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FINAL PROGRAM

#GPD2017

**ALL EYES
ON GLASS.**

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

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25



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!

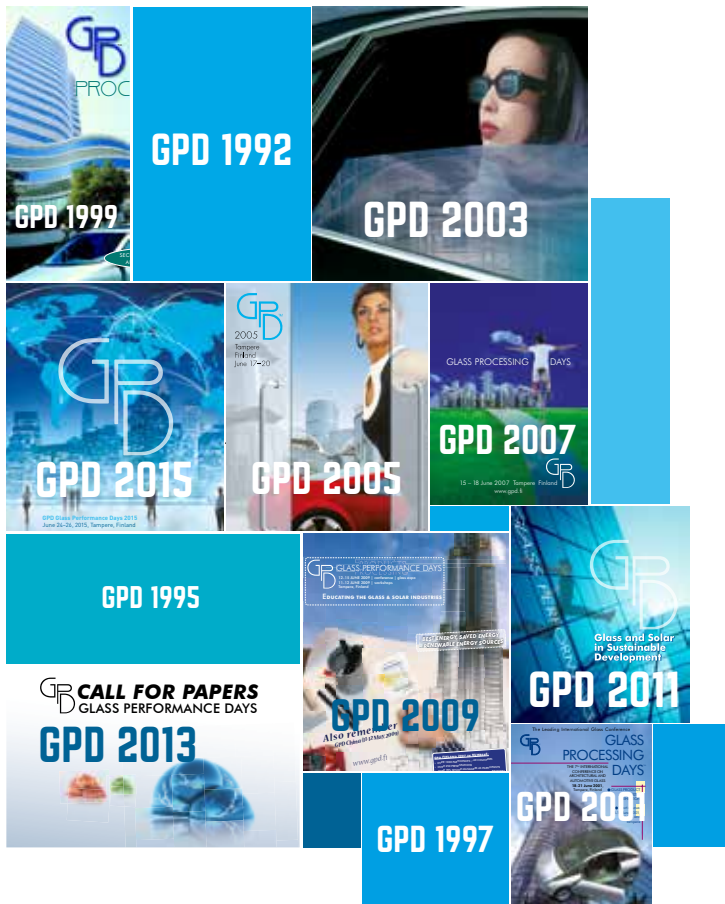
Our June 28-30, 2017 Conference again pushes the spirit of development further towards new horizons. The contents have been renewed, the modular structure of the Conference broadened and the very concept of this Glass Summit has been remodeled to reflect the pace of our times. Cases in point: The Step 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*



GPD 2017 WORKSHOPS

GPD workshops are 4–8 hour intensive courses with each focusing on techniques and skills in a particular field (e.g. pre-processing, tempering, structural glass facades, etc). The main emphasis is interaction and

exchange of information among small groups e.g. the number of participants for practical workshops will be limited to 5–15 persons and 20–50 persons for theoretical workshops.

Below is a list of the accepted workshops. For the full details please check the GPD website.t

Price: **EUR 150** + VAT 24% / workshop.

Please note that workshop organisers have a right to accept or reject participants

GPD Glass Performance Days 2017 • Workshops • June 27, TUESDAY

8:00	Registration					
WORKSHOP 1	WORKSHOP 2	WORKSHOP 3	WORKSHOP 4	WORKSHOP 5	WORKSHOP 6 (Held in Helsinki)	
9:00–17:00	9:00–17:00	9:00–17:00	9:00–18:00	9:00–17:00	9:00–18:00	
What did we get during last 25 years in the flat glass industry (1992–2017) and what we could expect for tomorrow?	Critical issues in glass chemical strengthening	Optimizing Cutting and Grinding	An introduction & advanced instruction on the vacuum insulated glazing	Architectural Glass Quality	Facades in High Rise Buildings – Architects & Structural Engineers	
Bernard Jean Savaëte, BJS. Différences	Guglielmo Macrelli, Isoclima SpA	Peter Pokoern, Bohle AG, Michael Emonds, Aachener Chemische Werk	Cenk Kocer, University of Sydney	Mikko Suomi, Ayrox Janne Aittokallio, Glaston Riku Färm, Glaston Mauri Saksala, Sparklike Markus Klein, Sugarus GmbH	Leon Jacob, Jacob & Associates Pty Ltd. Peter Smithson and Mr. Oliver Ng, BG & E Facades Keith Boswell and Ms. Lisa Follman SOM James Carpenter James Carpenter Design Associates Inc. Thomas Henriksen Mott McDonald	

