



UNIVERSITÀ DEGLI STUDI DI PARMA

Final Program

GLASS When Technology Meets Design

Parallel Sessions

BG - Building with Glass
GT - Glass Technology

University of Parma

Parma (Italy), November 18-19, 2010

Centro Santa Elisabetta
University Campus

BG Session: Keynote Lecture by

Tim Macfarlane

Dewhurst Macfarlane and Partners,
London, New York, Los Angeles, Hong Kong, Trinidad

GT Session: Keynote Lecture by

Ruud Beerkens

TNO Science & Industry Glass Group, The Netherlands

Under the aegis of:

Università degli Studi di Parma
Facoltà di Architettura - Facoltà di Ingegneria -
Facoltà di Scienze Matematiche, Fisiche e Naturali

Ordine degli Architetti, Pianificatori,
Paesaggisti e Conservatori della
Provincia di Parma

Ordine degli Ingegneri
della Provincia di Parma

A.T.I.V. (Association of Italian Glass Technologists), in cooperation with the Department of General and Inorganic Chemistry, Analytical Chemistry, Physical Chemistry and the Department of Civil Engineering and Architecture DICATeA of the University of Parma, is pleased to announce the XXV International A.T.I.V. Conference which will be held in Parma (Italy) on November 18-19, 2010. The final program of the Conference, organised in two parallel sessions devoted to Glass Technology (GT) and to Building with Glass (BG), is presented hereafter.

Thursday, November 18, 2010

7.30 am *Trip in the Food Valley*
(Only for Pre-Registered delegates and Accompanying Persons who have selected this item, if a minimum number of 20 participants is reached).

1.30 pm Participants' Registration

2.15 pm **WELCOMING ADDRESS - PRESENTATION OF THE CONFERENCE**
Gino Ferretti

Rector of the University of Parma - Italy

Ivo Iori

Dean of Architecture Faculty, University of Parma - Italy

Piero Ercole

A.T.I.V. President - Italy

Angelo Montenero

A.T.I.V. Vice President, University of Parma - Italy

BG Session: Building with Glass **MODELLING and TESTING**

CHAIRMAN: Roberto Dall'Igna

Stazione Sperimentale del Vetro, Italy

2.35 pm **INTRODUCTION: Giampiero Manara**

Engineering Department, Permasteelisa S.p.A., Italy

2.45 pm **PRACTICAL APPLICATION:**

High-Strength Glass Bonding - a new era in façade design?

U. Mueller, W. Wagner

Sika Services AG, Switzerland

3.15 pm Comments on tests methods for the determination of structural glass strength

R. Dall'Igna, A. D'Este, M. Silvestri

Stazione Sperimentale del Vetro, Italy

3.35 pm Simple models for predicting the post-fracture behaviour of laminated glass

S. Nhamoinesu, M. Overend

Department of Engineering - University of Cambridge,
United Kingdom

- 3.55 pm** Adhesion properties of laminated glass
L. Lani, M. Froli
Department of Civil Engineering, Structural Division, University of Pisa, Italy
- 4.15 pm** *Coffee Break*
- 4.45 pm** An analytical model for buckling evaluation of laminated glass beams in bending and compression
C. Amadio, C. Bedon
Department of Civil and Environmental Engineering, University of Trieste, Italy
- 5.05 pm** Dynamic tests on laminated glass specimens
G. Ranocchiai², L. Andreozzi¹, S. Briccoli Bati², M. Fagone²
¹Department of Physics "Enrico Fermi", University of Pisa, Italy
²Department of Constructions, University of Florence, Italy
- 5.25 pm** Numerical simulation and experimental analysis of PVB interlayers
E. Cagnacci, M. Orlando, P. Spinelli
Department of Civil and Environmental Engineering, University of Florence, Italy
- 5.45 pm** Buckling of glass columns: analytical models and experimental validation
P. Foraboschi
IUAV, University of Venice, Italy
- 6.05 pm** First experimental approach to testing for the structural glass characterization
G. Frunzio, R. Buonanno, L. Ferri, G. Mattiello, V. Nigro
Department of "Cultura del Progetto", Second University of Naples, Italy
- 6.25 pm** The plasticity of glass
D. Ferretti¹, M. Rossi², G. Royer Carfagni¹
¹Department of Civil Engineering and Architecture, DICATeA, University of Parma, Italy
²Department of Civil Engineering, University of Pisa, Italy

