1 Bellavista 2	Façade Integrated HVAC components Chair: Matteo D'Antoni, EURAC, Bolzano, Italy	10:45 Session E1 Bellavista 5	Innovative Products and Technologies for the Building Skin Chair: Valentina Puglisi, Politecnico di Milano, Italy	10:45 Session F1 Luna	Entwurf der Gebäudehülle unter Nachhaltigkeitsaspekten Chair: Andreas Hempel, International Academy of Architects
		Solar building skin: A dedicated architecture JD Steenackers, Sunsoak design & architecture, Brussels, Belgium Innovative design solutions for BIPV David Müller, Merck KGaA, Darmstadt, Germany Affordable BIPV – dream or reality? Dieter Moor, Ertex Solar, Austria Enhancing the visual design of PV-modules for façade application acceptance Peter Fornaro, University of Basel, Switzerland Technical requirements of PV components for BIPV Urs Muntwyler, Bern University of Applied Sciences, Switzerland Integrated PV as an added value of façades Christian Renken, CR Energie, Switzerland	Sustainable renovation and energy supply of historical districts: a Swiss case study Claudio Menn, University of Applied Sciences and Arts Northwestern Switzerland Fabric energy efficiency ratio: a new parameter as a nudge to push the boundaries of building refurbishment Giovanni Zemella, Ove Arup & Partners, London, United Kingdom Energetic refurbishment of building skins Lionel Rinquet, Stefanie Schwab, HES-SO, Geneva, Switzerland	Bio-inspired 3D printed kinematic responsive systems Correa, Institute for Computational Design (ICD), Stuttgart, Germany 3D printed flexible structures as self-transformable surfaces Alireza Borhani, Department of Architecture, Texas A&M University, USA Industrial 3D printing in the building industry Tobias King, voxeljet AG, Friedberg, Germany	Façade integrated HVAC systems for the renovation of residential buildings David Venus, AEE - Institute for Sustainable Technologies, Gleisdorf, Austria Sustainable bioplastics-based cladding Daniel Friedrich, Lucerne University of Applied Sciences, Switzerland Active roofs and façades Vickie Aagesen, Cenergia, Denmark Prefabricated timber-frame envelopes for building retrofit with integrated ventilation, heating system and building services Sebastian Hernandez, Gump & Maier, Germany; Fabian Ochs, University of Innsbruck, Austria Integration of a sorption collector coupled with a decentralized mechanical ventilation unit in curtain wall modules D'Antoni Matteo, EURAC, Bolzano, Italy Daylight-driven and user-centered lighting and energy management Wilfried Pohl, Bartenbach GmbH, Austria	Façade integrated HVAC systems for the renovation of residential buildings David Venus, AEE - Institute for Sustainable Technologies, Gleisdorf, Austria Sustainable bioplastics-based cladding Daniel Friedrich, Lucerne University of Applied Sciences, Switzerland Multiple requirements combined in a curved single skin unitized façade with fiberglass reinforced plastic Christiaan de Wolt, DGM&R Bouw BV, Den Haag, Netherlands High-performance smart textiles for tensile structures Pieter Heyse, Centexbel, Belgium Passive Infrared Night Cooling (PINC) at the Energy Efficiency Center Michaela Reim, ZAE Bayern, Würzburg, Germany Brief Presentations: Innovative materials for refurbishment of the building envelope Renata Morbiducci, University of Genova, Italy	Aerogel glazing units for high performance building envelopes Tao Gao, Norwegian University of Science and Technology, Norway Sustainable bioplastics-based cladding Daniel Friedrich, Lucerne University of Applied Sciences, Switzerland Multiple requirements combined in a curved single skin unitized façade with fiberglass reinforced plastic Christiaan de Wolt, DGM&R Bouw BV, Den Haag, Netherlands High-performance smart textiles for tensile structures Pieter Heyse, Centexbel, Belgium Passive Infrared Night Cooling (PINC) at the Energy Efficiency Center Michaela Reim, ZAE Bayern, Würzburg, Germany Brief Presentations: Innovative materials for refurbishment of the building envelope Renata