GPD Glass Performance Days 2017 • Workshops • June 28, WEDNESDAY

8:00	Registration								
WORKSHOP 1	WORKSHOP 2	WORKSHOP 3	WORKSHOP 4	WORKSHOP 5	WORKSHOP 6	WORKSHOP 7	WORKSHOP 8	WORKSHOP 9	
9:00–13:00	9:00–15:00	9:00–14:00	9:00–15:00	9:00–14:00	9:00–13:00	9:00–15:40	9:00–15:00	9:00–15:00	
The introduction to glass tempering process and properties of tempered glass	Glass surface: Alterations and treatment	Testing, rheological modelling and design of interlayer materials in laminated safety glass	Anisotropy	Serving Clients and Community through International Standards for Quality and Environment (ISO-9001, ISO-14001)	Glass Design: A comparison of standards	Advances in Coatings for Glass and Plastics	How will UX Design effect Automotive Glazing?	Innovative Structural Silicone Bonding Technologies: Optimizing Transparency and Performance in Facade Systems	
Antti Aronen, University of Sydney	Michael Emonds, Chemetall GmbH (part of BASF group) Edda Rädlein, TU Ilmenau Reinhold Senft, Grafotec Spray Systems GmbH	Miriam Schuster & Michael Kraus, Technical University Darmstadt & University of German Armed Forces Munich	Glass Innovation Institute: Martin Regon, Olavi Uusitalo Jorma Vitkala	Lisett Guevara Gulnick, McGrory Glass, Inc.	Urmilla Sowell, Glass Association of North America Bill Lingnell, Lingnell Consulting Julia Schimmelpenninck, Eastman Chemicals Stephen Morse Texas Tech University Geralt Siebert, Uni. of German Armed Forces Munich	Dmitriy Bernt, NSG Pilkinton Glass Sener Oktik, SISECAM Wang Shijie, Institute of Materials Research and Engineering Singapore Guenter Bräuer, Fraunhofer IST Karel Spee, Solliance/TNO Gerhard Schottner, Fraunhofer ISC Georg Ockefuss, Viavi Solutions Koichi Suzuki, Fraunhofer FEP & SurfTech Transnational Co., Ltd.	Michael Robinson, ED Design srl.	Larry Carbery & Valérie Hayez, Dow Corning Corporation Lisa Rammig, Eckersley O'Callaghan Bruno Kassnel-Henneberg, Glas Troesch Michael Ludvik, M.Ludvik & Co.	

For more information, please contact: Viktoriia Serediuk, GPD Assistant • viktoriia.serediuk@glaston.net • tel.: +358 50 4325591 • gpd.fi/workshops-gpd-finland-2017/

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

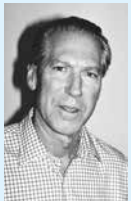


Founder & CEO of AKKA Architects

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)

2017 CONFERENCE TECHNICAL SESSIONS

FACADES

- Glass & Sustainability in Buildings
- Smart Glazing
- Facade Engineering
- Complex Geometry
- Do's & Don'ts in the Design and Installation of Building Facades
- Facade Contractor's Forum

GLASS IN ARCHITECTURE

- Structural Glass Applications
- Architect Forum
- Architectural Challenges & Solutions

SCIENTIFIC SESSION

- Research & Development

GLASS PROCESSING

- Tempering / Pre-processing
- Quality Management
- IGU & Window Technology
- Coatings Technology and Applications
- Laminated Glass

