## LOMONOSOV CONFERENCE

## **Programme and Room Allocation**

|               |               | Sunday 4 <sup>th</sup> September  |  |
|---------------|---------------|---|--|
|               | Room?         | Monson I  | Monson II  |
| 09:30 – 12:30 | Registration? | Business Meeting: ICG TC07 (Nucleation, Crystallisation and Glass Ceramics) | Business Meeting: ICG TC22 (Structure-Property Relationships)          |
| 12:30 – 14:00 |               | Lunch Break <sup>*</sup>  |  |
| 1400 – 17:00  | Registration  | Business Meeting: ICG TC03 (Glass Structure)                                | Business Meeting: ICG TC05 (Nuclear and Hazardous Waste Vitrification) |
| 19:00 – 21:00 |               | Welcome Reception   | n  |

<sup>\*</sup> Lunch is not provided, but can be taken at nearby cafés/restaurants.

|               | a  |  |  |
|---------------|--|--|--|
|               | Simkins Lee Lecture Theatre: Monday 5 <sup>th</sup> September  |  |  |
|               |  |  |  |
| 09:20 - 09:30 | Brian McMillan: Opening Ceremony & Welcome.  |  |  |
| 09:30 – 09:50 | David Martlew: Pilkington Award Announcement.  |  |  |
| 09:50 - 10:40 | Tatiana Moiseeva: Mikhail V. Lomonosov (1711-1765): "To Glass All His Labour Was Applied."   |  |  |
| _             | Coffee/Tea   |  |  |
|               | Chemical Aspects of Glass Structure (ICG TC03)   |  |  |
|               | (Chair: Akira Takada)  |  |  |
| 11:00 - 11:40 | Gregory Tricot: Advanced Solid-State NMR Methods for the Characterization of Glass Networks.   |  |  |
| 11:40 – 12:00 | Diane Holland: Superstructural Units in Pyrex – a DOR NMR Study.   |  |  |
| 12:00 - 12:20 | Francisco Muñoz: Structure of Oxynitride Phosphate Glasses.  |  |  |
| 12:20 - 12:40 | Hiromichi Takebe: Effect of $B_2O_3$ and $Al_2O_3$ Addition on the Structure of Phosphate Glasses.   |  |  |
| 12:40 - 13:00 | Armenak Osipov: Structure of Li <sub>2</sub> O-B <sub>2</sub> O <sub>3</sub> and Na <sub>2</sub> O-B <sub>2</sub> O <sub>3</sub> High-Alkali Melts: A High-Temperature Raman Spectroscopy Investigation. |  |  |
|               | Lunch  |  |  |
|               | Theory & Computer Simulation (ICG TC03)  |  |  |
|               | (Chair: Francisco Muñoz)   |  |  |
| 14:00 - 14:40 | Akira Takada: Disorder of Glass Structure in Terms of Configurational Entropy.   |  |  |
| 14:40 – 15:00 | Ondrej Gedeon: Rings and Configuration Entropy in Glass Prepared by MD.  |  |  |
| 15:00 – 15:20 | Oliver Villain: A Combined Molecular Dynamics, First-Principles and NMR Structural Study of Sodium Silicate Glasses.   |  |  |
|               | Nano-Phases in Glass   |  |  |
|               | (Chair: Giuseppe Dalba)  |  |  |
| 15:20 - 15:40 | Manfred Dubiel: Nucleation and Growth of Crystalline Ag Nanoparticles in Glass.  |  |  |
| 15:40 – 16:00 | Araceli de Pablos-Martin: Crystallisation Kinetics and Luminescence Properties of Er <sup>3+</sup> /Yb <sup>3+</sup> doped NaYF <sub>4</sub> Nano-Glass-Ceramics.  |  |  |
|               | Tea/Coffee   |  |  |
| 16:20 – 16:40 | Janis Kliava: Nanoparticle-Containing Oxide Glasses: Transparent Magnets.  |  |  |
| 16:40 – 17:00 | Vikram Singh Raghuwanshi: ASAXS Study of the Precipitation of Ferrimagnetic Nanocrystals in the Na <sub>2</sub> O-MnO-SiO <sub>2</sub> -Fe <sub>2</sub> O <sub>3</sub> system.                           |  |  |
| 17:00 - 17:20 | Andreia Ruivo: Ruby Copper Thin Layers in Float Glass by Using Spray Pyrolysis or Ionic Exchange in Melted Copper Compounds.   |  |  |
| 17:20 - 17:40 | Márcia Ventura: Colouring Glasses Using Nanoparticles Synthesized Within Polyelectrolytes Multilayers Assembled Through the Layer by   |  |  |
|               | Layer Method.  |  |  |
| 17:40 - 18:00 | Mohamed Marzouk: Effect of P <sub>2</sub> O <sub>5</sub> and MnO <sub>2</sub> on Crystallisation of Zn- and Zn-Mn Ferrite Glass-Ceramics.  |  |  |