Morbiducci, University of Genova, Italy	Prototypen in der Architektur von Theo Hotz Peter Berger, Theo Hotz Partner Architekten, Zürich, Switzerland Energetische Optimierung der Unterkonstruktionen von vorgehängten hinterlüfteten Fassaden (VHF) Ulrich Möller, HTWK Leipzig University of Applied Sciences, Germany Klimaregulierende und solar-aktive Gebäudehüllen bei ganzheitlicher Planung von Gebäuden und Quartieren Eileen Meyer, Eileen Meyer Architetto, San Felice, Italy Beschleunigungsfaktoren im Alterungsprozess von PV-Fassaden Julian Figes, Fraunhofer IWS, Kassel, Germany Reduzierung der Wärmebrücken von Tiefgaragendecken Christoph Greyer, Berner Fachhochschule, Switzerland Gesamtenergetische Gebäudeoptimierung im Spannungsfeld zwischen gesetzlichen Vorgaben und Praxis Moritz Zwahlen, Gruner Roschi AG, Köniz, Switzerland				
	12:30	Lunch						12:30	Lunch			
	14:00 Session A2 Bellavista 5	Designing PV-Façades for Optimized Performance Chair: Dieter Moor, Ertex Solar, Austria	14:00 Session B2 Bellavista 3+4	Products and Technologies for Building Refurbishment 1 Chair: Wolfram Sparber, Eurac Research, Bolzano, Italy	14:00 Session C2 Arena	Advanced Building Skin Design 1 Chair: Russell Gilchrist, Gensler, Chicago, USA	14:00 Session D2 Orione	Bio-inspired Materials + Technologies for the Building Skin Chair: Anders Nereim, School of the Art Institute of Chicago	14:00 Session E2 Bellavista 2	Architectural Membranes for High-performance Building Skins Chair: Stefan Lehner, Vector Foiltec GmbH, Germany	14:00 Session F2 Luna	Schlanke Fassaden aus hochwertigem Textilbeton Chair: Christian Kulak, solidian GmbH, Germany
		Building envelope design to maximize PV performance Daniel Mateus, University of Lisbon, Portugal Glass-glass photovoltaic modules for BIPV applications Max Mittag, Fraunhofer ISE, Freiburg, Germany Performance-based design concept for curved glass BIPV façades Nebojsa Jakica, Politecnico di Milano, Italy Exceptional BIPV application in Saudi Arabia Heribert Ley, Sunovation, Germany Efficient, flexible and affordable BIPV systems and their applications Rafael Stadelmann, SolarMarkt GmbH, Aarau, Switzerland Brief Presentations: Solar electric powered heat pump to generate hot water in façades Raphael Knecht, ZHAW School of Engineering, Winterthur, Switzerland Results with a BIPV implementation in a passive house Cristina Tanasa, Politehnica University Timisoara, Romania Dynamic solar shading technologies for application in Energy Frames Antonio Mollicone, Faculty for the Built Environment, Iklm, Malta Aesthetics, Economy and Functionality: The PV roof by Designergy Daniel Lepori, Designergy, Switzerland	Prefabricated façade modules with integrated ventilation René Kobler, University of Applied Sciences and Arts Northwestern Switzerland Airtight retrofits for improving insulation performance in multiple dwelling houses Fumiaki Takahashi, Tokyo University of Science, Japan Retrofitting historic buildings: The case of architectural faculty buildings in Istanbul Seda Nur Alkan, Istanbul Technical University, Turkey Multi-angled façade system for office building renovation Loay Hannoudi, Aarborg University, Denmark Brief Presentations: Tropical retrofit - the case of São Paulo, Brazil Cristina Cavalcanti, Universidade Presbiteriana Mackenzie, São Paulo, Brazil	Methods and technologies for advanced building skin design Fabian Schmid, seee GmbH, Gersthofen, Germany Advanced performances and construction processes with parametrical design – The Generali Tower, Milan Paolo Zilli, Zaha Hadid Architects, London, United Kingdom Adapting façade design to different climatic zones Russell Gilchrist, Gensler, Chicago, USA Self-supporting free-form structures made of individual sheet metal panels Thorsten Pfahli, RWTH Aachen University, Germany Innovative building skins engineered – Recent projects in the USA Wilfried Laufs, Laufs Engineering Design, Long Island City, NY, USA	Leaf veneration patterns to regulate translucent exothermic material