MARKET TRENDS & FUTURE OPPORTUNITIES

- Market Trends & Future Opportunities

SPECIALTY GLASS

- Use of Glass in Transportation

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

Registration						
8:00	Glass & Sustainability	Facade Engineering	Structural Glass Applications	Research & Development	Tempering /Preprocessing	Quality Management
	Session Chairs: Wim Stevels, Eastman Chemical Company	Session Chairs: Lawrence Carbary, Dow Corning Corporation Graham Dodd, Arup Materials Consulting	Session Chairs: Ingo Stelzer, Kuraray Michael Ludvik, M. Ludvik & Co	Session Chairs: Jens Schneider, Darmstadt TU Jan Belis, Ghent University Christian Louter, Delft TU	Session Chairs: Francis Serruys, Saint-Gobain Building Glass Europe Miika Appelqvist, Glaston Finland Oy	Session Chairs: AMETEK Land FeneTech Inc.
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	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	RESERVED	Roller Wave & Milli Diopter, but what can we see and how does it Look? Hannes Spiss, TNG - Europe
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	Probabilistic Study of Wind-Temperature Interaction: An Initial Study Towards Optimized Structural Assessment of Glass Components Manuel Santarsiero, Eckerstley 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	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	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	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	Controlling Anisotropy Francis Serruys, Saint-Gobain Building Glass Europe	Comparison Between Quality Requirements in Norms and Actual Client Expectations Romas Zvirzdas, GLASSBEL BALTIC UAB
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	Hybrid Glass Structures Peter Lenk, Arup	Influence of Weathering on Post-Fracture Performance Caroline Butchart, Eckerstley O'Callaghan	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	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	New Concept of Horizontal Structural Elements in Glass: Self bearing "Pi" Shape Plate. Jesus M. Cerezo, ENAR, ENVOLVENTES ARQUITECTONICAS	Full-surface and non-destructive quality control and evaluation by using photo elastic methods Benjamin Schaaf, RWTH Aachen Uni.	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	Qualifying and quantifying thermal comfort in highly glazed spaces Medina Deliahmedova, Lund University	All-glass Pavilions Geralt Siebert, Uni. of German Armed Forces Munich	Enabling Crystal Clear Façades Valerie Hayez, Dow Corning Corporation	Experimental and Numerical Studies on Blast Resistance of Laminated Glass Suwen Chen, Tongji University	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 Stahkopf, Optris GmbH
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	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 Carbary, Dow Corning Corporation	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	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	The Strength of Aged Glass Mauro Overend, University of Cambridge	Transparency in Glass Connections – a Case Study Lisa Rammig, Eckerstley O'Callaghan, TU Delft	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 Hellwig, Carl Zeiss Spectroscopy
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.	Sandwich Design of Mechanically Efficient and Structurally Slim Vision Panels Carlos Pascual, University of Cambridge - Glass & Façade Technology Research Group	The Application of Glass as A Bracing Element Daniel Neumer, Universität Der Bundeswehr München	ASTM E1300 Uniform Load Strength Reduction Factor not Required for Ceramic Enameled 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	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	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	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	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 Façade Construction Timo Saukko, Finnglass	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	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	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	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	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 Tornii Tampere, Paja Congress Center

23:00

GPD Glass Performance Days 2017 • Program • June 30, FRIDAY

8:00 Registration						
	Smart Glazing	Facade Contractor's Forum	Complex Geometry	Arch Challenges & Solutions	Laminated Glass	Market Trends
	Session Chairs: Valerie Hayez, Dow Corning Corporation Juha Liettyä, Glaston Oy	Session Chair: Saverio Pasetto, Skanska Stanley Yee, Dow Corning Corporation	Session Chairs: Benjamin Beer, Meinhardt Façade Technology Oliver Hans, Schueco	Session Chairs: Enrico Cutri, Dow Corning Bjorn Sanden, Kuraray	Session Chairs: Bernd Koll, Kuraray	Session Chairs: Peter Dixon A+W Software GmbH
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	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	Testing of Glass Laminates for Edge Stability Julia Schimmelpenninck, Eastman Chemical Company	USA: Market Trends and Drivers Urmilla Sowell, GANA
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	Approaching Curved Annealed Glass Timo Bühlmeier, Josef Gartner GmbH	Glass Appearances - Expectations Regarding a Material, Driving Projects and Upcoming Solutions Stefan Goeddert, Herzog & de Meuron	Edge Stability and Potential Cause of Blemishes in Laminated Safety Glass Vaughn Schauss, Kuraray	Minimum energy performance requirements for window replacement in the 28 EU member states Cédric Janssens, Glass for Europe
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	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 Sittte, Dow Corning GmbH	Post-Lamination Response of Warm-Bent Laminated Glass Gabriele Pisano, University of Parma, Italy	Applicability of design thinking to the construction industry Olavi Uusitalo, Holmark
10:15 COFFEE BREAK, ONE-ON-ONE MEETING STEP-CHANGE						
11:00	Smart glazing and adaptive facades: what can we simulate? Fabio Favoino, Eckerstley O'Callaghan	New Glass dimensions: large glass panes and their challenges in façade applications Mathias Klaiber, Josef Gartner GmbH	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	Thermal Radiation Against Forced Convection Heating in Flat Glass Lamination Oven Mikko Rantala, Glaston Finland Oy	Digitalization in the Glass Bernhard Saftig, Siemens
11:25	Switchable Glazing Heliotrope	Fabrication Technology for Hybrid Glass Metal Panels Peter Eckardt, Seele GmbH	Structural Silicon Joints in Cold-bent SSG units Viviana Nardini, Sika Services AG	Structural glass sandwich panels Graham Dodd, Arup	Testing of adhesion on laminated glass using photometric measurements Peter Hof, TU Darmstadt - MPA Darmstadt	The Past, Present and Future of Glass Fabrication Alex Ochoa, FeneTech Inc.
11:50	Transparent Solarcells Next Energy Technologies Inc	Glass Sandwich Facades Martien Teich, Seele GmbH	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.	Which Interlayer for Which Application? Bjorn Sanden, Kuraray Europe GmbH - Trosifol	Coatings Glass market. Russia, Far East, Turkey & Middle east – ICCG Dmitriy Bernt, Sener Optik, Wang Shijie
12:15			Systematically Unique Façade Geometry Oliver Hans, Schueco			The "Internet of Things" in Glass Processing Peter Dixon, A+W Software GmbH
12:40		IGU & Window Technology Session Chairs: TBA				Glass in Transportation Session Chairs: Juha Artama, NSG Group Juha Karisola, Glaston Finland Oy
13:00 LUNCH, ONE-ON-ONE MEETINGS						
13:25	Architect Forum Session Chairs: TBA	INVITED SPEAKER Vacuum Insulating Glass? Past, Present and Prognosis Richard Collins, University of Sydney				Developing New Technologies with Vehicle Manufacturers Juha Artama, NSG Group
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	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	Effect of Different Sources of Interlayer Modulus Data for Glass Design: The Structural PVB Case Wim Stevels, Eastman Chemical Company	In Glass Laminated Displays (For Special Vehicles) Joe Pimenoff, Beneq
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	Structurally shaped glasses for the new library of Caen Jacques Raynaud, Elioth	La Maison Des Fondateurs? Load Bearing Interlocking Glass Spiral as Building Structure Philippe Willareth, Dr. Luchinger + Meyer Bauingenieure AG	Enhanced Structural Integrity of Laminated Glass Balustrades Malvinder Singh Roorpal, Kuraray India Pvt. Ltd.	Energy Efficiency of Different Windscreen Bending Furnaces Juha Karisola, Glaston Finland Oy
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.	Banco Popular HQ - Auditorium Miguel Angel Ruiz, Martifer Metallic Constructions	Exciting Architectural Case Studies from All Around the World Sandro Casaccio, Kuraray	On The Causes of Optical Defects in Laminated Glass Jan Belis, Ghent Universit	Patented Moiré Optical Distortion Measurement Supports Evolution of Automotive Glass Jens Kayser, ISRA SURFACE VISION GmbH
15:00 COFFEE BREAK, ONE-ON-ONE MEETINGS, STEP-CHANGE						
			Coatings Technology and Applications Session Chairs: TBA			
15:30	Glass Specification Challenges in London Russell Cole, Arup Façade Engineering	Laser-Grown Bumps on Window Glass Alexander Streltsov, Corning Incorporated	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	Architectural Acoustic Glazing Hengyi Ju, Eastman Chemical Company	New Possibilities for Windshield Bending Reinhold Senft, Grafotec Spray Systems GmbH
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	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	Recent developments of laminating films as contribution for energy efficient buildings and facades Steffen Bornemann, Folienwerk Wolfen GmbH	New Era in Digital Printing On Glass Yariv Ninyo, Dip-Tech
16:20 CLOSING CEREMONY Speakers: Stephanie Akkaoui Hughes, Taina Tirkkonen • Closing Panel						
19:30-UNTIL DAWN FAREWELL PARTY @ Hatanpään Kartano, Hatanpään puistokuja 1, 33900 Tampere						

