

GLASS PERFORMANCE DAYS 2017 POCKET GUIDE



#GPD2017

**ALL EYES
ON GLASS.**

**GLASS PERFORMANCE DAYS 2017
JUNE 28 - 30, 2017. TAMPERE, FINLAND**



THE 1992-2017 QUARTER CENTURY PERFORMANCE RECORD



A QUARTER CENTURY OF GLASS INNOVATION

Welcome to the 25th Anniversary of the Glass Performance Days.

Celebrating 25 years could mean celebrating tradition. In a way we do that too, but on the other hand our tradition is really one of change and constant development. The escalating clock-speed of progress in the glass industry is of course always well reflected in its leading Conference. We can really claim to have been an active advocate of change and the adoption of new technology all along. In saying that, we do not refer to the Conference Organizers as a body, but to our entire global industry and its pioneering personalities – GPD Session Chairmen, Program Committee, lecturers and participants. Other conferences have followed in our proven GPD footsteps, but we can proudly claim to have held our position as the leading catalyst in the business – for a Quarter Century!

Our June 28-30, 2017 Conference again pushes the spirit of development further towards new horizons. The contents have been renewed, the modular structure of the Conference broadened and the very concept of this Glass Summit has been remodeled to reflect the pace of our times. Cases in point: The Step Change Approach for attracting startup organizations, the Ambassadorial Program to transfer technology and learning between generations and the Open Space Conference Concept, including a New Venue and new conferencing technology to increase awareness and involvement of participants. No more closed doors! Many more open (glass) windows.

The way in which we aim to bring together proven glass specialists with newcomers, mentors and investors is an innovation in itself. We apply the experiences of the dynamic world of information technology in an application for the art of glass construction. The sky is the limit!

Yours truly,

Jorma Vitkala
*Chairman of the Organizing Committee of
the Glass Performance Days*





#GPD2017

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GLASS PERFORMANCE DAYS 2017

JUNE 28 - 30, 2017. TAMPERE, FINLAND

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Conference Theme:

GROWTH

– support industry growth through education

KNOWLEDGE

– support the exchange of knowledge within the industry

NEW GENERATION

– linking talents with the industry

OPENING CEREMONY

JUNE 28, 16:00, TÄHTIAREENA

- 16:00** **Opening Ceremony starts**
- 16:05** **Jorma Vitkala**
Chairman of the Organizing Committee
- 16:15** **Arto Metsänen**
CEO & President, Glaston
- Scott Thomsen**
Managing Partner at Innoscovery
- 16:25** **Bernard Savaëte**
Founder BJS. Différences
- 16:50** **Esko Aho**
Executive Chairman of the Board,
East Office of Finnish Industries,
Former Prime Minister of Finland
- 17:20** **Peng Shou**
CBMC
- 17:50** Break
- 18:25** **Sponsor interviews**
- 18:55** **James Carpenter**
Founder, James Carpenter Design Associates Inc.
- 19:25** **Michael Robinson**
CEO & Design Director, ED Design srl.
- 20:00** Get Together Party, TähtiAreena
- 20:30** Welcome words – City of Tampere
- 22:00** Evening ends

The opening ceremony is moderated by
André Noël Chaker, Owner at C&C Global Advocates Oy



CLOSING CEREMONY

JUNE 30, 16:20, TÄHTIAREENA

- 16:20** **Taina Tirkkonen,**
General Counsel and Senior Vice President Human
Resources at Glaston Corporation
- 16:25** Keynote Speech
Stephanie Akkaoui Hughes,
Founder & CEO of AKKA Architects
- 17:05** Closing Panel
Felix Zabel, Lightglass
Brittany Kleiman Swisa, Gauzy
Michel Prassas, Corning
- 17:30** Dow Corning
Quiz-Draw
- 17:35** Closing Remarks
Jorma Vitkala,
Chairman of the Organizing Committee



OPENING AND KEYNOTE SPEAKERS

PENG SHOU



CBMC

ABOUT PENG SHOU

Peng Shou, as a famous Chinese expert in glass new material technology field, is the 23rd president of International Commission on Glass. He has been working at the front line of glass engineering technology since 35 years ago, contributing to the scientific research, design, and industrialization of glass. Under his auspices, nearly 10 research projects have been completed, covering 973 Program, 863 Program, and National Sci-Tech Support Plan.

STEPHANIE AKKAOUI HUGHES



Founder & CEO of AKKA Architects

ABOUT STEPHANIE AKKAOUI HUGHES

Founder & lead architect of AKKA Architects, Stephanie is part of a new breed of young visionary architects, who operate beyond the nowadays-restrained realm of architecture. A strong advocate of value created through cross-disciplinary interactions, Stephanie believes that the most sustainable innovation will happen at the intersection of different fields. Sustainability, as she defines it is the daily innovative solutions & opportunities we ought to actively create for a sustained long-term future.

JAMES CARPENTER



Founder, James Carpenter Design Associates Inc.

ABOUT JAMES CARPENTER

James Carpenter works at the intersection of art, architecture and engineering, advancing a distinct vision based on the use of natural light and glass as the foundational elements of the built environment. Carpenter founded the cross-disciplinary design firm James Carpenter Design Associates in 1979 to support the application of these aesthetic principles to large-scale architectural projects and in 2012 established Architecture Operations D.P.C. in order to provide clients with comprehensive architectural services.

BERNARD SAVAËTE



Founder BJS. Différences

ABOUT BERNARD SAVAËTE

Bernard Jean Savaëte (Engineer – 71 years) has created BJS.Différences in 2004. He worked with French BSN, and then with American PPG, from 1981. His last position was Director Quality for PPG Glass Europe. BJS.Différences provides worldwide consulting services (mainly in market survey & market analysis) for glass in building, industry, car & solar businesses. Bernard Jean Savaëte is also an expert in glass history and glass companies' history.

ARTO METSÄNEN



CEO & President, Glaston

ABOUT ARTO METSÄNEN

Glaston is a leading company in glass processing technologies. Glaston provides high-quality heat treatment machines and services for architectural, solar, appliance and automotive applications. Glaston is one of the long-standing glass solution providers and is committed to customers' success over the entire lifecycle of the offering. Moreover, we continuously innovate and develop technologies to enable the glass processing industry to reach ever higher standards in quality and safety. Glaston is a platinum sponsor the GPD. Arto has been the CEO of the company since 2009.

ESKO AHO



Executive Chairman of the Board, East Office of Finnish Industries, Former Prime Minister of Finland

ABOUT ESKO AHO

Esko Aho (born 1954) was Prime Minister of Finland from 1991 to 1995. Today he is executive Chairman of the Board at East office of Finnish Industries representing the leading Finnish corporations in Russia. Mr. Aho is elected member of the Executive Board at the International Chamber of Commerce.

MICHAEL ROBINSON



CEO & Design Director, ED Design srl.

ABOUT MICHAEL ROBINSON

ED is the largest design and engineering company in Italy, offering turn-key services in the automotive and transportation industry. Born in Los Angeles, California in 1956, graduated from the University of Washington in Seattle, Washington in 1978 in Fine Arts and in 1979 in Industrial Design, Robinson has lived in Italy since 1979. Robinson previously held the position of Design Director at Bertone, Fiat, and Lancia, where he designed the Fiat Bravo/Brava/Marea, (European Car of the Year in 1995), the Lancia Dialogos and Nea concept cars (the very first autonomous cars in Europe), the Lancia Lybra, Thesis, Phedra, and Ypsilon production cars, plus many more.

SCOTT THOMSEN



Managing Partner at Innoscovery

ABOUT SCOTT THOMSEN

Experienced entrepreneur and business leader with successful track record of generating profitable, sustainable growth through innovation. Core strength is building teams to scale new technologies, products and applications that leverage true competitive advantage and improve bottom line results.