Mark Alston, University of Salford, United Kingdom Load-responsive skin systems for lightweight architecture Roberto Naboni, Politecnico di Milano, Italy Strategies and possible applications scenarios for bio-inspired building envelopes Enes Tasa, NEU, Konya, Turkey Biomimicry in architecture: Effect of responsive autonomous architectural envelopes on energy efficiency Hicham Hadbaoui, Laboratoire Architecture Bioclimatique et Environnement (ABE), Elhamel, Algeria	ETFE envelopes for the building sector Paolo Beccarelli, University of Nottingham, United Kingdom ETFE vs. glass cladding: Environmental, social and economic sustainability Carl Maywald, Vector Foiltec GmbH, Bremen, Germany Acoustic comfort in atria covered by ETFE and glass claddings Monika Rychtarikova, KU Leuven, Belgium Influence of acoustic membrane on sound and thermal properties of building façade panels Fin O'Flaherty, Sheffield Hallam University, United Kingdom Liquid applied breathing weather barrier membranes Luc Peeters, Oevel-Westerlo, Belgium Lightweight tensile structure form finding Eugene Popov, Nizhegorodsky State Architectural University, Russia Brief Presentations: Effect of a membrane roof on solar radiation and thermal environment of a railway platform Junta Nakano, Tokai University, Japan	Neue Anwendungsmöglichkeiten in Betonbau durch Textilbeton Ali Shams, solidian GmbH, Albstadt, Germany Schlanke Fassadenelemente aus textildbewehrtem Hochleistungsbeton und deren Tragverhalten Sergej Rempel, RWTH Aachen, Germany Neue Gestaltungsmöglichkeiten durch Textilbetonsandwichkonstruktion Dominik Wirtgen, Fischer Architekten GmbH, Mannheim, Germany Das versteinerne Holzhaus in Fläsch Daniel Ladner, Bearth & Deplazes Architekten AG, Switzerland Möglichkeiten in der Herstellung filigraner Fassaden Johannes Schneider, Sulser AG, Switzerland					
	15:30	Coffee break						15:30	Coffee break			
	16:00 Session A3 Bellavista 5	Evaluating the Performance of PV Façades Chair: Monika Hall, University of Applied Sciences Northwestern Switzerland	16:00 Session B3 Bellavista 3+4	Products and Technologies for Building Refurbishment 2 Chair: Wolfram Sparber, Eurac Research, Bolzano, Italy	16:00 Session C3 Arena	Advanced Building Skin Design 2 Chair: Negar Kalantar, Dep. of Architecture, Texas A&M University, USA	16:00 Session D3 Orione	Development, Design and Impact of Living Building Envelopes Chair: Garth Rockcastle, University of Maryland, USA	16:00 Session E3 Bellavista 2	Building Envelopes with Wood and Wood Composites Chair: Zhenjun Ma, University of Wollongong, Australia	16:00 Session F3 Luna	Thermal and Structural Properties of PCM-Concrete Chair: Dervilla Niall, Trinity College, Dublin, Ireland
		Performance analysis of a multi-colored BIPV system Falk Dorusch, University of Applied Sciences and Arts Northwestern Switzerland, Muttenz, Switzerland Evaluating a BIPV sun-shading system with various software and methods Marco Lovati, EURAC, Bolzano, Italy Net-zero energy balance for high-rise buildings Monika Hall, University of Applied Sciences and Arts Northwestern Switzerland Whole building energy analysis of a BIPV curtain wall Wout Parys, KU Leuven, Heverlee, Belgium Performance analysis of the ZigZagSolar BIPV façade system Roland Valkenberg, Solar Energy Application Centre (SEAC), Eindhoven, Netherlands New paradigm to reduce the capital expenditure for façades Laurent Quittre, ISSOL, Belgium	An adaptable module for the renovation of residential buildings Paolo Basso, D'Apollonia, Genova, Italy Spandrel integrated air-based BIPV/T system for façade retrofits Edvinas Bigalia, Concordia University, Montreal, Canada Textile based systems to improve the energy efficiency of listed buildings Elisabetta Rosina, Politecnico di Milano, Italy Ventilated façade retrofitting system with an embedded energy storage system Paul Bonnamy, NOBATEK, Anglet, France Passive window ventilation openings for building refurbishment Caroline Hoffmann, University of Applied Sciences