|                             | Talbot Hall: Monday 5 <sup>th</sup> September  |  |  |
|-----------------------------|--|--|--|
|                             | Coffee/Tea   |  |  |
|                             | Applied Glass Science  |  |  |
|                             | (Chair: Margaret West)   |  |  |
| 11:00 – 11:20               | Emmanuelle Gouillart: In-Situ Synchrotron Tomography of Soda-Lime Glass Batch Melting Reveals the Influence of Inter-granular Contacts on Reaction Routes. |  |  |
| 11:20 - 11:40               | Sohei Sukenaga: Effect of Oxygen Partial Pressure on the Viscosity of Iron Oxide Containing Alkali Slicate Melts.  |  |  |
| 11:40 - 12:00               | Thomas Pfeiffer: Hydrothermal Dissolution of Copper Slag Glasses from the Mansfeld District.   |  |  |
| 12:00 - 12:20               | Hans Roggendorf: Chemical Durability of a Slag Glass from Pig Iron Production: Reaction Products, Surface Alteration and Kinetics.                         |  |  |
| 12:20 - 12:40               | Abdelmalek Roula: A Global and Non-Dimensional Approach to Compute the Oxides Global Relative Glass Forming Ability.                                       |  |  |
| 12:40 - 13:00               | Robert Jones: Inhibition of the Corrosion of E-Glass Fibres by Malonic Acid.   |  |  |
|                             | Lunch  |  |  |
|                             | Composition/Structure - Property Relationships (ICG TC22)  |  |  |
|                             | (Chair: George Kordas)   |  |  |
| 14:00 – 14:20               | Russell Hand: Relationships Between the Mechanical Properties of Silicate Glasses and Chemical Composition.  |  |  |
| 14:20 – 14:40               | Ana Rodrigues: Ionic Conductivity Enhancement by Halogenated Salt Dissolution in AgPO <sub>3</sub> -AgI Glasses.   |  |  |
| 14:40 – 15:00               | Oleg Yanush: New Interpretation of Oxide Glass Properties on the Basis of the Constant Stoichiometry Grouping (CSG) Concept.                               |  |  |
| 15:00 – 15:20               | Athina Angelopoulou: An Insight to the Germanate Anomaly: A Comparative EPR and RAMAN Study Supported by DFT Simulations.                                  |  |  |
| 15:20 – 15:40               | Robert Hill: Fluorine Containing Bioactive Glasses.  |  |  |
| 15:40 – 16:00               |  |  |  |
|                             | Tea/Coffee   |  |  |
| Glass Properties (ICG TC22) |  |  |  |
| (Chair: Georges Calas)      |  |  |  |
| 16:20 – 16:40               | Sharifah Shaharuddin: Thermal, Viscosity and Thermal Expansion Coefficient Properties for a Range of Phosphate Based Glasses.                              |  |  |
| 16:40 – 17:00               | Mark Stamminger: Electrical Conductivity of Quartz Glass Measured by Impedance Spectroscopy Between 600°C and 1100°C.                                      |  |  |
| 17:00 – 17:20               | Pauline Gateau: Tin Oxide Solubility in Soda-Lime Silicate Melts.  |  |  |
| 17:20 - 17:40               | Delia Brauer: Effects of Magnesium for Calcium Substitution in Phosphate Glasses.  |  |  |