[Read full bios at GPD.fi](http://GPD.fi)

8:00		Registration	
		Glass & Sustainability	Facade Engineering
	Session Chairs: Wim Stevels, Eastman Chemical Company		Session Chairs: Lawrence Carbary, Dow Corning Corporation Graham Dodd, Arup Materials Consulting
9:00	Active BIPV Glass facades: current trends of innovation, between new semantics and technological possibilities Erika Saretta, University of Applied Sciences and Arts of Southern Switzerland		Towards a More Consistent Design of Laminated Glass Michael Dunham, Arup
9:25	Innovative BIPV façade on administrative building in Klaipeda, Lithuania Tomas Lenkimas, Glassbel EU		Verification of Insulating Glass Units in Modern CW Facades Michael Elstner, AGC Interpane
9:50	Numerically simulating the impact of hail in photovoltaic Ivo Draganov, University of Ruse		Next generation calculation method for structural silicone joint dimensioning Valerie Hayez, Dow Corning Corporation
10:15 COFFEE BREAK, ONE-ON-ONE MEETINGS			
11:00	Thermal and Hygrothermal Performance Monitoring of Advanced Insulation Materials Used in Curtain Wall Spandrel Panels Stanley Yee, Dow Corning Corporation		Glazed Multilayered Building Envelopes Martien Teich, seele GmbH
11:25	Deconstructing the Thermal Performance of a Window: How to achieve better performing façades Helen Sanders, Technoform Glass Insulation NA, Inc.		Structural Glass Connections Carles Teixidor, Bellapart SAU
11:50	Qualifying and quantifying thermal comfort in highly glazed spaces Medina Deliahmedova, Lund University		All-glass Pavilions Geralt Siebert, Uni. of German Armed Forces Munich
12:15		Do's & Don'ts of Building Facades Session Chairs: Leon Jacob, Jacob Associates	STEP-CHANGE, LUNCH, ONE-ON-ONE MEETINGS
13:45	The Building Façade Concept: Keith Boswell – SOM Architects		The Futurium Berlin – Large Scale SSG Rain Screen Facades without Mechanical Restraints: from Design to Installation Jan Wurm, Arup
14:10	The Specifications and Material Compatibility Peter Smithson & Oliver Ng - BG & E Facades Pty. Ltd.		The Increasing Demand for Cyclone Resistant Glazing Solutions in the Asia-Pacific Region Dario Trabucco, The Council on Tall Buildings and Urban Habitat
14:35	The Manufacture and Supply of the Façade Components Leon Jacob, Jacob & Associates Pty Ltd.		Glass Fins with Embedded Titanium Inserts for The Façades of The New Medical School Of Montpelli Jordi Torres, Bellapart S.A.U.
15:00 COFFEE BREAK, ONE-ON-ONE MEETINGS			
15:45	A Case Study of Design and Collaboration Ms Lisa Follman - SOM Architects		Structural Glass in Building Restoration. Europe? S Tower Entrance Hall. Madrid. Spain Miguel Núñez, ENAR
16:10	A Case Study – Unitized façade system designed with a highly transparent façade of low G-value combined with blast requirements. Thomas Henriksen, Mott Macdonald		Cost and Energy Saving Potential of Glass Facade Construction Timo Saukko, Finnglass
16:35	Quality Assurance to the Science of Performance and Durable Façades Sammy Hui, Hong Kong Façade Association		Channel Glass on Pier 17: A Case Study Sameer Kumar, SHoP Architects
17:00 BREAK, ONE TO ONES, HAPPY HOUR			
19:30	CONFERENCE DINNER @ Solo Sokos Hotel Tornio Tampere, Paja Congress Center		
23:00			

Registration

Structural Glass Applications

Research & Development

Session Chairs:

Ingo Stelzer, Kuraray
Michael Ludvik, M. Ludvik & Co

Session Chairs:

Jens Schneider, Darmstadt TU
Jan Belis, Ghent University
Christian Louter, Delft TU

Shaping Ultra-Thin Glass

Sophie Pennetier, ARUP

Influence of the Distribution of Residual Stress on Strength Tests

Jürgen Neugebauer, University of Applied Sciences FH-Joanneum

Probabilistic Study of Wind-Temperature Interaction: An Initial Study Towards Optimized Structural Assessment of Glass Components

Manuel Santarsiero, Eckerlesley O'Callaghan

Biaxially Curved Glass? Determination of Strength using the Coaxial Double Ring Test

Steffen Müller-Braun, TU Darmstadt - Institute of Structural Mechanics And Design

Glass Constructions Under Extreme Boundary Conditions

Barbara Siebert, Dr. Siebert Consulting Engineers

Identification of A Rheological Model for Viscoelastic Materials in Structural Engineering

Michael Kraus, Uni. of German Armed Forces Munich, Miriam Schuster TU Darmstadt

COFFEE BREAK, ONE-ON-ONE MEETINGS

Hybrid Glass Structures

Peter Lenk, Arup

Glass 3D printing technology - a new way of manufacturing glass parts

Eran Gal-Or, MICRON3DP Ltd.

New Concept of Horizontal Structural Elements in Glass: Self bearing "Pi" Shape Plate.

Jesús M. Cerezo, ENAR, ENVOLVENTES ARQUITECTONICAS

Full-surface and non-destructive quality control and evaluation by using photo elastic methods

Benjamin Schaaf, RWTH Aachen Uni.

Enabling Crystal Clear Façades

Valerie Hayez, [Dow Corning Corporation](#)

Experimental and Numerical Studies on Blast Resistance of Laminated Glass

Suwen Chen, Tongji University

STEP-CHANGE, LUNCH, ONE-ON-ONE MEETINGS

Production and Testing of Kiln-Cast Glass Components for an Interlocking, Dry-Assembled Transparent Bridge

Telesilla Bristogianni, TU Delft, Faculty of Civil Engineering and Geosciences

Blast performance of point fixed assemblies utilizing crystal clear TSSA

Lawrence Carbury, [Dow Corning Corporation](#)

The Strength of Aged Glass

Mauro Overend, University of Cambridge

Transparency in Glass Connections - a Case Study

Lisa Rammig, Eckerlesley O'Callaghan, TU Delft

Sandwich Design of Mechanically Efficient and Structurally Slim Vision Panels

Carlos Pascual, University of Cambridge - Glass & Facade Technology Research Group

The Application of Glass as A Bracing Element

Geralt Siebert, Universität Der Bundeswehr München

COFFEE BREAK, ONE-ON-ONE MEETINGS

Deformations in Fragments of Tempered Glass - Experimental and Numerical Investigation

Jens H. Nielsen, Technical University of Denmark

Engineering and Applications of the Bundled Glass Column

Faidra Oikonomopoulou, TU Delft, Faculty of Architecture and The Built Environment

Exploring The Potential of Free Standing Glass Columns Assembled from Stacked Interlocking Cast Elements

Telesilla Bristogianni, TU Delft, Faculty of Civil Engineering and Geosciences

Applied Machine Learning in Structural Glass Design

James Griffith, Arup

Structural Glass - 25 Years of Innovation

Tim Macfarlane, Glass Light and Special Structures LTD.

Is current sizing of float glass structures too much conservative?