Thursday, November 18, 2010

GT Session: Glass Technology

CHAIRMAN: Piero Ercole
A.T.I.V. President

- 2.40 pm** Glass sector overview
N. Favaro¹, F. van Houte²
¹Stazione Sperimentale del Vetro, Italy - ²CPIV, Belgium
- 3.05 pm** Glass batch conditioning for better melting properties
H. Erich
Maschinenfabrik Gustav Erich GmbH & Co KG., Germany

- 3.30 pm** Advanced heat exchange systems for glass furnaces.
Hybrid regenerative - recuperative device "CENTAURO"
A. Mola, A. Santero, P. Bortoletto, E. Cattaneo
Stara Glass, Italy
- 3.55 pm** MoZrO₂ - A new material for glassmelting electrodes
F. Bruno
Plansee, Italy
- 4.20 pm** *Coffee Break*
- 4.50 pm** New ways to refine refractories
R. Weigand¹, H. Hessenkemper²
¹Institute of Ceramic, Glass and Construction Materials,
²TUBergakademie Freiberg, Germany
- 5.15 pm** Increase of glass production efficiency and energy efficiency with
Model-Based Predictive Control
E. Muijsenberg¹, M. Eisenga², J. Buchmayer³
¹Glass Service B.V., The Netherlands, ²HQ Glass Service Inc.,
Czech Republic, ³Gerresheimer Lohr, Germany
- 8.30 pm** *Social Dinner*

Friday, November 19, 2010

BG Session: Building with Glass

NEW PRODUCTS

CHAIRMAN: Luigi Biolzi

Department of Structural Engineering, DIS, Technical School of Milan, Italy

- 9.00 am** **INTRODUCTION: Angelo Montenero**
Department of General and Inorganic Chemistry, Analytical
Chemistry, Physical Chemistry, University of Parma, Italy
- 9.10 am** **PRACTICAL APPLICATION:**
Evaluation of transparent structural silicone film adhesive for
bonded point-fixed glazing
A. Wolf
Dow Corning GmbH, Germany
- 9.50 am** New glass ceramic materials for building and ballistic protection,
where nanotechnology meets glass
G. Baldi, A. Bandini, G. Lupi, L. Pellicci
Colorobbia Italia S.p.A., Italy
- 10.10 am** 100% Silicone based spandrel and decorative coatings
T. Wierzchowski
ICD - High Performance Coatings, USA
- 10.30 am** Paving the way for BIPV
F. Pinton
Onyx Solar, Spain

10.50 am Development of the Memorial 11M's glass structure
E. Acosta
Estudio SIC

11.10 am *Coffee Break*

11.40 am **INTRODUCTION: Gianni Royer Carfagni**
Department of Civil Engineering and Architecture, DICATeA,
University of Parma, Italy

11.45 am **KEYNOTE LECTURE**
Glass Lightweight And Special Structures
Tim Macfarlane
Dewhurst Macfarlane and Partners London, New York, Los Angeles,
Hong Kong, Trinidad

1.00 pm *Lunch*

BG Session: Building with Glass STRUCTURES

CHAIRMAN: Franco Maceri
Department of Civil Engineering, University of Roma Tor Vergata,
Italy

3.00 pm **INTRODUCTION: Claudio Amodio**
Department of Civil and Environmental Engineering, University of
Trieste, Italy

3.10 pm **PRACTICAL APPLICATION:**
Post-failure behaviour of Fischer FZPG point fixings into DuPont
SGP laminated glass panels
M. Fioraso¹ O Manfroni.²
¹Fischer Italia, ²Mew Engineering Workshop, Italy