PARTICIPANT REGISTRATION

PARTICIPANT REGISTRATION & HOTEL RESERVATION

The on-line participant registration for GPD Finland 2017 is now open. While completing your registration, you will also have to do the following

- Choose your participation in the evening social activities
- Book your hotel room. During the time of the Conference, Tampere hotels are fully booked, which is why GPD has made block reservations for all participants in advance. Booking your hotel through the registration site is **REQUIRED** for you to be able to secure a room under the discounted GPD rates

REGISTRATION FEES FOR PARTICIPANTS:

24% VAT and 35€ service fee are added on all registrations fees as indicated in the following registration fee structure.

EUR 1 150 + VAT 24 %, for registrations received between January and April 30, 2017

- EUR 1 250 + VAT 24 %, for registrations received from May 2017 until the conference time

The fee includes

- admission to all sessions scheduled June 28–30, 2017
- conference bag and material
- lunches and teas/coffees on conference days
- admission to the Glass Expo
- admission to the Get Together and Farewell evening parties with food and drinks
- transportation to and from the conference venue and evening events

FEES FOR ACCOMPANYING PERSONS:

EUR 130 + VAT 24%

This fee is available only for participant's spouse (or equivalent). This fee does not allow accompanying guests' entrance to the conference sessions.

Fee includes:

- accompanying guest badge
- entrance to the Opening Ceremony on June 28, 2017
- admission to the Get Together and farewell evening events with included food and drinks
- transportation to and from the conference venue and evening events

Children below 18 years can join free of charge.

GROUP DISCOUNT

There is a possibility to register as a group and get discounted rates indicated below. An invoice will be issued and once paid; you will be given the instructions of how to register the members of the group.