Gianni Royer Carfagni, University of Parma, Italy

BREAK, ONE TO ONES, HAPPY HOUR

CONFERENCE DINNER @ Solo Sokos Hotel Tornio Tampere, Paja Congress Center

GPD Glass Performance Days 2017 • Program • June 29, THURSDAY

8:00		Registration	
Tempering / Preprocessing		Quality Management	
Session Chairs: Francis Serruys, Saint-Gobain Building Glass Europe Miika Appelqvist, Glaston Finland Oy		Session Chairs: Peter Droegmoeller, AMETEK Land FeneTech Inc.	
9:00		RESERVED	Roller Wave & Milli Diopter, but what can we see and how does it Look? Hannes Spiss, TNG - Europe
9:25	On Safety of Heat-Soaked Thermally Toughened Glass Panes Andreas M Kasper, Saint-Gobain HRDC	The Psychology of Perception, Threshold, And Emotion in Interior Glass Design Jim Gulnick, Mcgrory Glass, Inc.	
9:50	Controlling Anisotropy Francis Serruys, Saint-Gobain Building Glass Europe	RESERVED	
10:15 COFFEE BREAK, ONE-ON-ONE MEETINGS			
11:00	Infrared Temperature Measurement of Thermally Tempered Low Emissivity Glass Mark Bennett, AMETEK Land	XX(X)L Glass - Quality Control, Logistics & Insurance Dirk Schulte, APG International, Inc.	
11:25	Effects of Non-Uniform Heat Transfer on Glass Quality in A Tempering Process Reijo Karvinen, Tampere University of Technology	Infrared Temperature Measurement in The Glass Industry Peter Droegmoeller, AMETEK Land	
11:50	Haze, Anisotropy, Clarity and Interference Effects (HACI) evaluation Louis Moreau, AGNORA	Non-contact Glass Temperature Measurement – the Correct Adaptation of IR Thermometers and Cameras to Different Applications Ingo Stahlkopf, Optris GmbH	
12:15			
STEP-CHANGE, LUNCH, ONE-ON-ONE MEETINGS			
13:45	Automating flat glass tempering process Miika Appelqvist, Glaston Finland Oy	Solutions for Closed-Loop Process Control of Lowe Glass Production for Architecture, Automotive and Smart Applications Marcus Klein, SURAGUS GmbH	
14:10	Thermally Processed Glass: Correlation Between Surface Compression, Mechanical and Fragmentation Test Ennio Mognato, Stazione Sperimentale Del Vetro Scpa	From Color to Chemometrics: Strategies to Determine Coating Thickness and Quality Chris Helliwig, Carl Zeiss Spectroscopy	
14:35	ASTM E1300 Uniform Load Strength Reduction Factor not Required for Ceramic Enamelled Glass A. William Lingnell, Lingnell Consulting Services	Taking control of anisotropy in tempering process: the new way Riku Farm, Glaston Finland Oy	
15:00 COFFEE BREAK, ONE-ON-ONE MEETINGS			
15:45	Proven Roller Stability in Advanced Tempering Process Jean Denis Nicolas, Vesuvius	Anisotropy and White Haze On-Line Inspection System Kai Vogel, Viprotron GmbH	
16:10	The Importance of an Integrated Software ERP Solution in The Glass Processing Industry Horst Mertes, FeneTech Inc.	Electromagnetic Shielding Effectiveness of Glazing Components Eric Stein, Viracon	
16:35	Criticities in Glass Chemical Strengthening Guglielmo Macrelli, Isoclima SpA	RESERVED	
17:00 BREAK, ONE TO ONES, HAPPY HOUR			
19:30 CONFERENCE DINNER @ Solo Sokos Hotel Tornio Tampere, Paja Congress Center			
23:00			

8:00		Registration	
	Smart Glazing	Facade Contractor's Forum	
	Session Chairs: Valerie Hayez, Dow Corning Corporation Juha Liettyä, Glaston Oy	Session Chair: Saverio Pasetto, Skanska Stanley Yee, Dow Corning Corporation	
9:00	Smart Glazings -Lessons from the Past 25 years for Future Technologies and Market Trends Stephen Selkowitz, LBNL	Glass specifications for visual acceptance in architectural applications Hans Jansen, Scheldebouw	
9:25	Liquid Crystal Window Technology? Crystal Clear Vision for Architecture Martin Zitto, Merck KGaA	Haute Couture for a Curtain wall: Serrated glass in façade application Mathias Klaiber, Josef Gartner GmbH	
9:50	The Potential of Structured Switchable Glazing Walter Haase, University of Stuttgart	Curved glass in the building skin: Case studies and lessons learned Marc Zimmer, Frener & Reifer GmbH/Srl	
10:15 COFFEE BREAK, ONE-ON-ONE MEETING STEP-CHANGE			
11:00	Smart glazing and adaptive facades: what can we simulate? Fabio Favoino, Eckersley O'Callaghan	New Glass dimensions: large glass panes and their challenges in façade applications Mathias Klaiber, Josef Gartner GmbH	
11:25	Colloidal Nanocrystal (CNC) Electrochromic Glazing Technology Amir Bayati, Heliotrope Technologies Inc.	Fabrication Technology for Hybrid Glass Metal Panels Peter Eckardt, Seele GmbH	
11:50	Transparent Solarcells Corey Hoven, Next Energy Technologies Inc.	Glass Sandwich Facades Martien Teich, Seele GmbH	
12:15 LUNCH, ONE-ON-ONE MEETINGS			
12:40		IGU & Window Technology Session Chairs: TBA	
13:25	Architect Forum Session Chairs: TBA	INVITED SPEAKER Vacuum Insulating Glass? Past, Present and Prognosis Richard Collins, University of Sydney	
13:45	Recent Trends in Architectural Design of Transparent Facades Marcin Brzezicki, Wroclaw University of Science and Technology	A Novel Glass Spacer for Vacuum Insulated Glazing Cenk Kocer, University of Sydney	
14:10	30 Years of Structural Design Innovations in Glass Mick Eekhout, Octatube Space Structures B.V.	Vacuum Insulated Glazing Under the Influence of a Thermal Load Antti Aronen, University of Sydney	
14:35	Glass Imagined and Realized: Case Studies of the Aesthetic Qualities and Possibilities of Glass in Architectural Design. Daniel Vos, Heintges & Associates	The Development of Synergy on Vacuum Glass Jiang Yi, Beijing Synergy Vacuum Glazing Technology Co., Ltd.	
15:00 COFFEE BREAK, ONE-ON-ONE MEETINGS, STEP-CHANGE			
15:30	Glass Specification Challenges in London Russell Cole, Arup Facade Engineering	Laser-Grown Bumps on Window Glass Alexander Streltsov, Corning Incorporated	
15:55	New Solutions for Edge-Enamelling of Sputter Coatings Ralf Greiner, Guardian Thalheim GmbH	Analysis of The Uncertainties In Acoustic Of IGU: A Comparison In Between Products and Labs Fabien Dalzin, Saint-Gobain	
16:20 CLOSING CEREMONY Speeches • Closing Panel			
19:30–UNTIL DAWN FAREWELL PARTY @ Hatanpään Kartano, Hatanpään puistokuja 1, 33900 Tampere			