| Monson Room: Monday 5 <sup>th</sup> September |  |  |
|---|--|--|
| Coffee/Tea                                    |  |  |
|   | History & Heritage: Russian Glass History  |  |
|   | (Chair: David Martlew)   |  |
| 11:00 – 11:40                                 | Natalia Vedishcheva: Russian Glass Chemistry: From Lomonosov to Shultz.  |  |
| 11:40 – 12:20                                 | Sarah Paynter: Ancient Glassmaking Furnaces.   |  |
| 12:20 - 13:00                                 |  |  |
|   | Lunch  |  |
|   | History & Heritage: Roman & Medieval Glass   |  |
|   | (Chair: Linn Hobbs)  |  |
| 14:00 - 14:40                                 | Vera Keller: Pliny's Lost Glass: The Search for Flexible Glass and the Formation of Research Agendas in Early Modern Europe. |  |
| 14:40 – 15:20                                 | Dieter Brems: Looking for Primary Roman Glass Production in the Western Mediterranean.                                       |  |
| 15:20 – 16:00                                 | Monica Ganio: Trade Routes Across the Mediterranean: A Sr/Nd Isotopic Investigation of Roman Colourless Glass.               |  |
|   | Tea/Coffee   |  |
|   | (Chair: Vera Keller)   |  |
| 16:20 – 17:00                                 | Pisutti Dararutana: Roman Mosaic Glass Found in Thailand. – Not coming? Ceri Lambdin?  |  |
| 17:00 – 17:40                                 | Rainer Werthmann: Glass Coatings on Stones of Copper Smelting Furnaces: Bronze Age Originals and Results of Archæological    |  |
|   | Experiments.   |  |
| 17:40 - 18:00                                 | General Discussion.  |  |

|               | Simkins Lee Lecture Theatre: Tuesday 6 <sup>th</sup> September   |  |  |
|---------------|--|--|--|
|               |  |  |  |
|               | (Chair: Natalia Vedishcheva)   |  |  |
| 09:00 - 09:50 | David Pye: Stained Glass: A Glass Science Perspective.   |  |  |
|               |  |  |  |
|               | Conditional/Lone-Pair Glass Formers  |  |  |
|               | (Chair: Yanko Dimitriev)   |  |  |
| 10:00 - 10:40 | Alex Hannon: The Structural Role of Lone-Pair Cations in Glasses.  |  |  |
|               | Coffee/Tea   |  |  |
| 11:00 – 11:40 | Emma Barney: The Influence of Modifiers on the Tellurium Environment in Glass.   |  |  |
| 11:40 – 12:00 | Tatiana Markova: Intermediate-Range Order in the Tellurite Glassforming System PbO-P <sub>2</sub> O <sub>5</sub> -TeO <sub>2</sub> Studied by Raman Spectroscopy and X-ray |  |  |
|               | Powder Diffraction.  |  |  |
| 12:00 – 12:20 | Ladislav Koudelka: Lead Tungstate-Phosphate glasses: Structural Study, Properties and Crystallization.   |  |  |
| 12:20 – 12:40 | Reni Iordanova: Glass Formation and Structure of Glasses in the ZnO-V <sub>2</sub> O <sub>5</sub> -WO <sub>3</sub> -MoO <sub>3</sub> System.                               |  |  |
| 12:40 – 13:00 |  |  |  |
|               | Lunch  |  |  |
|               | Non-Oxide Glasses  |  |  |
|               | (Chair: Marie-Louise Saboungi)   |  |  |
| 14:00 – 14:40 | Bruce Aitken: Where Constraint Theory Breaks Down: The Case of Molecular Chalcogenide Glasses.   |  |  |
| 14:40 – 15:20 | David Price: Short- and Intermediate-Range Order of Phosphorus-Selenium Glasses.   |  |  |
|               | Tea/Coffee   |  |  |
|               | Glass-Forming Melts: Thermodynamics & Equilibria   |  |  |
| 15.40 16.00   | (Chair: Marek Liska)   |  |  |
| 15:40 – 16:00 | Natalia Vedishcheva: The Vitreous State: A Product of Chemical Equilibria.   |  |  |
| 16:00 – 16:20 | Olga Koroleva: Thermodynamic Modelling and High-Temperature Raman Spectroscopy of Silicate Melts.  |  |  |
| 16:20 – 16:40 | Leyla Osipova: Raman Spectra of Two-Alkali Borate Glasses and Melts.   |  |  |
| 16:40 – 17:00 | Victor Minaev: Is the Term "Polyamorphism" Correct for Non-Crystalline Substances?   |  |  |
| 17:00 – 17:20 | Lothar Wondraczek: In Situ Analyses of Glasses and Supercooled Melts in Microconfinement.  |  |  |
| 17:20 – 17:40 |  |  |  |