and Arts Northwestern Switzerland	Design strategies associated with transformability in building skins Negar Kalantar, Department of Architecture, Texas A&M University, USA Technical constraints and strategies for building envelope design Raul Corrales Marcos, Bureau d'Ingenieurs Fenêtres & Façades SA, Switzerland Dynamic simulation software as a design tool Innovative organic building materials Elisabetta Rosina, Politecnico di Milano, Italy Dynamic simulations of different façade designs Sabina Jordan, Slovenian National Building and Civil Engineering Institute, Slovenia Physical mesh data structures for building skins Ergun Akleman, Department of Visualization, Texas A&M University, USA	Vertical gardens Francois-Xavier Jacquinet, Geraldine Chopin de Janvy, tracer urban nature, Saint Apollinaire, France Comparing roof cases in relation to their energy consumption in two climates Hind Zaki, AAST, Alexandria, Egypt Vertical greener systems as building skin to provide urban ecosystem services Gabriel Pérez, University of Lleida, Spain Improving air quality and building thermal behaviour: monitoring the performances of a green wall Adriano Magliocco, University of Genova, Italy	Implementing hygromorphic wood composites into responsive building skins Artem Holstov, Newcastle University, United Kingdom Strategies to extend the durability of wooden façades Huizhang Guo, ETH Zürich, Switzerland Digital tectonics and dynamics in designing of wooden architecture envelopes Michał Golański, University of Zielona Góra, Poland Hygrothermal and mould growth-related analysis of typical Finnish log-house envelopes Antti Haapala, University of Eastern Finland, Joensuu, Finland Long span self-supporting wood-based compact façade system Marcus Schiere, Bern University of Applied Sciences, Switzerland Refurbishment of a typical Australian fibre house Zhenjun Ma, University of Wollongong, Australia Brief Presentations: Winter season protection of envelope bottom timber plate Filip Fedorik, University of Oulu, Finland	Effect of microencapsulated PCM in textile-reinforced concrete panels Myriam Bahar, Ecole Nationale des Travaux Publics de l'Etat, Lyon, France Influence of ground granulated blast furnace slag on the thermal properties of PCM-concrete composite panels Dervilla Niall, Trinity College Dublin, Ireland The mechanical behavior of geopolymer and Portland cement concrete with micro-encapsulated PCM Shima Pilehvar, Østfold University College, Halden, Norway Energy management of double layer shape-stabilized PCM wallboards in office buildings Na Zhu, Huazhong University of Science and Technology, Wuhan, China					
	17:30	End of Conference Day 1						17:30	End of Conference Day 1			

11 October 2016, Conference Day 2				11 October 2016, Conference Day 2								
	08:30 Session A4 Arena	New Design Possibilities for Solar Façades: Colored and Customized, yet Cost Effective Chair: Pierluigi Bonomo, Swiss BIPV Competence Center	08:30 Session B4 Bellavista 5	Holistic Approach to Sustainable Architecture Chair: Udo Dietrich, HafenCity University, Hamburg, Germany	08:30 Session C4 Bellavista 3+4	Parametric Design for Sustainable Architecture Chair: Mitsuhiro Udagawa, Prof. Emeritus, Kogakuin University, Japan	08:30 Session D4 Bellavista 2	Window Design for Sustainable Buildings Chair: Urs Uehlinger, Bern University of Applied Sciences, Switzerland	08:30 Session E4 Orione	Solar Shading Systems for Enhanced Daylight Control Chair: Feride Şener Yilmaz, Istanbul Technical University, Turkey	08:30 Session F4 Vivace 3+4	PCM Composite Materials for the Building Skin Chair: Zhenjun Ma, University of Wollongong, Australia