8:00		Registration
	Complex Geometry	Arch Challenges & Solutions
	Session Chairs: Benjamin Beer, Meinhardt Façade Technology Oliver Hans, Schueco	Session Chairs: Enrico Cutri, Dow Corning Bjorn Sanden, Kuraray
9:00	The consequences of panelisation on visual inconsistency of curved glazed façades Neesha Gopal, Meinhardt Façade Technology	Sustainable Façade Design for Glazed Buildings in a Blast Resilient Urban Environment Guido Lori, Permasteelisa
9:25	Approaching Curved Annealed Glass Timo Bühlmeier, Josef Gartner GmbH	Glass_ Appearances - Expectations Regarding a Material, Driving Projects and Upcoming Solutions Stefan Goeddertz, Herzog & de Meuron
9:50	Integral design: free geometry, hybrid construction Lutz Schöne, LEICHT Structural Engineering and Specialist Consulting GmbH	Structural Silicone Glazing: Life Expectancy of more than 50 Years? Sigurd Sitte, Dow Corning GmbH
10:15 COFFEE BREAK, ONE-ON-ONE MEETING STEP-CHANGE		
11:00	Free-Form Cold-Bent Façades and All-Glass Structures - Design and Value Engineering Challenges Benjamin Beer, Meinhardt Façade Technology	Silicone Opacifiers For Spandrel Glass Applications: Risk Mitigation In Thermal Stresses Chris Fronsoe, ICD High Performance Coatings
11:25	Structural Silicon Joints in Cold-bent SSG units Viviana Nardini, Sika Services AG	Structural glass sandwich panels Graham Dodd, Arup
11:50	Chaoyang Park Plaza Tower: Design and Construction of complex geometry façade Hui Yu, RFR Shanghai	Tall self-supporting Load Bearing Glass Structures Gennady Vasilchenko-Malishev, Malishev Engineers Ltd.
12:15	Systematically Unique Façade Geometry Oliver Hans, Schueco	12:40 LUNCH, ONE-ON-ONE MEETINGS
12:40		
13:25		
13:45	Beauty and The Beast: The Wilshire Grand's Façade Design in LA's Seismic Zone 4 Reality Tammy Jow, AC Martin	Counter Selective Glazing for a Passive Building Concept Felix Weber, Arup
14:10	RESERVED	La Maison Des Fondateurs? Load Bearing Interlocking Glass Spiral as Building Structure Philippe Willareth, Dr. Lüchinger + Meyer Bauingenieure AG
14:35	Banco Popular HQ - Auditorium Miguel Angel Ruiz, Martifer Metallic Constructions	Exciting Architectural Case Studies from All Around the World Sandro Casaccio, Kuraray
15:00 COFFEE BREAK, ONE-ON-ONE MEETINGS, STEP-CHANGE		
	Coatings Technology and Applications Session Chairs: TBA	
15:30	Breakthrough in Building Glass: High Energy Efficiency Coatings Through Laser Annealing. Jean-Philippe Schweitzer, Saint-Gobain	Challenging Project Development with Implementation of Innovative AR Coating Anastasija Sutkina, Glassbel Baltic
15:55	Next Generation of High Throughput Architectural Glass Coaters Christoph Häusler, Von Ardenne GmbH	The Development of Stainless Steel Based Warm Edge Spacer Systems Gerhard Reichert, Polymer Extrusion Technology LLC
16:20 CLOSING CEREMONY Speeches • Closing Panel		
19:30-UNTIL DAWN FAREWELL PARTY @ Hatanpään Kartano, Hatanpään puistokuja 1, 33900 Tampere		

Registration

Laminated Glass

Session Chairs:
Bernd Koll, Kuraray

Testing of Glass Laminates for Edge Stability Julia Schimmelpenningh, [Eastman Chemical Company](#)

Edge Stability and Potential Cause of Blemishes in Laminated Safety Glass Vaughn Schauss, [Kuraray](#)

Post-Lamination Response of Warm-Bent Laminated Glass Gabriele Pisano, University of Parma, Italy

Market Trends

Session Chairs:
Peter Dixen, A+W Software GmbH
Urmilla Sowell, GANA

USA: Market Trends and Drivers Urmilla Sowell, GANA

Minimum energy performance requirements for window replacement in the 28 EU member states Cédric Janssens, Glass for Europe

Applicability of design thinking to the construction industry Olavi Uusitalo, Holmark

COFFEE BREAK, ONE-ON-ONE MEETING STEP-CHANGE

Thermal Radiation Against Forced Convection Heating in Flat Glass Lamination Oven Mikko Rantala, [Glaston Finland Oy](#)

Testing of adhesion on laminated glass using photometric measurements Peter Hof, TU Darmstadt - MPA Darmstadt

Which Interlayer for Which Application? Bjorn Sanden, [Kuraray Europe GmbH - Trosifol](#)

Digitalization in the Glass Bernhard Saftig, [Siemens](#)

The Past, Present and Future of Glass Fabrication Alex Ochoa, [FeneTech Inc.](#)

Coatings Glass market. Russia, Far East, Turkey & Middle east – ICCG Dmitry Bernt, Sener Optik, Wang Shijie

LUNCH, ONE-ON-ONE MEETINGS

The "Internet of Things" in Glass Processing Peter Dixen, A+W Software GmbH

Glass in Transportation
Session Chairs:
Juha Artama, NSG Group
Juha Karisola, [Glaston Finland Oy](#)

Developing New Technologies with Vehicle Manufacturers Juha Artama, NSG Group

Effect of Different Sources of Interlayer Modulus Data for Glass Design: The Structural PVB Case Wim Stevels, [Eastman Chemical Company](#)

Enhanced Structural Integrity of Laminated Glass Balustrades Malvinder Singh Rooprai, [Kuraray India Pvt. Ltd.](#)

On The Causes of Optical Defects in Laminated Glass Jan Belis, Ghent Universit

In Glass Laminated Displays (For Special Vehicles) Joe Pimenoff, Beneg

Energy Efficiency of Different Windscreen Bending Furnaces Juha Karisola, [Glaston Finland Oy](#)

Patented Moiré Optical Distortion Measurement Supports Evolution of Automotive Glass Jens Kayser, ISRA SURFACE VISION GmbH

COFFEE BREAK, ONE-ON-ONE MEETINGS, STEP-CHANGE

Architectural Acoustic Glazing Hengyi Ju, [Eastman Chemical Company](#)

Recent developments of laminating films as contribution for energy efficient buildings and facades Steffen Bornemann, Folienwerk Wolfen GmbH

New Possibilities for Windshield Bending Reinhold Senft, Grafotec Spray Systems GmbH

New Era in Digital Printing On Glass Yariv Ninyo, Dip-Tech

CLOSING CEREMONY Speeches • Closing Panel

POSTER PRESENTATIONS

- The Effective Stiffness of Broken Laminated Glass. A Homogenized Approach, *Gianni Royer Carfagni*, University of Parma, Italy
- Durability of Colored PVB Interlayers: A Project Case, *Philip Poppe*, Eastman Chemical Company
- Simple statistics shows that heat-treated glass is much stronger than expected, *Gianni Royer Carfagni*, University of Parma, Italy
- Zaryadye Park, Glass Grid Shell Roof, *G. Vasilchenko-Malishev*, Malishev Engineers
- Will the US impose tariffs on imported flat glass again?, *Olavi Uusitalo*, Holmark
- Analysis of float glass's development by design envelope, *Olavi Uusitalo*, Holmark
- Approaching Free Energy, *James Gulnick*, McGrory Glass, Inc.
- Morphological and structural features of the gold nanolayer on the glass surface modified by surface ion exchange and chemical etching, *Olga Sidelnikova*, Institute of Solid State Chemistry and Mechanochemistry, Novosibirsk, Russia

GPD STEP CHANGE 2017

Step Change is a new module of the GPD Conference, which is aimed at bringing new technologies, startup companies and investors together to develop the entire glass industry. We are going to do this by finding new concepts, and in doing so, increasing the clock speed of the entire industry. In order to further develop the community, we are introducing a mentoring program to foster new startups and involve engagement between different generations in an open exchange of ideas.

The mentoring platform is going to be launched parallel to the GPD Step Change. Linking talents within the industry with the mentors' networks, interest groups and the new generation of glass professionals. We strongly feel that the mentor program, comprised of active and retired professionals, connecting with the younger glass specialists is vital for the development of the industry and the building of sustainable networks.

