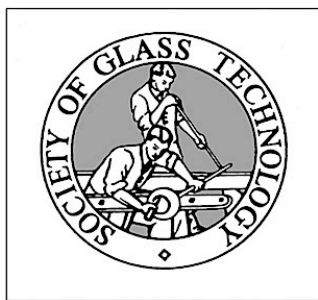


PROGRAMME

Aspects of Glass

the Annual Conference of the
Society of Glass Technology



3rd to 6th September 2017
at
Murray Edwards College, Cambridge

STAINED GLASS
ART AT THE SURFACE
CREATION, RECOGNITION, CONSERVATION



3rd - 5th September 2017
Murray Edwards College, Cambridge
part of the SGT Annual Conference

A FRAGILE HERITAGE
ASPECTS OF HISTORIC GLASS



6th September 2017
at
Murray Edwards College, Cambridge

Aspects of Glass

The annual conference of Society of Glass Technology

Incorporating

Stained Glass - Art at the Glass Surface
A Fragile Heritage - Aspects of Historic Glass

www.sgt.org



Contents

	Page
<hr/> Sunday:	
Registration	2&6
Excursions	6
<hr/> Monday:	
Science & Technology	2-3
Stained Glass Forum	6-7
Excursion	7
<hr/> Tuesday:	
Science & Technology	3-4
Stained Glass Forum	7-8
Banquet	4&8
<hr/> Wednesday:	
Science & Technology	5
A Fragile Heritage-Aspects of Historic Glass	9
<hr/> Posters	
	10

PROGRAMME

Sunday 3rd September

Session: Excursion and Registration

13:30 Registration for all conference delegates In the Jocelyn Bell Room

Monday, Tuesday and Wednesday- daily from 8:00

Monday 4th September

Session: Science & Technology

Room: Vivien Stewart Room

Chair: Lothar Wondraczek

9:20 Welcome

9:40 Molecular dynamics of oxide glasses as a complement to conceptual and experimental techniques

Gavin Mountjoy

10:20 Coffee & Poster Session

Room: Vivien Stewart Room

Chair: Gavin Mountjoy

11:00 Combined Solid-State NMR and Molecular Dynamics Study of the Structure of Strontium-Aluminosilicate glasses

Thibault Charpentier

11:40 Glass property design informed through knowledge of network topology

Lothar Wondraczek

12:20 Building experimentally consistent atomistic models of multicomponent glasses using diffraction data

Daniel Bowron

13:00 Lunch & Poster Session

Room: Vivien Stewart Room

Chair: Jamieson Christie

14:00 Glass Research Activities at Johnson Matthey

Hong Zheng

14:40 Switchable fluidic glass-glass laminates for real-world and large-scale application in building envelopes

Benjamin Heiz

15:00 *TBC*

15:20 Coffee & Poster Session

Monday 4th September continued

Session: Science & Technology

Room: Vivien Stewart Room

Chair: Russell Hand TBC

- 16:00 Electro-optically active nanoparticles in glass for fast infrared modulators
Martin Mika
- 16:20 Structural Anisotropy in Hybrid Waveguide
Xu Yang
- 16:40 Glass-based magneto-optical microprobe
Yi-Cong Ding
- 17:00 Side-Emitting Fibers: Coupling Guided Modes to Radiation Modes
in Optical Fiber via Fs-Laser Induced Microstructures
Aaron Reupert

Tuesday 5th September

Session: Science & Technology

Room: Vivien Stewart Room

Chair: Alex Hannon

- 09:00 Modelling the sulphate capacity of simulated radioactive waste borosilicate glasses
Paul Bingham
- 09:20 In-Situ Monitoring of Volatile Radionuclides Produced by the Vitrification of Intermediate
Level Nuclear Waste
Josh Radford
- 09:40 Irradiation effects in Indian and UK high level radioactive waste glasses
Prince Rautiyal
- 10:00 The Role of BaO Modifier in Silicate and Borosilicate Glass Systems with High Sulphate
Solubilities
Paul Bingham
- 10:20 Coffee & Poster Session**
- Room: Vivien Stewart Room
- Chair: Paul Bingham
- 11:00 Bond valence analysis of phosphate structures
Alex Hannon
- 11:20 Molecular dynamics simulation of phosphate based bioactive glasses containing fluorine
Adja Touré
- 11:40 Effect of AlF_3 and Na_2SO_4 on the structure and properties of sodium phosphate glasses
Quyen Huyen Le
- 12:00 Crystalline to Amorphous Phase Transformations of Calcium Phosphate by Doping with
different Concentrations of Fe^{3+}
Animesh Jha

Tuesday 5th September Continued

Session: Science & Technology

12:20 Mössbauer spectroscopic study of iron phosphate glass for radioactive waste storage
Abdelmoumene Djeridi

12:40 TBC

13:00 Lunch & Poster Session

Room: Vivien Stewart Room

Chair: Russell Hand TBC

14:00 An insight into the mechanisms of glass atmospheric alteration and their temperature dependence
Odile Majérus