		Current Building-Integrated Photovoltaic (BIPV) technologies Pierluigi Bonomo, Swiss BIPV Competence Center, Cannobio, Switzerland New design flexibility for BIPV façades Tomas Lenkimas, Glassbel, Klaipeda, Lithuania Electricity production with colored BIPV modules Thomas Weber, Photovoltaik Institute Berlin, Germany Cost effectiveness of customized BIPV elements Juris Ulbikas, Applied Research Institute for Prospective Technologies, Vilnius, Lithuania	Grey energy versus economy Marvin King, Lucerne University of Applied Sciences and Arts, Switzerland Asymmetric perception of different stakeholders on Sustainable and safe building skin construction Rita Yi Man Li, Director, Sustainable Real Estate Research Center, Shue Yan University, Hong Kong Environmental impacts of high and low tech office buildings Laura Tschumperlin, Treeze Ltd., Uster, Switzerland Holistic approach to thermal envelope efficiency of residential buildings in Nordic climate Irat Daniëlski, Mid Sweden University, Östersund, Sweden Nachhaltige Gebäudehüllen im Klimatischen und kulturellen Kontext Sebastian El Khouli, Bob Gysin + Partner BGR, Zürich, Switzerland	Optimization methods applied to glazing façades for sustainable buildings Clara Vite, University of Genova, Italy Modular façade kit system for Net Zero Energy settlements Wen Pan, Technical University of Munich, Germany A parametric design approach to building integrated solar collectors Simone Giostra, Politecnico di Milano, Italy Parametric System Andreas Fuchs, FAT LAB Stuttgart, Germany Form finding of integrated PV on organic horizontal building envelopes using parametric study Firza Utama, Sjarifudin Bina, Nusantara University, Jakarta, Indonesia	Impact of window design on building energy consumption Reza Faroughi, Penn State University, USA Noise management through automated window systems Urs Buehlmann, Virginia Tech, Blacksburg, USA Reinforced, insulated glazing for large windows Manuela Brunner, Bern University of Applied Sciences, Switzerland Replacing setting blocks for glazing windows with liquid filler Andreas Masuch, Bern University of Applied Sciences, Switzerland Thermal properties of access systems in field trials Urs Uehlinger, Bern University of Applied Sciences, Switzerland Standard for testing access control systems Wolfgang Rädle, Bern University of Applied Sciences, Switzerland	3D dielectric compound parabolic concentrator for daylight control Meng TAN, University of Nottingham, United Kingdom Sustainable design and energetic refurbishment Antonio Basti, University of Chieti, Pescara, Italy Advanced louver system design for daylight utilization Feride Şener Yilmaz, Istanbul Technical University, Turkey Integrated optical and solar functions in ETFE membranes Andreas Freutschnig, Novofol, Germany Feststehendes Sonnenschutzsystem für Überkopferglasaugen Daniel Kleiherer, Kleiherer+partner, Saarbrücken, Germany Brief Presentations: Energieeffiziente Raumbelichtung durch Tages- und Kunstlicht Michaël Jakubowski, TU Dortmund, Germany	Composite building material with hydraulic-binder incorporating PCM Thibault Harlé, Université de Cergy-Pontoise, Neuville-sur-Oise, France Thermo-regulating bricks based on shape-stabilized PCM Angel Serrano Gasera, University of Castilla - La Mancha, Ciudad Real, Spain Small greenhouse cells and PCM for building skins Gert Guldentops, Worcester Polytechnic Institute, USA PCM-enhanced ceiling ventilation system with integrated PV thermal collector Mohammed Imraz Sohel, University of Wollongong, Australia Cooling ceilings with PCM in the Energy Efficiency Center Constantin Römer, Bavarian Center for Applied Energy Research, Germany Selection of building materials with Solene-microclimat Bisam Al-Hafiz, Ecole Nationale Supérieure d'Architecture de Nantes, France					
	10:00	Coffee break						10:00	Coffee break			
	10:45 Session A5 Arena	Customization and Flexibility – Key Issues for the BIPV Market Chair: Björn Rau, Helmholtz Research Center, Berlin, Germany	10:45 Session B5 Bellavista 5	Design Methods for Sustainable, High-performance Façades Chair: Anders Nereim, School of the Art Institute of Chicago	10:45 Session C5 Bellavista 3+4	Building Information Modeling (BIM) for Sustainable Building Design Chair: Andreas Hempel, International Academy of Architects	10:45 Session D5 Bellavista 2	Intelligent Glazed Façades for Dynamic Daylight Control Chair: Michele Manca, Italian Institute of Technology	10:45 Session E5 Orione	Integrating Solar Thermal Systems into the Building Skin Chair: Roberto Garay Martinez, Tecnalia, Spain	10:45 Session F5 Vivace 3+4	Building Envelopes as Thermal Storage Chair: YUAN Yanping, Southwest Jiaotong University, China