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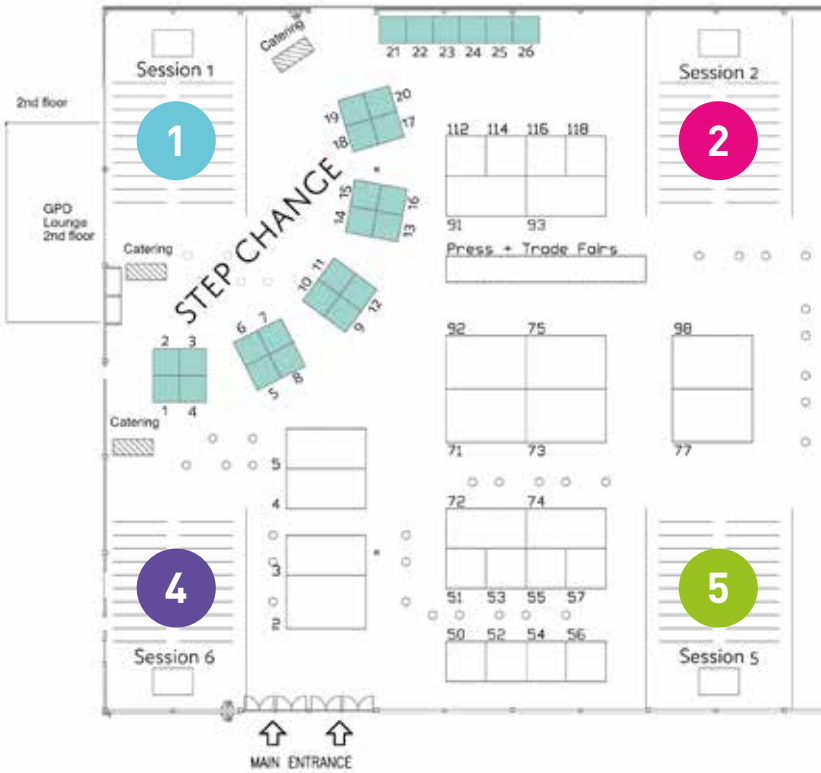
DGG journal

Glas+Rahmen

Glass International

Rivista del Vetro

EXHIBITION MAP



SESSIONS

- Glass & Sustainability
- Architect Forum
- Do's & Don'ts of Building Facades
- Facade Contractor's Forum
- Facade Engineering
- IGU & Window Technology
- Structural Glass Applications
- Complex Geometry
- Coatings Technology and Applications
- Research & Development
- Architectural Challenges & Solutions
- Tempering / Pre-processing
- Laminated Glass
- Quality Management
- Market Trends
- Smart Glazing
- Glass in Transportation



Stand no.

AMETEK Land	75
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COMPANY DESCRIPTIONS – GPD 2017

AMETEK

Booth 75

AMETEK Land, a business unit of AMETEK, Inc., is a specialist in the design and manufacture of monitors and analysers for industrial infrared non-contact temperature measurement, combustion efficiency and environmental pollutant emissions.

The measurement of temperature at critical locations in the glass production process is essential for the full understanding and efficient control of glass manufacture and processing. AMETEK Land offers an extensive range of instruments, all designed to the highest standards of quality and reliability to ensure accurate measurements under glass plant operating conditions.

AMETEK Land will showcase its new thermal imaging Near Infrared Borescope designed specifically for use in glass-melt tanks with an optional auto-retract version for additional instrument protection.

The NIR-B Glass provides continuous real-time temperature data, combined with a crystal clear thermal video image, allowing a single solution to replace the traditional approaches of visual cameras and periodic hand-held pyrometry. NIR-B Glass delivers 24/7 data to a plant, providing an operator with access to real-time, continuous data, along with an ability to store and trend this data for future analysis. This capability can save significant costs through the reduction of fuel usage, whilst maintaining the best possible performance from the furnace/melt tank.

BEIJING JEFFOPTICS COMPANY LIMITED

Booth 118

Beijing Jeffoptics Co.,Ltd. is a company dedicated to R&D glass surface stress measurement instruments. The instruments are applied for chemical tempered glass surface stress measurement and thermal tempered glass surface stress measurement. Jeffoptics presents four glass surface stress measurement instruments. JF-1 Series Surface Stress Meter is for thermal tempered glass stress measurement. JF-2 Series Surface Stress Meter is for chemical tempered glass. JF-3 Series Glass Stress Meter is for thermal tempered glass. JF-4 Series Surface Stress Meter is for chemical tempered glass.

BEIJING SYNERGY

Booth 99

Beijing Synergy Vacuum Glazing Technology Co., Ltd.(“Synergy”) was established in Beijing China in 2001. As a state-level high-tech enterprise registered in Beijing Economic and Technological Development Zone with the registered capital of RMB 75 million.

Synergy owns world-class vacuum glazing R&D team, facilities, and core technology of the whole industry chain with a 40,000 sqm modern plant building which was invested RMB 216 million. In 2014, the company's technology center was rated as "Beijing vacuum glazing engineering technology research center" by Beijing Municipal Science and Technology Commission. Currently Synergy's annual production capacity of vacuum glazing products reaches 200,000 sqm, meanwhile the performance and quality also reach the world-leading level.

Synergy has successfully applied in nearly 100 construction projects, including China's first passive housing project that passed the acceptance inspection, the world's first vacuum glass curtain wall building Sky Plaza and active housing project in Stuttgart, Germany, etc. Synergy has created several "Top in the World" for vacuum glazing applications in buildings. Synergy is committed to create a world-class well-known outstanding enterprise with global influence and core competitiveness all the time. The aim of Synergy is to supply the most professional energy-saving glass solution for the clients all over the world

BOHLE AG

Booth 51

Industrial Glass Cutting Wheels, Surface Protection, CeroGel (Glass Polishing Fluid), Measuring Devices, Emergency Foil – This is Bohle.

The Bohle Group is Europe's leading manufacturer and wholesaler of tools, machinery and accessories for glass processing and glass finishing. The family business, founded in 1923, is now represented by over 300 employees at thirteen locations in Germany and abroad. Divided into the product divisions Handling, Glass Cutting, Glass Bonding, Glazing, Tools, Machinery, Fittings and Surface Protection, the total product range is precisely tailored to the respective customer groups from trade, industry and retail. Quality is the leading principle at Bohle - in every area. To live up to this requirement, the company develops and manufactures many products themselves, for example. A modern logistics centre quickly sends the ordered goods on their way to the customer.

BÜHLER ALZENAU GmbH

Booth 56

Bühler Alzenau, former Leybold Optics, is a world leading machine manufacturer in the field of vacuum deposition and sputter technology. A major area is the deposition of thin films onto glass substrates. Bühler Alzenau offers complete system solutions, as well as comprehensive after sales services.

CHROMOGENICS

Booth 53

ChromoGenics is a leader in dynamic glass with controllable optical properties. The company's unique electrochromic technology ConverLightT, provides dynamic solar control with increased indoor comfort and energy efficiency. In 2016 the company started sales and deliveries to real estate

projects in Scandinavia. Our dynamic glass is suitable for new construction, reconstruction and renovation. It is smart and flexible and gives the architect freedom of design as our solution does not affect the appearance of the façade and can even be provided as bent glass or insulated glass unit. ChromoGenics is located in Uppsala, Sweden and has about 20 employees. The production facility includes climate-stabilized cleanroom facilities, production lines for ConverLightT glass laminates, testing and development facilities ChromoGenics was established in 2003 as an outcome of over 20 years of research on electrochromic materials by Professor Claes-Göran Granqvist and his team at the Ångström Laboratory at Uppsala University in Sweden. ChromoGenics has built up a strong IP portfolio consisting of proprietary know-how and patents covering essential materials, processes and applications in eighteen patent families, the last one to expire in 2033, and additional patents are pending. The main owners are K-Svets Venture AB and New Energy Solutions II K/S. The plant has been partly financed by a conditional loan from the Swedish Energy Agency.