14:20 Determination of the critical forming condition for ultra-thin tellurite glass film using glass blowing technique
Ray-Jay Jeng

14:40 Effect of different additives on the crystallization behaviour of BaO-SrO-ZnO-SiO₂ glasses
Katrin Thieme

15:00 TBC

15:20 Coffee & Poster Session

Room: Vivien Stewart Room

Chair: TBC

16:00 Structural control of the coloration of alkali borate glasses by 3d-elements
Georges Calas

16:20 Linking color to structural properties of glasses
Laurence Galois

16:40 Optical and structural properties of PbO doped silicate glasses
Benjamin Allsopp

17:00 TBC

Session: Social Event

19:00 Drinks reception at St John's college.

19:30 Conference banquet at St John's college.

Wednesday 6th September

Session: Science & Technology

Room: Vivien Stewart Room

Chair: Jamieson Christie

09:00 **President's Address**

Russell Hand

09:40 Extension of thermodynamic concept using spatial sampling

Akira Takada

10:00 Lead-Free electrical Sodium Potassium Niobate Glass-Ceramics

Khalid Rmaydh Muhammed

10:20 Coffee & Poster Session

Room: Vivien Stewart Room

Chair: Paul Bingham

11:00 Structure and ion dynamics of alkali-silicates: a simulation study

Edwin Flikkema

11:20 Bone repair ions in phosphate-based glass

Jamieson Christie

11:40 Non-bridging oxygen atoms: Can they be present in low-alkali borate glasses?

Natalia M. Vedishcheva

12:00 Small Angle Scattering and the Cybotactic Theory, as Applied to Single-Component Glasses

Adrian Wright

12:20 A new theoretical approach to the never-ending quest for assessing the Glass Forming Ability of Bulk Metallic Glasses

Abdelmalek Roula

12:40 **TBC**

Room: Vivien Stewart Room

Chair: TBC

13:00 Lunch

14:00 Utilisation of food and biomass ash by-products in mainstream coloured container soda-lime-silica glass production of Bulk Metallic Glasses

Paul Bingham

14:20 Briquetting of recycled glass fine particles for container glass batch

Wei Deng

14:40 Mode-locked Laser Assisted Sintering and Morphological Engineering of Gel-mineral based Dental Biomaterials- a new approach for the restoration of damaged enamel tissue!

Animesh Jha

15:00 TBC

15:20 Coffee & Poster Session

Corpus Vitrearum Stained Glass Forum

Murray Edwards College, Cambridge

3rd-5th September 2017

Sunday 3rd September

Session: Excursion and Registration

- 13:30 Registration for all the conference In the Jocelyn Bell Room
- 14:00 Assemble at Murray Edwards College to visit All Saints, Jesus Lane followed by the chapel of Jesus College

Monday 4th September

Session: Corpus Vitrearum Stained Glass Forum

- Room: Long Room *Chair: Dr Isabelle Pallot-Frossard*
- 9:00 Welcome
Isabelle Pallo Frossard, Sarah Brown
- 9:20 **Keynote Address:** Severe paint loss from stained-glass windows: causes and conservation challenges
Alison Gilchrist
- 10:00 Scratching the surface: observations on techniques and characteristics of English commercial glass-painting of the late 19th Century
Jonathan Cooke
- 10:20 **Questions and Discussion**
- 10:40 **Coffee & Poster Session**
- Room: Long Room *Chair: Dr Sophie Wolf*
- 11:20 **Keynote Address:** Restoration of Louis-Germain Vincent-Larcherin the 19th century at Troyes cathedral
Barbara Trichereau
- 12:00 Loss and reinvention: the changing surface of two Renaissance stained glass windows from Sint-Genovevakerk, Steenhuffel, Belgium
Sarah Jarron
- 12:20 Thomas Jervais and the East Window of Agher Parish Church, County Meath
Laura Tempest
- 12:40 **Questions and Discussion**
- 13:00 **Lunch & Poster Session**

Monday 4th September Continued

Session: Corpus Vitrearum Stained Glass Forum

Room: Long Room

Chair: Dr Ivo Rauch

14:00 The Sharp End of Conservation: The Reintroduction of Paint to a Mid-Nineteenth Century American Stained-Glass Window

Amanda Chau

14:20 Retouching the past

Linda Kvarnström

14:40 Bringing Back the Ghosts

Mary Clerkin Higgins

15:00 Questions and Discussion

15:20 Coffee & Poster Session

Session: Excursion

16:00 Visit to Westminster College Chapel

Tuesday 5th September

Session: Corpus Vitrearum Stained Glass Forum

Room: Long Room

Chair: Prof Joost Caen

9:10 Welcome

Isabelle Pallo Frossard, Sarah Brown

9:20 **Keynote Address:** Artistic and Technical Dexterity: An Investigation of Medieval Jewel Techniques in Stained Glass