- Group registration for 5 people gets 10% discount
- Group registration for 10 people gets 15% discount

REGISTRATION OFFICE CONTACT DETAILS

Email: gpdinfo@managementevents.com

Tel: **+358 400 9910 72** (During 9.00–17.00 UTC/GMT +2 hours)

NEW VENUE CONCEPT – OPEN CONCEPT ADOPTED TO

ENHANCE NETWORKING ACTIVITIES

IMPROVE ATTENDEE LOGISTICS BETWEEN SESSIONS

PROVIDE NEW AND DIFFERENT EXPERIENCE TO ALL PARTICIPANTS

The conference will be held in a new facility, Tähtiareena, which is part of the Tampere Trade Fair Complex. The new venue enables us to stage the GPD Conference in one open 5,000 square meter space, which will be divided into six seminar sections with their own presentation and audio units.

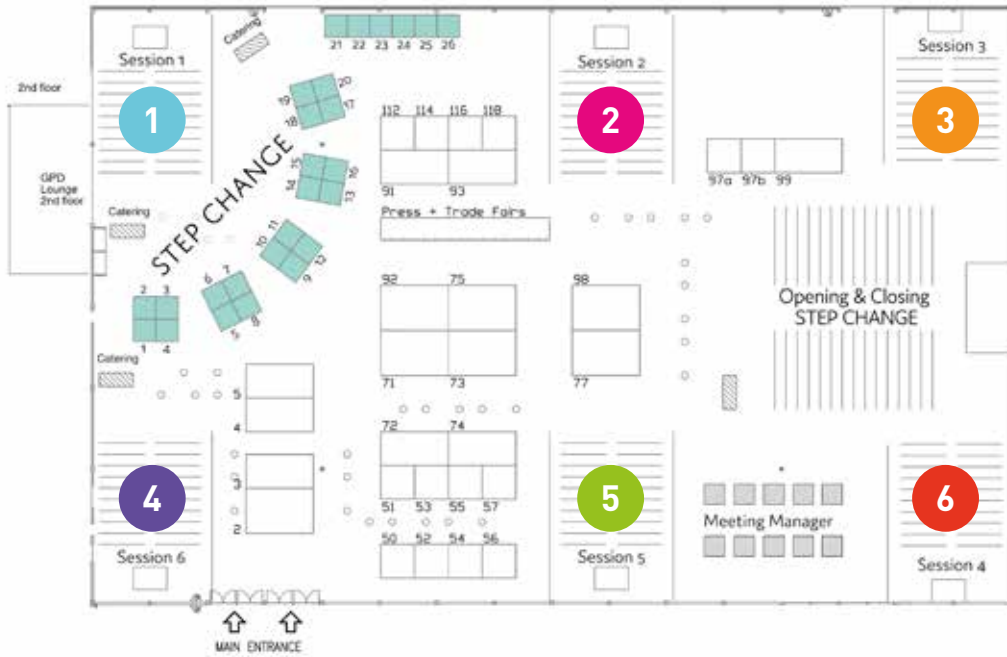
The open nature of venue makes moving between sessions and presentations easy and efficient – the same is true for participant networking.

At the center of the open space we will construct a special Expo and Step Change area accessible from all directions, which could not be effectively done in the old venue.

Running from session to session between floors, corridors and closed doors is no longer necessary.

Welcome to the new GPD.

EXHIBITORS



Stand no.

AMETEK Land	75	LPKF Laser & Electronics AG	55
Beijing Jeffoptics Company Limited	118	Merck	2
Beijing Synergy	99	Morgan Advanced Materials,	
Bohle AG	51	Haldenwanger GmbH	52
Bühler Alzenau GmbH	56	Optris	97a
Chromogenics	53	Sedak	93
Cimec	97b	Sika Services AG	91
Dow Corning Europe	98	Softeco / Ayrox	74
GlasStress Ltd.	112	SOGELUB	54
Glaston	71, 92	Sparklike Oy	4
Hegla and Bystronic	5	Tecnoglass	73
Interpane Glas Industrie AG/AGC	72	Vesuvius	57
Kin Long	3	Viprotron GmbH	50
Kuraray Europe GmbH	77		

SESSIONS

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



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.

To reinforce and ensure the success of the Step Change and Mentor programs, we are looking for glass industry emerging technologies divisions, investors, venture capital organizations, business angels, who would like join us in the first of its kind event in the glass industry. The investment element is essential to aid the event to become a platform for idea and technology development. We are currently also looking for new sponsors from within the glass industry to help support GPD Step Change to bring in a fresh perspective.