		Increasing flexibility of PV-module production for BIPV Jef Poortmans, IMEC, Leuven, Belgium Practical challenges for BIPV systems with several module orientations Johannes Eisenlohr, Fraunhofer ISE, Freiburg, Germany Applying the lessons learned from PV roof-integration to façades Patrick Hofler-Koser, Meyer Burger AG, Switzerland Customization of PV to the needs of the building skin Stefan Haas, Forschungszentrum Jülich, Germany Mosaic modules for improved BIPV design options Matthieu Ebert, Fraunhofer ISE, Freiburg, Germany BIPV: Balancing aesthetics and technology Jochen Weick, Avancis GmbH, Torgau, Germany Next generation BIPV: The Grosspeter Tower, Basel Christoph Schmidt, Manz CIGS Technology GmbH, Germany	Methodology and evaluation of wind energy harvesting devices integrated into buildings David Serero, Serero Architectes Urbanistes, Paris, France High performance skin meets a dramatic climatic environment Randy McGee, ZGF Architects LLP, Portland, USA Facing the façade's growing complexity: the work of Peter Zumthor Irat Daniëlski, Mid Sweden University, Östersund, Sweden Brief Presentations: Envelope requirements in the Egyptian energy conservation code Sally Edeeb, Arab Academy for Science & Technology, Alexandria, Egypt Global Passive Building Council Guenther Gantlior, Passive House Institute Italy eHome - A franchise model for passive house Fabio Baldo, AAKHON, Italy	Green BIM to achieve Passivhaus standards Mohamed Mohsen, Engineering Consultants Group, Doha, Qatar Building skins as BIM objects - potential and limitations of present technologies Elina Pita, TEC, Barcelona, Spain BIM for multi-system integrated double-skin façades in different life-cycle stages Yehao Song, Tsinghua University, Beijing, China	Electrochromic materials utilized for smart window applications Bjorn Peter Jelle, Norwegian University of Science and Technology, Norway Innovative glazing with dynamic solar heat gains Andreas Schuler, EPFL, Switzerland New developments in dynamic glass for enhanced daylight control Eloise Sok, Vitrochec Saint-Gobain, Paris, France Energy performance assessment of a near-infrared selective dynamic glazing Elsa Moretti, University of Perugia, Italy Energy performance and visual comfort of thermochromic glazing Lorenza Bianco, Politecnico di Torino, Italy Solar control mechanisms for enhanced thermal comfort and daylight control of a fully glazed space Harris Polratzis, ACC Glas, Sweden	Architectural integration and design of solar thermal system Maria Cristina Munari Probst, LESO-PB, EPFL, Lausanne, Switzerland Integrated solar thermal systems for renovation of external walls Roberto Garay Martinez, Tecnalia, Spain Design and construction of a novel building envelope cladding with integrated pipework Paul Bonnamy, Nobotec, France Experimental validation of a new climate-adaptive façade panel Olivier Flechon, CEALITEN, France New high-performance solar air-heating façade technology Richard Hall, Energy Transitions Limited, Pontypriid, United Kingdom	Heat performance enhancement of PCMs for building skins YUAN Yanping, Southwest Jiaotong University, China Optimum thermal mass and insulation configuration Aidan Reilly, Queen's University, Belfast, United Kingdom Using fatty acids for developing thermal energy storage materials Anna Szczołot, Østfold University College, Halden, Norway Design characteristics of building integrated thermal energy storage systems Navid Ekrami, Ryerson University, Richmond Hill, Canada Active insulation building envelope with renewable energy Junhua Xu, Huazhong University of Science & Technology, Wuhan, China Brief Presentations: Thermal performance of a roof with PCMMin Hee Chung, Chung-Ang University, Seoul, South Korea Study of solar cooling through PCM buildings applications Habib Sammouda, University of Souss, Tunisia					