3.50 pm Cold twisting in point fixed glass: a case study
G. Manara, C. Florian, L. Tonon
Permasteelisa S.p.A, Italy

4.10 pm A simple technology to care about glass during building
construction
E. Mognato¹, A. Barbieri¹, A. Nembro², M. Pace³
¹Stazione Sperimentale del Vetro, ²Vetrocare, ³Department of
Engineering Division of Materials, University of Padova, Italy

4.30 pm Design with laminated glass: a modular truss
L. Consolini, S. Lenci
Department of Architecture, Buildings and Structures, Polytechnic
University of Marche, Ancona, Italy

4.50 pm *Coffee Break*

5.20 pm Structural glass beams supporting a new transparent roof
M. Palumbo¹, D. Palumbo¹, V. Ghezzi², B. Scala², R. Gentile³
¹Vetrostrutturale Srl, ²Studio ARC, ³Soprintendenza per i Beni
Architettonici e Paesaggistici di Brescia, Cremona e Mantova, Italy

- 5.40 pm** The new cover of "Ex Sala ContraMazione" in Cuneo
L. Lani¹, D. Galgani², F. Grazzini²
¹Department of Civil Engineering, University of Pisa, ² LGG Ing.
 Ass. Firenze, Italy
- 6.00 pm** Development of design charts for laminated glass design
M. Froling, K. Persson
 Department of Construction Sciences, Lund University, Sweden

Friday, November 19, 2010

GT Session: Glass Technology

CHAIRMAN:

Gary Smay

AGR (American Glass Research), USA

- 9.00 am** **KEYNOTE LECTURE**
 Glass Recycling & Contamination of Recycling Cullet
Ruud Beerkens
 TNO Science & Industry - The Netherlands
Goos Kers
 O-I Leerdam, Leerdam, and Engelbert van Santen, Consultant, The Netherlands
- 9.40 am** From inclusion observation to microstructure of glass defect
T. Consoles
 Saint Gobain Centre De Recherches et D'Etudes Europeen, France
- 10.05 am** Sulfate chemistry in Glass Melting / Fining
R. Beerkens
 TNO Science & Industry Glass Group, The Netherlands
- 10.30 am** CERCAT Filter: How to get rid of all pollutants in one single unit
M. Laute
 Maguin, France
- 10.55 am** *Coffee Break*
- 11.25 am** Mechanical evaluation of the geometry of glass containers
 through FEA and study of fracture probability
A. D'Este, R. Dall'igna, M. Silvestri
 Stazione Sperimentale del Vetro, Italy
- 11.50 am** Bring to a focus the defects on the moulds
R. Reverberi
 Consultant, Italy
- 12.15 am** How to improve forming and reducing energy costs
M. Ferrero
 Pneumofore, Italy

12.40 pm Glass surface improvement in the forming process by a new lubricant

Hessenkemper H.

TU-Bergakademie Freiberg, Germany

1.05 pm *Lunch*

GT Session: Glass Technology

CHAIRMAN: Heiko Hessenkemper

TU-Bergakademie Freiberg, Germany

3.00 pm A boost for HE process control Gob Assist:
an indispensable tool for the container glass industry

J. Dalstra

XPAR Vision BV, The Netherlands

3.25 pm A systematic approach to fracture analysis - reliance on science
not guesswork

G. Smay

AGR American Glass Research, USA

3.50 pm Quality inspection of special glass container designs

J. Olling

Iris Inspection Machines, France

4.15 pm The effect of tin oxide coatings on the severity of closure rusting

G. Smay

AGR American Glass Research, USA

4.40 pm *Farewell coffee*

XXV A.T.I.V. CONFERENCE REGISTRATION INFORMATION

Registration Fees Participants/Speakers	Early due payment (by September 21, 2010)	Later payment (after September 21, 2010)
A.T.I.V. Members	200,00 €	300,00 €
Non A.T.I.V. Members	290,00 €	390,00 €
PhD Students	150.00 €	250.00 €
Students	70,00 €	170.00 €
Social Dinner	60,00 €	-
Trip in the Food Valley*	60,00 €	-

* The trip will be organized if a minimum number of 20 participants is reached

The “A.T.I.V. Members – Non A.T.I.V. members fee” and “PhD Students fee” include:

Admission to all technical sessions - Conference proceedings - Coffee breaks and lunch.