For more information, please contact:

Victor Jason

Event Coordinator
victor.jason@gpd.fi
tel. +358 50 362 9416



**GLASS PERFORMANCE DAYS 2017
STEP CHANGE**

**#STEPCHANGE
ALL EYES
ON GLASS.
GLASS PERFORMANCE DAYS 2017
28-30 JUNE 2017, TAMPERE, FINLAND**

WEDNESDAY 28 JUNE	THURSDAY 29 JUNE	FRIDAY 30 JUNE
<p>8:00</p> <p>STAND SET-UP @ TÄHTI AREENA</p>	<p>REGISTRATION @ TÄHTI AREENA</p> <p>MEETINGS & NETWORKING</p> <p>IN-SESSION PITCHES</p>	<p>MEETINGS & NETWORKING</p>
<p>9:30</p> <p>PITCH CAMP – HOSTED BY TREDEA AND ACCELERANDO</p> <p>LOCATION: CONGRESS CENTER ROOMS: MARS, JUPITER & SATURN AT TÄHTI AREENA</p>	<p>12:00</p> <p>PITCHING COMPETITION</p> <p>LUNCH</p>	
	<p>13:30</p> <p>MEETINGS & NETWORKING</p> <p>IN-SESSION PITCHES</p>	
<p>16:00</p> <p>CPD OPENING CEREMONY</p> <p>GET-TOGETHER PARTY</p>	<p>15:00</p> <p>PITCHING COMPETITION CONTINUES</p> <p>COFFEE BREAK</p>	<p>16:20–17:30</p> <p>CLOSING CEREMONY KEYNOTE</p> <p>PANEL DISCUSSION</p>
	<p>19:30</p> <p>WINNER OF PITCHING ANNOUNCED</p> <p>CONFERENCE DINNER</p>	<p>19:00 – DAWN</p> <p>FAREWELL PARTY</p>

THIS PROGRAM IS TENTATIVE AND MAY BE SUBJECT TO CHANGE.

EXHIBITION VENUE

The exhibition will be located in close connection to the conference session areas. In addition, all coffees and lunches will be served in the expo area. This combination of activities will provide exhibitors the best platform to showcase or launch products, services and knowhow to the attending glass fraternity.

INCREASE YOUR BUSINESS OPPORTUNITIES!

While the GPD Finland conference and the workshops are for educational purposes, the Expo is for commercial purposes. This strategic set-up aims at increasing business opportunities for exhibitors since coffees and lunches will be served in the Expo area. Book now at www.gpd.fi

BENEFITS FOR EXHIBITORS WILL INCLUDE THE FOLLOWING:

- Networking and fostering partnerships with like-minded professionals
- Direct company and product promotion to a targeted audience of high level decision-makers.
- Establishing new contacts and laying foundations for future business
Booths available are between 9 and 24m².
- For more information about the expo booths, prices etc., visit GPD Finland 2017 Expo
- To reserve a booth, go to GPD 2017 Expo Reservation Form

To ensure the best position for your booth, book now by contacting **Ms. Heli Huhtala email: info@meetingsmill.fi, +358 400 737 420**

Reserve your booth online via the following link:
[GPD 2017 Expo Reservation Form](#)

A reservation fee of EUR 500 will be charged for any of the packages and is non-refundable in case of cancellation. The fee is included in the package fees and will be charged upon receipt of your reservation. The balance will be invoiced later.

**RESERVE YOUR
BOOTH NOW!**

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 (Rautatiekatu 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

GPD 2017 TOURS FOR PARTICIPANTS

TAMPERE SIGHTSEEING TOUR BY BUS

– Versatile and fascinating sightseeing tour showing you the best parts of the city

Tampere is located between two beautiful lakes named Näsijärvi and Pyhäjärvi. The water flows from Näsijärvi and runs in rapids through the city, falling a total of 18 meters before it reaches Pyhäjärvi. The factories harnessed the power of the rapids, and this is how the story of this industrial city began. Today, Tampere is the largest inland city in Scandinavia and its population is growing. The top sights and interesting places with their fascinating history will be included in the tour. The beautiful natural scenery around Tampere attracts visitors from all over the world. We visit the Pispala district at the highest point of the Pispalanharju ridge, showing visitors the most beautiful lake view in the city. Pispala is also an architecturally interesting neighbourhood built during a time without a local development plan, resulting in unique building styles and urban solutions, some dating as far back as the late 1800's.

Date and time: Wednesday, June 28 at 12–14

Departure Tampere City Hall – a tour guide meets you there

Price: 40 € / person

Price includes: Tour guiding, bus transportation, coffee / tea & a donut, tax 24 %. Min. amount of 20 participants

Last registration day: May 28, 2017

ART AND DESIGN CITY TOUR BY WALKING

– introducing Finnish art and design

Finlayson Art Area, FAA, is a new visual arts event taking place in the old Finlayson factory area next to Tammerkoski rapids. FAA is a local, national and international art event offering an extraordinary art experience in the middle of the city.

FAA exhibitions take place both indoors and outdoors; in galleries and old factory halls as well as on streets and squares. There are paintings, photographic art, sculptors, video installations, art prints and Finnish glass design on show. The milieu is an important part of the event. Finlayson factory was established in 1820 by the Scotsman James Finlayson. The organizer is Himmelblau Printmaking Studio. We will walk along the Tammerkoski rapids and visit the Finnish Designers Boutique and enjoy the afternoon coffee or tea with pastry.