	12:30	Lunch						12:30	Lunch			
	14:00 Session A6 Arena	Active Interfaces: Large-scale PV Integration into Urban Renewal Processes Chair: Stephen Wittkopf, Lucerne University, Switzerland	14:00 Session B6 Bellavista 5	Building Design Optimization Chair: Fabian Ochs, University of Innsbruck, Austria	14:00 Session C6 Bellavista 3+4	Adaptive Building Skins Chair: Andreas Hempel, International Academy of Architects	14:00 Session D6 Bellavista 2	Glass in Advanced Building Envelopes Sebastian Thieme, Jansen AG, Switzerland	14:00 Session E6 Orione	Prefabrication of Façade Elements Chair: Michael Garrison, University of Texas at Austin, USA	14:00 Session F6 Vivace 3+4	Smart Windows for Energy Production and Saving Chair: Elisa Moretti, University of Perugia, Italy
		Novel transformative design for PV modules: the infinite possibilities for powering building and cities Christophe Ballif, Ecole Polytechnique Fédérale de Lausanne, Switzerland Advanced architectural integration of BIPV in renovation projects Emmanuel Rey, Ecole Polytechnique Fédérale de Lausanne, Switzerland Real estate owners' preferences for BIPV Hans Christoph Curtius, University of St. Gallen, Switzerland Technology Transfer Projects Christian Roese, University of Lucerne, Switzerland Coloured Photovoltaics Stephen Wittkopf, Userhus, Switzerland	Improving integrated building design with early design simulations Vladimir Jovanovic, io-consultants, Heidelberg Building design process: design oriented or comfort oriented? Udo Dietrich, HafenCity University Hamburg, Germany Parametric optimization of frit patterns, self-shading, and wind resistance in tall buildings Anders Nereim, School of the Art Institute of Chicago, USA Method for creating a standard office plan based on the representative floor area Miki Kanamori, Tokyo University of Science, Japan	A framework for building with adaptive ability Bart Janssens, University of Hasselt, Diepenbeek, Belgium Performative integrative façades: from design research to built practice Roman Kristesiashevili, UNStudio, Amsterdam, Netherlands Structural and architectural integration of adaptive PV modules Progeeth Jayathissa, ETH Zürich, Institute of Technology in Architecture Adaptive façades in temperate climates: An in-use assessment of the MediaTiC Building, Barcelona Miren Juarristi, University of Navarra, Pamplona, Spain Comparing the performance of climate adaptive façades with static façades Eve Farrugia, University of Malta, Msida, Malta	Integrated design process of a glazed roof in Liege (Belgium) Pierre-Lomb, VK Architects & Engineers, Meebeke, Belgium Aerogel insulated glass with superior thermal performance for daylighting Pierre Olivier Cuhe, Solarwall SA, Switzerland Design and manufacturing of glass panels for curvilinear building envelopes Krzyszyna Januszkiewicz, West Pomeranian University of Technology in Szczecin, Poland Industrial development of water-flow glazing Veneta Novakova, ETEM Bulgaria SA, Sofia, Bulgaria	The rationalization of construction and assembly Gordon Murray, Ryder Architecture, Glasgow, United Kingdom Sandwichcladding Scholeh Abedini, Technische Universität Darmstadt, Germany Advanced façade prefabrication in cross-laminated timber buildings Eugenia Gasparri, Politecnico di Milano, Italy Timber based prefabricated façade elements for building refurbishment Kepa Iturralde, Technische Universität München, Germany An energy-efficient prefabricated double-skin façade Yehao Song, Tsinghua University, Beijing, China A zero net energy, zero net water and carbon neutral house Michael Garrison, University of Texas at Austin, USA	Design and development of smart solar concentrators for building integrated PV façades Yupeng Wu, University of Nottingham, United Kingdom Zero Energy Buildings (ZEB) and smart windows: current developments and future perspectives Marco Casini, Sapienza University of Rome, Italy Solution-processed polymer photovoltaic-powered smart windows Fangting Zhang, Linköping University, Sweden Nanotechnology based glass lamination and coatings for energy production and conservation in architectural glass Rick Orlando, Britc Solar Inc, USA					