Trip in the Food Valley and the social dinner are not included and must be booked and paid separately.

The “Students fee” includes:

Admission to all technical sessions - Coffee breaks and lunch.

Trip in the Food Valley and the social dinner are not included and must be booked and paid separately.

The reduced fee for students and PhD students will be allowed upon delivering of an official document certifying the status of the participant.

Your participation in the Social Dinner and Trip in the Food Valley you have not booked in advance is not guaranteed!

Cancellation conditions

Prepaid registration fees are refundable, minus a 20% administration fee, if written notification is received before October 21, 2010.

Payments

- By credit card: CartaSi, VISA and Master Card
- By money transfer to the account N. 35 225 968 belonging to A.T.I.V. /o Cassa di Risparmio di Parma e Piacenza - Agenzia 14 - Via Langhirano 65 - Parma (ABI 06230 - CAB 12782 – CIN M – IBAN IT 47M0623012782000035225968) indicating “XXV A.T.I.V. Conference” and specifying the name/s of the participant/s. Please Note: for the international money transfers the bank commissions must be charged to the orderer.
- At the registration desk (cash, checks, credit cards - CartaSi, Visa and Mastercard accepted).

XXV A.T.I.V. CONFERENCE

REGISTRATION FORM

Please write in capital letters, complete and fax or e-mail this form to: **A.T.I.V. Conference - Organizing Secretariat** Phone/Fax +39-0525-404229; e-mail: ferrari@ativ-online.it

Surname First Name(s)

Title

Company, Institution etc

Street, PO Box

Postal Code

City

Country

Phone

Fax

e-mail

Registration Fees Participants/Speakers	Early due payment (by September 21, 2010)	Later payment (after September 21, 2010)
A.T.I.V. Members	<input type="checkbox"/> 200,00 €	<input type="checkbox"/> 300,00 €
Non A.T.I.V. Members	<input type="checkbox"/> 290,00 €	<input type="checkbox"/> 390,00 €
PhD Students	<input type="checkbox"/> 150,00 €	<input type="checkbox"/> 250,00 €
Students	<input type="checkbox"/> 70,00 €	<input type="checkbox"/> 170,00 €
Social Dinner	<input type="checkbox"/> 60,00 €	.
Trip in the Food Valley	<input type="checkbox"/> 60,00 €	.
TOTAL € €
I plan to attend: <input type="checkbox"/> BG Session <input type="checkbox"/> GT Session		

Your participation in the events you have not booked in advance is not guaranteed!

Method of Payment:

☐ Credit Card (CartaSi, Visa, Mastercard) Card n°

Exp.date

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Amount

Name of card holder

Signature

☐ Bank Money transfer (please enclose copy of the payment receipt free of bank commission).
Account N. 35 225 968 - A.T.I.V. c/o Cassa di Risparmio di Parma e Piacenza ABI 06230 -
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Specifying "XXV A.T.I.V. Conference" and the name/s of the participant/s.