|               | Talbot Hall: Tuesday 6 <sup>th</sup> September  |  |  |
|---------------|---|--|--|
|               | Tunio of Tana |  |  |
|               | Waste Vitrification: Chemical Structure (ICG TC05)  |  |  |
|               | (Chair: Michael Ojovan)   |  |  |
| 10:00 - 10:40 | Sergey Stefanovsky: Elemental Speciation in Nuclear Waste Glasses.  |  |  |
|               | Coffee/Tea  |  |  |
| 11:00 – 11:20 | Abdessamad Kidari: Investigation of the Solubility of Lanthanides and Minor-Actinides in SiO <sub>2</sub> -B <sub>2</sub> O <sub>3</sub> -Na <sub>2</sub> O-Al <sub>2</sub> O <sub>3</sub> -CaO Glasses.  |  |  |
| 11:20 - 11:40 | Amélie Monteiro: Chemical Mechanisms During Vitrification of Model Containment HLW Glass.   |  |  |
| 11:40 – 12:00 | Barbara Dunnett: Vitrification of High Molybdenum Waste.  |  |  |
| 12:00 – 12:20 | Leslie Dewan: Modelling Radiation-Induced Alteration of the Network Topology of Alkali Borosilicate High-Level Waste Glass.   |  |  |
| 12:20 – 12:40 | Paul Bingham: Spectroscopic Investigation of Glasses Produced by Microwave Heating.   |  |  |
| 12:40 - 13:00 | Sergey Stefanovsky: Structural Features of High-Fe <sub>2</sub> O <sub>3</sub> and High-Al <sub>2</sub> O <sub>3</sub> /Fe <sub>2</sub> O <sub>3</sub> SRS HLW Glasses.   |  |  |
|               | Lunch   |  |  |
|               | Waste Vitrification: Durability & Devitrification (ICG TC05)  |  |  |
|               | (Chair: Carl Steele)  |  |  |
| 14:00 – 14:20 | Mike Harrison: Investigation of the Effect on Long-Term Aqueous Durability with Variations in the Composition of UK Vitrified HLW   |  |  |
|               | Product.  |  |  |
| 14:20 – 14:40 | Odile Majérus: Alteration kinetics of Eu <sub>2</sub> O <sub>3</sub> -Bearing Sodium Borosilicate Glasses in Aqueous Solutions Containing MgCl <sub>2</sub> , CaCl <sub>2</sub> , AlCl <sub>3</sub> or  |  |  |
|               | $ZnCl_2$ salts.   |  |  |
| 14:40 – 15:00 | Denis Strachan: The Glass Dissolution Rate Equation Revisited.  |  |  |
| 15:00 – 15:20 | Nolwenn Chouard: Crystallisation Study of an Aluminosilicate Glass Containing both Rare Earths and Molybdenum.  |  |  |
|               | Tea/Coffee  |  |  |
|               | Waste Vitrification: Glass Properties (ICG TC05)  |  |  |
|               | (Chair: Michael Harrison)   |  |  |
| 15:40 – 16:20 | Michael Ojovan: Viscous Flow and Viscosity of Melts and Glasses.  |  |  |
| 16:20 – 16:40 | Carl Steele: Viscosity of Simulated High Level Waste Vitrified Residues.  |  |  |
| 16:40 – 17:00 | Jesús Rincón: Thermal Behaviour of Iron Aluminium Phosphate Glasses containing UO <sub>2.67</sub> .   |  |  |
| 17:00 – 17:20 | Toru Sugawara: High-Temperature Density and Heat Capacity of a Simulated High-Level Radioactive Waste Glass.  |  |  |
| 17:20 – 17:40 | Keita Watanabe: X-ray CT Imaging of Vitrified Glasses Containing Pseudo-Radioactive Wastes.   |  |  |
| 17:40 – 18:00 |   |  |  |