	15:30	Coffee break						15:30	Coffee break			
	16:00 Session A7 Arena	Photovoltaics on Architectural Membranes Chair: Jianhui Hu, Shanghai Jiao Tong University, China	16:00 Session B7 Bellavista 5	Building Energy Performance Simulation Fabian Ochs, University of Innsbruck, Austria	16:00 Session C7 Bellavista 3+4	Kinetic Building Skins Chair: Sandra Persiani, Sapienza University of Rome, Italy	16:00 Session D7 Bellavista 2	Effects of Glare off Glass and PV on Building Façades Chair: Dieter Moor, Ertex Solar, Austria	16:00 Session E7 Orione	Maintenance of Building Façades Chair: Valentina Puglisi, Politecnico di Milano, Italy	16:00 Session F7 Vivace 3+4	New Materials for the Building Skin Chair: Oliver Kinnane, Queen's University, Belfast, United Kingdom
		ETFE cushions integrated amorphous silicon photovoltaics Jianhui Hu, Shanghai Jiao Tong University, China Lightweight photovoltaic for architecture and e-mobility Thomas Ferwagner, Soltartension Jülich, Germany Wooden membrane with integrated flexible photovoltaic foil Walter Klaz, University of Innsbruck, Austria Design options for a convertible PV roof plant Gian Andri Diem, dhp technology, Switzerland Photovoltaics on textile and architectural membranes Perry Carroll, Perry Carroll Consulting, United Kingdom	Simple and advanced Passive House modeling Guenther Gantlior, PHI Italy, Barbone, Italy Modelling Closed Cavity Façade with integrated blind system for energy and daylight performance Luc Delestrate, Integrated Environmental Solutions Ltd, Glasgow Scotland Passive calculation of cooling Eleonora Laurini, University of L' Aquila, Italy Temperature and air mode of air gaps of double skin façades Elisaveta Reich, Faina Khairutdinova, St. Petersburg Polytechnic University, Russia Ventilated double skin façades with variable width of air gap Vyacheslav Olsheskiy, St. Petersburg Polytechnic University, Russia	The application of acoustics in intelligent buildings Gabriel Tang, Sheffield Hallam University, United Kingdom Autoreactive architectural façades: unpowered kinetic building skins and the method of evolutionary optimization Sandra Persiani, Sapienza University of Rome, Italy Effect of kinetic façades on energy efficiency of office buildings Cherif Ben Bacha, Bioclimatic Architecture & Environment Lab, Algeria Smart self-adapting origami structures Matteo Botto, Politecnico di Torino, Italy	When buildings attack - Death ray buildings Vicente Montes-Amoros, CDC Inc., Leesburg, USA Glare caused by PV panels on building façades in dense urban areas Rania Labib, Texas A&M University, Houston, USA Glare effects from sunlight reflected off the building envelope Mattia Battaglia, Hochschule für Technik Rapperswil, Switzerland Is it stone or is it glass? And will it blind me? Miriam Butti, Ramboll UK, London, United Kingdom	Nano-technological coatings for preventive envelope maintenance Annalisa Andolara, Politecnico di Milano, Italy Building maintenance with BIM Zito Sampão, University of Lisbon, Portugal Building automation solutions for the building envelope: Mapping the market and development prospects Valentina Puglisi, Politecnico di Milano, Italy	Stone skin – Hyper-light double-layered granite skin with fiber reinforcement Maurizio Barberio, Università degli Studi Roma Tre - Politecnico di Bari, Italy Hemp concrete wall - a numerical study Georges Costantini, Groupe de Recherche en Sciences pour l'Ingenieur, Reims, France Correcting the acoustic absorption of rendered hemp-based walls Oliver Kinnane, Queen's University, Belfast, United Kingdom					
	17:30	End of Conference						17:30	End of Conference			