☐ At the registration desk (cash, checks, credit cards - CartaSi, Visa, Mastercard)

With reference to Italian law nr. 675/96 we inform you that your personal data will be treated only for conference purposes. We also inform you that the personal data listed above will be included in the list of the participants of this conference. If you DO NOT want to be included in this list, please tick the square and sign. Thank you. ☐ DO NOT include my data in the list of the participants

Date

Signature

Scientific Committee

- **Ruud Beerkens**
TNO Science & Industry Glass Group, The Netherlands
- **Stephen Bennison**
DuPont de Nemours & Co. Inc., Wilmington DE, USA
- **Luigi Biolzi**
Dept. of Structural Engineering, DIS, Technical School of Milan
- **Piero Ercole**
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- **Heiko Hessenkemper**
TU-Bergakademie Freiberg, Germany
- **Ivo Iori**
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Engineering Department, Permasteelisa S.p.A.
- **Angelo Montenero**
Dept. of General and Inorganic Chemistry, Analytical Chemistry, Physical Chemistry, University of Parma
- **David L. Pye**
New York State College of Ceramics, Alfred University, New York NY, USA
- **Gianni Royer Carfagni**
Dept. of Civil Engineering and Architecture, DICATeA, University of Parma

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New York State College of Ceramics, Alfred University, New York NY, USA
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Phone/Fax +39.0525.404229
E-mail: ferrari@ativ-online.it
www.ativ-online.it

INFORMATION ABOUT PARMA



Conference Site

The Conference will be held in the Centro Congressi Santa Elisabetta located in the Campus University of Parma.

Access

The closest international airports are Milan Malpensa (180 km), Milan

Linate (120 km), Bologna (90 km), Bergamo (120 km), Brescia (70 km), and Verona (100 km). However, due to its central position in the Po Valley, the town can be easily reached from all airports in northern Italy, including Venice (250 km), Genoa (210 km), and Florence (190 km).

The town can be easily reached also by fast train or highway: the "Parma" exit is on the A1 Milan - Naples motorway, connecting traffic from France (via Turin), Switzerland (via Chiasso - Como), and Austria (Autobrennero, via Verona to Modena).

Venue

Parma is a relatively small city, but it can nevertheless boast some truly monumental architecture, rich artistic heritage and a range of important cultural institutions. Among the main attractions in town, the masterpieces of Romanesque art, i.e. the Cathedral and the Baptistery. The frescoes by Correggio and Parmigianino, Pilotta Palace, some monumental churches, the Ducal Palace, the Regio Theatre are all evidence of the past as the capital of the Duchy of Parma and Piacenza, ruled by the Farnese family first, then by the Bourbons, now ruling Spain, then by Maria Luigia of Austria, wife of Napoleon.

It is also the town of birth of Giuseppe Verdi and Arturo Toscanini.

Moreover, Parma is well known also as the capital of the food-valley: the rich tradition of the local products of the territory and the province include its famous salami, Parma ham, and the renowned Parmigiano-Reggiano cheese.

Other Information

Tourist and General Information:

<http://turismo.comune.parma.it/>
<http://www.parmaitaly.com/indexk.html>
<http://www.promoparma.it/>
<http://www.teatroregioparma.org/>

Airport:

<http://www.parma-airport.it>

Food:

<http://www.parmigiano-reggiano.it/default.aspx?newlang=7>
<http://www.prosciuttodiparma.com/eng>

Italian Railways - Timetable:

<http://www.ferroviedellostato.it/>

SUGGESTED HOTELS

	Single Room	Double Room	
Hotel Palace Maria Luigia **** Parma	108,00 €	167,00 €	Tel. +39 0521 281032 Fax +39 0521 231126 email: reservationsml@sinahotels.com
Hotel Astoria Executive *** Parma	80,00 €	98,00 €	Phone +39 0521.272717 Fax +39 0521.272724 email:info@piuhotels.com
Hotel Tre Pozzi **** Sanguinaro - Fidenza - Parma	65,00 €	90,00 €	Phone +39 0521 825347 Fax + 39 0521 825294 email:info@hoteltrepozzi.it
Hotel Campus My Hotels *** Collecchio - Parma	54,00 €	69,00 €	Phone +39 0521 802680 Fax +39 0521 802684 email: campus@myonehotel.it

When booking "Convenzione Universitaria" should be mentioned in order to obtain the special rates agreed for Conference delegates.