Megan Stacey

10:00 Comparisons in the degradation in surface decoration in Lord Gort's Stained glass collection at Hamsterley Hall Co. Durham

Chris Chesney

10:20 Questions and Discussion

10:40 Coffee & Poster Session

Tuesday 5th September Continued

Session: Corpus Vitrearum Stained Glass Forum

Room: Long Room

Chair: Dr Claudine Loisel

- 11:20 **Keynote Address:** Cold paint on medieval stained glass: The choir windows of Berne Minster
Sophie Wolf
- 12:00 **Keynote Address:** Cold Paint on Stained Glass in Nuremberg around 1500 Patina, Varnish and Glazes
Martha Hör

12:40 Questions and Discussion

13:00 Lunch & Poster Session

Room: Long Room

Chair: Aletta Rambaut

- 14:00 Original cold paint on early modern stained glass at the Germanisches National Museum, Nuremberg
Annika Dix
- 14:20 Sanguine Paint: Historical Recipes for Production and Application
Angela Santos & Marcia Vilarigues
- 14:40 Characterization of enamel used in stained glass in Barcelona at the end of the XIX century.
Jordi Bonet

15:00 Questions and Discussion

15:20 Coffee & Poster Session

Room: Long Room

Chair: Sarah Brown

- 16:00 Analysis of technology and state of preservation of medieval and modern paint layers on two stained-glass panels from the Dominican Monastery in Cracow, Poland
Edyta Bernady
- 16:20 Commercial transparent cold paints used for inpainting on glass: a research into degradation parameters
Claire Boselie
- 16:40 **Questions and Discussion**
- 17:00 **Closing Remarks**
Isabelle Pallo Frossard, Sarah Brown

Session: Social Event

- 19:00 Drinks reception at St John's college.
- 19:30 Conference banquet at St John's college.

A Fragile Heritage -Aspects of Historic Glass

Murray Edwards College, Cambridge

Wednesday 6th September

Session: History & Heritage Seminar

Room: Long Room

Chair: Dedo von Kerksenbrock-Krosigk

09:00 **Keynote Address:** For good measure: take a glass!

John Parker

09:40 Oxidation states of manganese and iron in medieval purple stained glasses

Natan Capobianco

10:00 Crystallisation of iron coloured high lead glazes: Looking for Bernard Palissy's secret (1510-1590)

Gauthier Roisine

10:20 Coffee & Poster Session

Room: Long Room

Chair: John Parker

11:00 **Keynote Address:** Glass from England's Late Bronze Age Pompeii - Must Farm

Julian Henderson

11:40 A plant ash glass workshop in first century Dibba

Alicia Van Ham-Meert

12:00 Scottish Medieval Window Glass: Chemical analysis

Helen Spencer

12:20 Protecting historic windows in Scotland -Developing a tool for monitoring change

Caitlin Phipps

12:40 Characterisation of Scottish laboratory glass from the 18th and 19th centuries

Craig Kennedy

13:00 Lunch & Poster Session

Room: Long Room

Chair: Bill Brookes

14:00 **Keynote Address:** The Scent bottle - the Jewel in the Glass Crown

Andy McConnell

14:40 A new model of painting glass

Jianyong Guo

15:00 Inner space in sculpture: the use of metal inclusions in glass

Goshka Bialek

15:20 Coffee & Poster Session

Room: Long Room

Chair: David Martlew

16:00 **Keynote Address:** The Glass Museum - A Fragile Institution

Dedo von Kerksenbrock-Krosigk

16:40 Archival film footage of Alloa Factory producing glass bottles

Neil Simpson

17:00 Advanced technological methods and their impact on architectural glass structures

Marwa Sadek

Poster Sessions

Origins of stained glass in the Great East Window of York Minster

Laura Adlington

Oxidation states of manganese and iron in medieval purple stained glasses

Natan Capobianco

Fracture and Cutting of Glass Plates under Local Compression

Atsushi Hashimoto

Switchable SPD for Smart Windows with Controlled Shading and Solar Energy Harvesting Ability

Benjamin Heiz

The mining Humpen of Halberstadt from 1579

Jana Hilderbrandt

Bioglass-Brushite Membranes for Biodegradable Microfluidics

Neelam Iqbal

Improvement of direct bonding strength of tellurite glass film with optical substrates in vacuum

Ray-Jay Jeng

Stained glass paints: Grisaille and Yellow Stain

Sara Louro

Electrochemical studies of liquid-liquid interfaces

Karima Morakchi

Morphological and structural special features of the gold nanolayer sputtered on the glass surface modified by surface ion exchange and chemical etching

Olga Sidelnikova

Determination of lost paint layers by Scanning Electron Microscopy

Manfred Torge

A specific approach for the conservation of fragment windows

Birgit Verplancke

National Record of Stained Glass in Scotland

Mylène Vigneron

Electrochemical studies of liquid-liquid interfaces

Karima Morakchi

Glass parameters affecting radiative lifetime for electronic transitions of luminescent dopants

Fouad El-Diasty