Date and time: Thursday, June 29 at 13–16 pm

Departure Tampere City Hall – a tour guide meets you there

Price: 45 € / person

Price includes: FAA Exhibition and tour guiding, coffee and pastry, tax 24% Min. amount of 10 participants

Last registration day: May 28, 2017

LIGHT SUMMER LUNCH WITH GLASS ARTIST AND DESIGNER ANU PENTTINEN IN NUUTAJARVI GLASS VILLAGE

Date and time: Saturday, July 1 at 9 am – 15 pm

TOUR RESERVATIONS:

The tour reservations should be made in writing at: info@meetingsmill.fi

Please mention the name of the participant and also the name of the tour you want to participate to! If your tour package includes any lunch or servings, we ask, that you inform Meetings Mill beforehand of any food-allergies as soon as possible, preferably at the point of reservation.

Kindly notice, that each tour requires a minimum number of participants; if the required number is not reached, the tour will be cancelled.

#GPD17
www.gpd.fi

ARRIVING IN TAMPERE FROM HELSINKI

Tampere is located in Southern Finland, 175 km north of Helsinki and it can easily be reached by train, bus or airplane. Below is info on how to get from the Helsinki Airport to Tampere by train or bus. You can also ask for assistance at the Airport's info desk.

BY TRAIN

Trains between Helsinki and Tampere run every hour.

For example, the Pendolino train from Helsinki Central railway station takes only about an hour and a half. The last train from Helsinki to Tampere during week days departs at 22:06.

However, you can now travel by **the train from Helsinki-Vantaa airport to Tampere** without the need to go to Helsinki Central railway station. Below are instructions:

- Search for a time table online before you leave for Finland via the link provided below, then enter **from Helsinki-Vantaa Airport to Tampere** in the search field.
- The search results will show trains with one or two train connection/transfer options. Please select the train that has one connection/transfer option via **Tikkurila station**.
 - You will be able to see the time the train will leave the airport, the transfer time at Tikkurilla Station and the long distance train to Tampere (Intercity train or Pendolino).
 - Please note the number of the long distance train connection so you can see the departure platform at Tikkurila station. This will be indicated on monitors at the station
- On arrival to Helsinki Airport, first, take the commuter train from the Airport (P-train) to Tikkurila station then change to the long distance train to Tampere
- On arrival to Tampere train station, if you are staying in the GPD recommended hotels, they are all within walking distance from the station. No need for taxis.

Please search for the timetable via the following link

https://www.vr.fi/cs/vr/en/aikatauluhaku_en

Please note that you can book and pay for the train journey via the same link.

BY BUS

Buses to Tampere from Helsinki-Vantaa Airport depart almost once an hour.

- For timetables and fares, please go to <https://www.matkahuolto.fi/en/>
- To locate the bust stop at the airport, please ask for assistance at the airport info desk
- On arrival to Tampere bus station, if you are staying in the GPD recommended hotels, they are all within walking distance from the station. No need for taxis.

TAXIS IN TAMPERE

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

LEAVING TAMPERE TO HELSINKI BY ROAD OR RAIL

By Bus

GPD is arranging bus transfers from Tampere to directly to Helsinki Airport for those that will be leaving on July 1, 2017. More info will be published on the GPD website when ready.

By rail

Follow the above instructions in case you may need to use trains.



VISIT TAMPERE

All
Bright!
TAMPERE
FINLAND



TOP 5 THINGS TO DO IN TAMPERE

- 1. Visit the Finlayson and Tampella areas to witness the new life of industrial heritage sites.** Get within touching distance of the steam engine used in the old textile factory in the Finnish Labour Museum Werstas (free admission!). Also, stop by to the old Stable Yards at Finlayson to shop for local handicrafts.
- 2. Pyynikki observation tower.** The best doughnuts in the universe and a view on the side!
- 3. Tampere Cathedral.** Designed by Lars Sonck, the cathedral boasts impressive interior art including frescoes by Hugo Simberg that shocked the locals in 1907.
- 4. Public saunas.** Rajaportti in Pispala is Finland's oldest public sauna still in use, and from the heat of Rauhaniemi and Kaupinoja you can dive straight into lake Näsijärvi, all year round!
- 5. Have lunch or coffee at Tampere Market Hall.** From local homemade dishes to delicious French cuisine and the best sushi in town! The biggest indoor market hall in the Nordic countries is 115 years old.

MUSEUMS FOR THE WHOLE FAMILY

Moomin Museum (Yliopistonkatu 55)

Did you know Moomins live in Tampere and the Moomin house actually exists?