CIMEC

Booth 97b

Cimec Oy is a Finnish company founded in 1995. Cimec is manufacturing machines for Window Manufacturers and Glass industry. Our production range consists of Assembly Lines for the Window Units, Automatic Frame Presses, Glazing Stations, Glass Lifters and lifters for various plates. Cimec has developed its know how of the sheet handling technology with sense of purpose. Our products are designed to meet the complex customer requirements in severe working environment. Cimec Oy has been specializing in ergonomic handling equipment, which can be easily customized due to the modular construction.

DOW CORNING

Booth 98

Dow Corning, a wholly owned subsidiary of The Dow Chemical Company, is a leader in silicon-based technology, with a versatility and unique potential to solve some of the most important challenges facing smart skyscraper design and quality of construction. With an extensive global track record both in landmark projects and functional building, Dow Corning silicone sealants and construction chemicals set the standard for quality, reliability, durability and consistent performance, which are meeting the challenges of contemporary architecture. Trusted by leading architects, contractors and building owners worldwide, Dow Corning also provides local access to their global product supply and a technical support network with expertise and knowledge which is second to none. We invite you to collaborate with our Façade Engineering and Architectural Design Team, who can deliver expertise and direction to help push the boundaries of sustainable modern construction. For advice, project support or further information, please visit our website. www.dowcorning.com/construction

GLASS STRESS

Booth 112

SCALP-05 that enables depthwise stress measurement in architectural glass panels, automotive glazing and solar glasses. Polariscope is fully automatic, computer controlled and easy to use. GlasStress Ltd is a manufacturer of internal residual stress measurement equipment for glass products. It's polariscopes help manufacturers to evaluate the quality and strength of glass products. GlasStress Ltd offers automatic transmission polariscope AP for container, tableware, lighting industries and scattered light polariscopes SCALP for automotive, architectural, solar industries.

HEGLA

Booth 5

HEGLA GmbH & CO KG. A leading German manufacturer for Glass Processing machines HEGLA has played an active role in the glass processing machinery industry being well recognized worldwide for its superior quality and outstanding innovation capability. HEGLA's strength is in cutting and breaking technology for both flat glass and laminated, either coated or uncoated, including the related loading equipment. As a well known supplier to the world's leading glass processing companies, HEGLA offers glass handling solutions, including accumulating and storage systems with complete line control.

INTERPANE

Booth 72

Solar Control Glass, Decorative Glass, Coatings, Coating Plants

AGC Interpane is one of the major European glass manufacturers and glass processors. The company offers a complete range of functional glass, which is available worldwide. Interpane was founded in Lauenförde, near the Weser river in Lower Saxony, Germany, in 1971 by Georg F. Hesselbach and today has production facilities at eleven locations in Germany, Austria, France and Slovakia. The company's product range includes float glass and low-iron float glass, high-quality coated insulation glass, soundproofing glass, solar control glass, safety glass, glass for design and decoration as well as glass for solar applications. In addition, a new specialty are oversized high-end coated glass products. They are used, for example, when architects want to design exclusive glass constructions with complete façades composed of very few individual panes. With those "Giga Lites", Interpane has developed glass panes that are among the largest coated glass products in the world. The maximum deliverable size for coated float glass is 18.00 x 3.21 metres - with a maximum thickness of 20 mm.

KIN LONG

Booth 3

KIN LONG company has been an innovative and professional company engaged in research, development, manufacture and marketing of fittings for architectural hardware. Through many years' development, KIN LONG has achieved a good reputation in the industry.

KIN LONG has a factory of 200,000m² with a construction area of 200,000m². The total number of employees exceeds 8000, including over 700 technical and managerial personnel. With a developing sales network both home and abroad, its products are distributed through China and exported to more than 100 countries and areas.

KIN LONG's products range including façade fittings like spider, bolt, tension rod, tension cable, clamp all in stainless steel; interior decoration fittings like glass door fitting, post railing fitting, bathroom fitting, lock; structural fittings like kinds of bespoke components. Striving to become the leader to serve the architectural hardware industry, KIN LONG not only adopts advanced management and manufacturing method, but also invests heavily in design and innovation. Rich product and prominent capability of innovation are driving force for its progress. Also KIN LONG takes pride in supplying fittings to many famous landmarks in countless cities all over the world.

KIN LONG is always your reliable partner for architectural hardware.

KURARAY

Booth 77

Trosifol® – your global partner for laminated safety glass

Trosifol® – part of the Kuraray Group – is a leading global producer of PVB and ionoplast interlayers for laminated safety glass applications in the architectural, automotive and photovoltaic industries.

The evolution of the Trosifol and DuPont Glass Laminating Solutions (GLS) merger has resulted in consolidation of the Trosifol®, SentryGlas® and Butacite® product brands into a single brand: the new Trosifol®.

We at Trosifol® now offer the world's broadest portfolio of innovative glass-laminating solutions, including structural and functional interlayers for safety and security applications, sound insulation and UV protection. For decorative applications, we supply colored interlayers, digitally printable films and other innovative products for interior design projects. Our UltraClear films exhibit the lowest Yellowness Index (YID) in the industry.

LPKF

Booth 55

LPKF SolarQuipment GmbH located in Suhl (Germany) employs a staff of around 100 people. It is part of the LPKF group. LPKF SQ develops, builds and supplies highly sophisticated laser systems to the photovoltaic and automotive markets. LPKF SQ combines specialized skills in laser, control and drive technology with extensive knowledge in micromachining a wide variety of materials. 24/7 in an industrial environment is no challenge for LPKF's proven laser technology. Trained service personnel is on hand

worldwide to perform commissioning service tasks, and an application center is available to help with feasibility studies and machining design. LPKF SQ has set new standards with its "Allegro" laser scribers for thin-film solar module manufacturing and has become market leader. In terms of throughput, accuracy and robustness they are unmatched allowing cost effective and efficient module production.

Lately LPKF SQ has introduced Laser Transfer Printing (LTP) for automotive applications. LTP combines the accuracy and flexibility of a laser-based digital printing process with the ability to print certified black and silver inks well known from screen printing on automotive glass.

This offers new possibilities like digitally printing logos for serialization with datamatrix or QR codes. In the aftermarket or small batch production, e.g. for transportation glass, LTP is making screens in production obsolete.

MERCK

Booth 2

Merck is a leading science and technology company in healthcare, life science and performance materials. In 2016, Merck generated sales of € 15.0 billion in 66 countries. Founded in 1668, Merck is the world's oldest pharmaceutical and chemical company. The founding family remains the majority owner of the publicly listed corporate group. The company holds the global rights to the Merck name and brand. The only exceptions are the United States and Canada, where the company operates as EMD Serono, MilliporeSigma and EMD Performance Materials.

Today around 50,000 employees work to further develop technologies that improve and enhance life – from biopharmaceutical therapies to treat cancer or multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions.

Beyond displays Merck also develops the liquid crystal technology for windows. In order to protect against solar radiation, these windows allow continuously variable switching from light to dark in just seconds and have high color neutrality compared with competitive technologies. A privacy version of the windows permits switching from transparent to opaque. The manufacture of these switchable modules is to start at the end of 2017.

MORGAN ADVANCED MATERIALS

Booth 52

Morgan Advanced Materials Haldenwanger GmbH is the manufacturer of high performance ceramic, e.g. tubes, rollers and kiln furniture made from alumina, silicon carbide, silicon dioxide and zirconia amongst other materials.