|               | Monson Room: Tuesday 6 <sup>th</sup> September  |  |  |
|---------------|---|--|--|
|               |   |  |  |
|               | History & Heritage: Museum Collections & Scientific Background  |  |  |
|               | (Chair: Natalia Vedishcheva)  |  |  |
| 10:00 - 10:40 | Linn Hobbs: Old Kingdom Egyptian Faience: Some New Perspectives.  |  |  |
|               | Coffee/Tea  |  |  |
|               | (Chair: Dieter Brems)   |  |  |
| 11:00 – 11:40 | John Smith: Glass Furniture in St. Peterburgh   |  |  |
| 11:40 – 12:20 | Anna Marie Roos: The Prince and the Popper: Prince Rupert's Drops and Natural History in the Early Royal Society. |  |  |
| 12:20 - 13:00 |   |  |  |
|               | Lunch   |  |  |
| 14:00 - 15:20 | Exhibitors Forum (Set Up Time)  |  |  |
|               | Tea/Coffee  |  |  |
|               | Exhibitors Forum  |  |  |
|               | (Chair: Bill Brookes)   |  |  |
| 15:40 - 18:00 | Exhibitors Forum:   |  |  |
|               | 7?? Johnson Matthey: Platinum and Noble Metals for Glassmaking.   |  |  |
|               | Lambda Photometrics: Scanning Electron Microscopy.  |  |  |
|               | Metler Toledo: Differential Thermal Analysis.   |  |  |
|               | Panalytical: X-Ray Fluorescence & X-Ray Diffraction.  |  |  |
|               | ??? Scientific Support Services: Optical Microscopy.  |  |  |

|               | Simkins Lee Lecture Theatre: Wednesday 7 <sup>th</sup> September  |  |
|---------------|---|--|
|               |   |  |
|               | (Chair: David Pye)  |  |
| 09:00 - 09:50 | Isabelle Pallot-Frossard: Transparancy and Opacity: Light and Colour in the Art of Stained Glass.   |  |
|               |   |  |
|               | Crystallisation/Devitrification (ICG TC07)  |  |
|               | (Chair: Ladislav Koudelka)  |  |
| 10:00 - 10:40 | Edgar Zanotto: Dynamic Processes in a Silicate Liquid from Above the Melting Point to Below the Glass Transition.   |  |
|               | Coffee/Tea  |  |
| 11:00 – 11:20 | Wolfram Höland: Controlled Crystallization of Xenotime- and Monazite-Type Crystals in Glass-Ceramics.   |  |
| 11:20 – 11:40 | Juern Schmelzer: Dependence of Crystallization Processes of Glass-Forming Melts on Prehistory: A Theoretical Approach to a Quantitative Treatment.                                    |  |
| 11:40 – 12:00 | Salaheddine Alahraché: Vitrification and Crystallisation in the $Y_2O_3$ -Al $_2O_3$ system.  |  |
| 12:00 - 12:20 | Joachim Deubener: The Influence of Sulphur on Nucleation and Crystal Growth in Na <sub>2</sub> O-SiO <sub>2</sub> glasses.  |  |
| 12:20 - 12:40 | Noritaka Saito: Effect of Agitation on Crystallisation Behavior of Calcium Silicate Melts.  |  |
| 12:40 - 13:00 | Yanko Dimitriev: Crystallisation of ZnO From Supercooled Melts and Glasses.   |  |
|               | Lunch   |  |
|               | Crystallisation & Glass-Ceramics (ICG TC07)   |  |
|               | (Chair: Edgar Zanotto)  |  |
| 14:00 – 14:20 | Natalia Karpukhina: Effect of Sodium, Potassium and Zinc Substitutions in Lithium Disilicate Glass and Glass-Ceramics.  |  |
| 14:20 – 14:40 | Hélène Vigouroux: Phase Separation and Crystallization Mechanism in LiNbO3-SiO2 Glasses.  |  |
| 14:40 – 15:00 | Marek Liska: Nucleation and Crystallisation of As <sub>2</sub> Se <sub>3</sub> Undercooled Melt.  |  |
| 15:00 – 15:20 |   |  |
|               | Tea/Coffee  |  |
|               | Heterogeneity & Phase Separation  |  |
|               | (Chair: Ana Rodrigues)  |  |
| 15:40 – 16:00 | Oleg Yanush: Fluctuation Inhomogeneities in Glasses and Melts Studied by Light Scattering Spectroscopy and High Temperature Acoustic Methods.   |  |
| 16:00 – 16:20 | Gavin Mountjoy: The role of Cation Bond Valence in the Phase Separation of Binary Silicate Melts and Glasses.   |  |
| 16:20 – 16:40 | Elena Kashchieva: Microstructure of Multicomponent Borosilicate Glasses Containing MoO <sub>3</sub> .   |  |
| 16:40 – 17:00 | Olga Dymshits: Influence of CoO Addition on the Phase Separation and Crystallisation of Glasses of the ZnO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> -TiO <sub>2</sub> System. |  |
| 17:00 – 17:20 | Armin Hoell: ASAXS as a Tool to Investigate Phase Separation in Glasses as Shown in the Case of Cuprous Halide Photochromic Glasses.  |  |
| 17:20 – 17:40 | Andreia Ruivo: Spectroscopic Studies of Photochromic Glasses.   |  |
| 17:40 – 18:00 |   |  |