Museum Centre Vapriikki (Alaverstaanraitti 5)

Natural history museum, ice hockey museum, all sorts of museums!

Lenin Museum (Hämeenpuisto 28)

Did you know the idea of Soviet Union was actually born in Tampere?

Amuri Museum of Workers' Housing (Satakunnankatu 49)

How did the worker families of Tampere live in the 1800's?

SÄRKÄNNIEMI – MORE THAN AN AMUSEMENT PARK

From Piggy Train to Tornado, from Log River to the top of Näsinneula tower. On a rainy day, visit SuperPark, Aquarium and Planetarium. And don't forget to eat cotton candy!

Welcome to Doghill!

See some cute animals, explore the castle of Count Drakkula and visit the café and candy shop of the historical town of Doghill, a theme park in Särkänniemi dedicated to children's books by Mauri Kunnas.

VISIT TAMPERE TOURIST INFORMATION

Opening hours:

June-August Mon-Fri 10-18, Sat-Sun 10-15

Hämeenkatu 14b
+358 3 5656 6800

visittampere@visittampere.fi

See more: www.visittampere.fi

Finland's second biggest city region, the Tampere Region, is developing heavily. New development plans include Central deck and arena, a new shopping mall, a light rail, a new sustainable and innovative housing area and several other sites. These projects amount to some 10 B Euro public and private investments during the next decade.

Here are some of our finest examples:

DECK AND ARENA:

Central Deck and Arena is urban scale development on top of existing railway tracks in the heart of the city. The 110,000 m² will hold a multi-purpose arena with capacity of 11,000 people. Constructions start spring 2017.



HIEDANRANTA:

An old pulp factory area Hiedanranta right on the shore of Lake Näsijärvi is being built into a sustainable and innovative residential area. The area will offer housing for 12,000-25,000 residents and jobs for 12,000-14,000 people.

LIGHT RAIL:

As a new form of public transportation in Tampere the light rail will offer a perfect testing ground for smart mobility solutions, as well as, smart building and smart infrastructure solutions.

[See all the major construction projects in Tampere](#)



THE LAND OF THE MIDNIGHT SUN

YEAR 2017 – FINLAND CELEBRATES 100 YEARS OF INDEPENDENCE

GENERAL INFO

Finland is a republic which became a member of the European Union in 1995. Finland is the most sparsely populated country in the European Union, with only 16 inhabitants per km². Its population is 5.3 million, with 561 000 residents living in Helsinki, the capital. Tampere the venue of GPD, has a population of 223,292, growing to 313,058 people in the urban area. It is the most populous Finland city in any of the Nordic countries and the second-largest urban area after Helsinki and Espoo. Finland is the sixth largest country in Europe. Finland is an advanced industrial economy: the metal, engineering and electronics industries account for about 60% of export revenues, the forest products industry for about 20%.

Finland is situated in northern Europe and borders with Sweden, Norway, Russia and Estonia.

NATURE

Finland is affectionately referred to as the Land of a Thousand Lakes, but that number doesn't even come close. There are over 180,000 lakes and a total of 179,888 Finnish islands to explore within the territory of Finland – the most of any country in the world.

CLIMATE

One notable effect of Finland's northerly position on the globe is that the four seasons of the year are clearly distinct from one another. In spite of its pretty dark and gloomy winters, where temperatures fall to as low as 25 degrees Celsius, the country definitely lives up to its nickname as the Land of the Midnight Sun. During the months of June and July the temperature occasionally rises to almost 30 degrees and the sun never drops below the horizon.

FUN FACTS

Finland has some of the world's strangest sports. Strangest of all is the Wife Carrying World Championship, with an extreme obstacle course. Couples from all over the world traveling to the country to take part.

Finland also has some of the world's best "Freedom to Roam" opportunities. This means that everyone can pitch a tent, forage for wild lingonberries or catch zanders in the lakes for free and without worry.

Do not get caught zooming through Finland! The cost of traffic and speed violations is calculated by the offending driver's annual income. One mega rich speed demon was once fined over 200,000 dollars for a single speeding offense.

Finland won the world's best pizza contest, placing ahead of Italy, with a pizza playfully titled the "Pizza Berlusconi". Its signature ingredient? Smoked reindeer. This was after former Italian Prime Minister, Silvio Berlusconi, ruffled a few feathers in 2005 when he remarked that Parma ham was completely superior to the Finns' smoked reindeer. This comment was not taken lightly. Finns, being rather touchy about their favorite animal, sprung to its defense. Read more <http://www.helsinki.fi/2012/04/worldsbestpizza.html>

To read more about Finland, visit WWW.FINLAND.FI for more information.

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Gold sponsors



Silver sponsors



The conference is supported by the following trade fairs and associations:



www.glasstec-online.com

www.bau-muenchen.com

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www.glaston.net



www.gpd.fi

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