Established in 1865, Morgan Advanced Materials Haldenwanger has developed into a leading international supplier of advanced ceramics. We offer a comprehensive range of products made from oxide and non-oxide

materials, primarily for use in applications involving thermal, chemical or high mechanical stress. By virtue of our comprehensive expertise in ceramic applications, we are more than just a supplier – we are your reliable specialist partner in finding solutions to any technical challenges you may face. With more than 30 years of experience in the manufacture of ceramic rollers we today supply final customers worldwide as well as leading manufacturers of tempering kilns for the glass and metal annealing industry. Our production in Waldkraiburg offers a wide range of fused silica roller shapes with or without metal end caps.

OPTRIS GmbH

Booth 97a

Optris is a leading manufacturer of non-contact measuring equipment. Optris proposes both portable and fixed infrared thermometers for spot measurements as well as online infrared cameras for real-time thermography analysis.

SEDAK GmbH & Co. KG

Booth 93

Leading glass sedak, the glass manufacturer in Gersthofen, Germany, was founded in 2007. With its 150 employees, the world's leading glass fabricator produces insulating and safety glass in dimensions up to 3.2m x 16,5 m: processed, tempered, laminated, printed, coated, and cold bent. The core capabilities are the lamination of glass, edging, and the company's know-how of producing glass components with additional functional, and decorative elements. sedak's production has been optimized for extraordinary glass sizes; the level of automation for such glass dimensions is unique. All finishing steps are handled in-house e.g. with the new, fully automated insulating glass line. As a full supplier for large-size glass units, sedak sees itself as a partner for architects, designers, and façade constructors. Outstanding references are for example the Apple Cube and the Lincoln Center Canopies in New York, the Städel Museum in Frankfurt, and the Tottenham Court Road Station in London.

Applications:

- glass façades
- glass roofs
- glass stairs
- glass balustrades
- ship building
- safety glazing
- all-glass constructions
- interior design
- custom-made glass units

AG SIKA SERVICES AG

Booth 91

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. This year, Sika shows at GPD Silicone adhesives for laminar glass bonding and high-strength glass bonding in facades.

Sika has subsidiaries in 97 countries around the world and manufactures in over 190 factories. Its approximately 17,000 employees generated annual sales of CHF 5.75 billion in 2016.

SOFTECO

Booth 74

On display at our stand: Compact automatic glass surface stress meter and other quality control items. Softeco, established in 1984, and Ayrox are the leading suppliers of Quality Control Equipment for flat glass industry, both architectural and automotive sectors.

The other leading product segment for Softeco and Ayrox is PVB treatment, including PVB shaping and stretching as well as PVB wiring technologies. PVB stretching generates considerable material savings for laminated windscreen producers and PVB wiring allows production of value added heatable laminated glass. Softeco has offices in Helsinki and Tampere. Ayrox is located in Brussels for easy customer servicing.

SOGELUB

Booth 54

Sogelub® develops, produces and markets special chemicals especially dedicated for the flat glass industry. Since 1976, our mission has been to match and meet the requirements of our customers in the world.

Our main fields of applications have been selected:

- cutting all types of glass,
- edge working / drilling / sawing,
- polishing prior to coating processes,
- washing,
- bending,
- separating / stain and scratch protection,
- coating,
- maintenance including water treatment of grinding solutions.

Our value proposition is to produce higher quality, afford higher productivity and reduce rejected waste material of the finished customer product.

For detailed information visit us on our booth at GPD, or contact us via contact@sogelub.com.

SPARKLIKE

Booth 4

Non-invasive* insulating gas measurement:

Sparklike Handheld: Double glazed units with a measurement time of 2 seconds.

Sparklike Laser product line: Double and triple glazed units with coatings and laminated glass.

**Sparklike devices are based on our proprietary and patented technology, which allows the analysis of insulating gas concentration – without having to break the insulating glass unit.*

SURAGUS

SURAGUS GmbH is a spin-off of the Fraunhofer Institute for Non-Destructive Testing Dresden, and develops contact-free testing systems for both inline and offline characterization of functional conductive thin-films (TCO, Nanowires, Graphen, Cu, Al, Zn). The eddy current testing solutions allow the fast and accurate analysis of several crucial quality characteristics. SURAGUS offers single-point devices as well as inline systems and mapping solutions for the quality assurance of thin film systems, carbon fiber materials and metals. The contactless eddy current measuring systems allows the real-time monitoring of various relevant parameters, which also includes the characterization of hidden layers. Through customizations and optional features, the solutions can be optimized for specific testing tasks. The contact-free characterization of thin films is especially relevant to glass applications (e.g. LowE), touchscreens and flat monitors. For their innovative approach to the development of non-destructive testing solutions, SURAGUS received the Innovation Award of the Free State of Saxony.

TECNOGLASS

Booth 73

Tecnoglass is a fully integrated group of companies including Tecnoglass SA, ESWindows and Alutions, which offer the latest technology on glass, aluminum frames, facades and window systems. These companies employ over 5 000 people and sell to 27 countries, providing single source responsibility in all their products.

VESUVIUS

Booth 57

Vesuvius Glass & Industrial Technologies is a dedicated business unit within the Vesuvius group and is focused and committed to the global glass industry with expanding materials and technologies. We are specialized in designing and manufacturing ceramic solutions for various markets such as glass manufacturing, glass heat treatment, metal heat treatment and others. Our products can withstand temperatures up to 1 500°C, provide low thermal expansion and conductivity, and are made of high purity fused

silica material, well known under its ZYAROCK® brand name. For the Glass Heat Treatment and Tempering market we manufacture and provide ZYAROCK® glass tempering rollers with SMARTLY DRIVEN® end cap technology - a patented and unique technology available only from Vesuvius. With four manufacturing platforms and sales offices on every continent, Vesuvius provides a global service of sales and technical support. Local manufacturing in facilities with ISO 9001 quality management ensures our customers to receive the best quality and service in the shortest amount of time.

VIPROTRON GmbH

Booth 50

Since 2004 Viprottron develops and produces innovative quality scanning devices for the flat glass processing industry in our Pfungstadt premises "Made in Germany". Worldwide our devices control reliably the quality of architectural glass. As OEM-partner of many leading machine builders, Viprottron could develop to the technology leader in quality control of architectural glass within the recent years. Our Quality Scanner, being completed according to customer´s needs, sets the standard among the quality control devices now for years.

As manufacturer of outstanding inspection systems, Viprottron offers an effective automation of current quality controls. Viprottron also offers an integration into the on-site process chain that is individually tailored to customer´s needs, allowing a significant increase in quality and productivity. The newest application is the Anisotropy Scanner. It first time provides an efficient measuring method, which delivers images and measurement results of anisotropies in real-time. These collected isotropy data objectively and repeatably describe the quality of the tempered glass and allow immediate adjustments of the furnace or quench.

Furthermore, the same inspection system is able to detect and quantify "White Haze" right after the furnace. This again occurs during the ongoing production process in real-time.

GPD FINLAND 2017 INTERACTIVE NETWORKING ACTIVITIES

The new venue concept will play a key role in making the event more interactive, participatory and fun in engaging all attendees to create an effective learning, sharing and networking environment. In addition, we list, on this page, some of the key activities that will be going on during the conference days

DAY TIME ACTIVITIES

GPD Anniversary Golf Tournament

Tuesday, June 27

- Participation Fee: **Complimentary tournament for participants**
- Venue: Linna Golf, Hameenlinna

Program

- **11:00** Bus leaves from Glaston
- **11:15** am bus stops at Holiday Inn (Rautatienkatu 21)
- **11:20** am bus stops at Cumulus Hotel Koskikatu (Koskikatu 5)
- **12:30** Bus arrives to Linna Golf
- **12:30–14:00**
 - Registration at Caddie Master
 - Soup lunch in Club house restaurant
 - Free use of range and other practice areas with unlimited balls
- **14:00** Welcome and Rules at Club house
- **14:30** Competition starts, Group 1 tee-time
 - Following by rest of Groups, every 10min
 - Max. duration 4h 40min
 - Competition starts at tee 1
- **19:15–20:45** Sauna (towels available) and refreshments
- **20:45–22:00** Dinner and Award ceremony
- **22:00** Bus leaves from Linna Golf to Tampere

Trolleys for golf bags are available, if you don't find those, please ask from Caddie Master [trolleys are free of charge].

All refreshments are complimentary from Club house before, during and after competition. If you need rent clubs, those are available in Club house, price is 30€/bag (inc. clubs, balls and tee's).

One on One meetings

- You can book one-on-one meetings through our Meeting Manager networking platform during the conference.
- If you have any questions regarding Meeting Manager, please contact Meeting Manager Info -desk.
- The meetings will be held during breaks in the program such as coffee & lunch breaks.



EVENING ACTIVITIES

Get Together Party

Wednesday, June 28, 20:00

- Venue: Tähti Areena
- Included in the conference fee. All registered delegates and accompanying persons are invited. This event provides an excellent opportunity to meet old as well as new colleagues. Buffet style dinner will be served on complimentary basis.
- Dress code: Casual attire

Conference Dinner

Thursday, June 29, 19:30

- Venue: Solo Sokos Hotel Tornin Tampere, Paja Congress Center
- Charges: 80 € + VAT 24 %
- Food, drinks and entertainment will be on offer in a unique and an impressive setting.
- Please contact the registration desk at Tähtiareena if you still wish to register for this.
- Dress code: Business attire



FAREWELL PARTY

Friday, June 30, 19:00 – until sunrise

- Venue: Hatanpään Kartano, Hatanpään puistokuja 1, 33900 Tampere
- Farewell Party – A Must Attend Event!
- As expected, the party is always something unforgettable. The set up will be very informal and will include special networking opportunities, activities and memorable entertainment!
- Included in the conference fee.
- Please contact the registration desk at Tähtiareena if you still wish to register for this.

BUSINESS TOURS

Saturday, July 1

- Modern architecture in Helsinki – past, present and future 100€ / person (+24% VAT)

Details for the tours at www.gpd.fi/activities

DIRECTIONS

Tähtiareena is a part of Tampere Exhibition and Sports Centre (Tampereen Messu- ja Urheilukeskus).

Address:

Ilmailunkatu 20, Hall E, 33900 Tampere.

How to get there

There will be bus transportation from the official GPD hotels (Cumulus Koskikatu, Cumulus Hämeenpuisto, Holiday Inn Central Station, Lapland Hotels Tampere) to the event venue. Participants staying in other hotels can join the bus transportation from any bus stop mentioned in the bus schedule. The average travel time is around 15 min.

The bus routes can be found from the GPD App, hotels and the registration desk at Tähtiareena

INFO

Post Office Address

Tullintori Shopping Center
Tel. +358 20 071000
Open until 20.00

Tampere Tourist Information Office

Hämeenkatu 14B
Tel: +358 3 5656 6800

Taxis in Tampere

The number of Tampere taxi service is:
Tel. +358 100 4131

Stockmann

Hämeenkatu 4, 33100
Tampere
Mon-Fri: 9-20
Sat: 9-19

Forex Bank

Stockmann 3. krs,
Hämeenkatu 4
33100 Tampere
Tel: +358 3 532 0106
Mon-Fri: 9-20
Sat: 9-19
Sun: 11-18

Emergency Number: 112

The Speaker Room:

Located after the cloakroom at the end of the corridor.

Media Lounge:

Next to the Red Stage, Number 6.

BUS SCHEDULES 28.6.–30.6.

28.6. Wednesday • To TähtiAreena

Bus	Cumulus Koskikatu	Arrival at TähtiAreena	Cumulus Koskikatu	Arrival at TähtiAreena	Cumulus Koskikatu	Arrival at TähtiAreena
	14:45	15:00	15:20	15:35	15:30	15:45
	Holiday Inn Central st	Arrival at TähtiAreena	Holiday Inn Central st	Arrival at TähtiAreena		
	Bus stop: Railway station		Bus stop: Railway station			
	14:45	15:00	15:25	15:45		
	Lapland Hotel	Arrival at TähtiAreena				
	15:15	15:45				
	Tampere University	Arrival at TähtiAreena				
	15:15	15:35				
	Cumulus Hämeenpuisto	Arrival at TähtiAreena				
	15:30	15:45				

From TähtiAreena

Bus	Departure	Departure	Departure	Departure	Departure
	20:00	20:45	21:00	21:30	21:45
	Departure	Departure	Departure		
	22:00	22:15	22:30		

29.6. Thursday • To TähtiAreena

Bus	Cumulus Koskikatu	Arrival at TähtiAreena
	08:20	08:35
	Holiday Inn Central st	Arrival at TähtiAreena
	Bus stop: Railway station	
	08:20	8:45
	Lapland Hotel	Arrival at TähtiAreena
	08:15	08:45
	Cumulus Hämeenpuisto	Arrival at TähtiAreena
	08:30	08:45

From TähtiAreena

Bus	Departure	Departure	Departure	Departure	Departure
	16:45	17:00	17:15	17:30	17:45
	Departure	Departure	Departure		
	18:00	18:15	18:30		

Shuttle Bus	Departure from Lapland Hotel to TähtiAreena	Departure from TähtiAreena
	09:00	10:00
	11:00	12:00
	13:00	14:00
	15:00	16:00

30.6. Friday • To TähtiAreena

Bus	Cumulus Koskikatu	Arrival at TähtiAreena
	08:20	08:35
	Holiday Inn Central st	Arrival at TähtiAreena
	Bus stop: Railway station	
	08:20	8:45
	Lapland Hotel	Arrival at TähtiAreena
	08:15	08:45
	Cumulus Hämeenpuisto	Arrival at TähtiAreena
	08:30	08:45

From TähtiAreena

Bus	Departure	Departure	Departure	Departure	Departure
	17:15	17:30	17:45	18:00	18:15

TO FAREWELL PARTY (Hatanpään kartano)

Bus	Cumulus Koskikatu	Arrival at Hatanpää	Cumulus Koskikatu	Arrival at Hatanpää
	18:45	19:00	18:55	19:10
	Cumulus Koskikatu	Arrival at Hatanpää	Cumulus Koskikatu	Arrival at Hatanpää
	19:20	19:35	19:45	20:00
	Holiday Inn Central st	Arrival at Hatanpää	Holiday Inn Central st	Arrival at Hatanpää
	Bus stop: Railway station		Bus stop: Railway station	
	18:45	19:10	19:30	19:55
	Lapland Hotels	Arrival at Hatanpää		
	19:00	19:25		
	Cumulus Hämeenpuisto	Arrival at Hatanpää		
	19:10	19:25		

FROM FAREWELL PARTY TO TAMPERE CITY CENTER

Bus	Departure from Hatanpää	Departure from Hatanpää	Departure from Hatanpää	Departure from Hatanpää	Departure from Hatanpää	Departures from Hatanpää
	22:00	22:45	23:30	00:15	01:00	01:45 02:15

Shuttle Bus	Departure from Lapland Hotel	Departure from TähtiAreena
	09:00	10:00
	11:00	12:00
	13:00	14:00
	15:00	16:00



Organized by

glaston

www.glaston.net

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Glass and Glazing Federation

www.glasstec-online.com

www.bau-muenchen.com



Italian Glass Processing Machinery and Accessory Supplier's Association



National Glass Association



Glass Technology