|               | Talbot Hall: Wednesday 7 <sup>th</sup> September   |  |  |
|---------------|--|--|--|
|               |  |  |  |
|               | New Researchers Forum: History & Applied Glass Science   |  |  |
|               | (Chair: Paul Bingham)  |  |  |
| 10:00 – 10:15 | Tom Smith: Interdisciplinary Studies of Ancient Glass from Dichin, Bulgaria.   |  |  |
| 10:15 – 10:30 | Marilyn Griffiths: A Temporal Assessment of the Educational Philosophies Reflected in the Historical Artefacts at the Welsh School of Architectural Glass, Swansea |  |  |
| 10:30 – 10:45 | Myrtille Hunault: Optical Spectroscopy of Cobalt in Oxide Glasses.   |  |  |
| 10.30 - 10.43 | Coffee/Tea   |  |  |
|               | New Researchers Forum: Glass Formation & Structure   |  |  |
|               | (Chair: Diane Holland)   |  |  |
| 11:05 – 11:20 | Nerea Mascaraque: Glass Formation in Lithium Phosphate Glasses with Anionic Substitution.  |  |  |
| 11:20 - 11:35 | Julien Grynberg: Glass Batch Reactions Observed at the Granular Scale.   |  |  |
| 11:35 – 11:50 | Buhsra Al Hasni: Structure of Amorphous Iron Phosphate FePO <sub>4</sub> .   |  |  |
| 11:50 - 12:05 | Oliver Alderman: Local Structure in Pb <sup>2+</sup> Containing Silicate and Germanate Glasses.  |  |  |
| 12:05 - 12:20 | Damir Mukimov: The Structure and Vitrification Process of Arsenic Chalcogenide As <sub>50</sub> Se <sub>50</sub> .   |  |  |
| 12:20 - 12:35 | Nattapol Laorodphan: Amorphous Structure in Thallium Germanate Binary Glasses.   |  |  |
| 12:35 – 12:50 | Sindy Reibstein: Structure-Property Relationship of Ionic Sulfophosphate Glasses.  |  |  |
|               | Lunch  |  |  |
|               | New Researchers Forum: Waste Vitrification & Glass-Ceramics  |  |  |
|               | (Chair: John Parker)   |  |  |
| 14:05 – 14:20 | Nathan Cassingham: Durability of UK Nuclear Waste Glasses in Neutral and High pH Solutions.  |  |  |
| 14:20 – 14:35 | Andrew Grigg: Encapsulation of $\beta$ -tricalcium Phosphate in a Sodium Aluminophosphate Glass Matrix.  |  |  |
| 14:35 – 14:50 | Owen McGann: Gamma Irradiation Effects in Glasses Intended for the Immobilisation of Nuclear Waste.  |  |  |
| 14:50 – 15:05 | James Stevens: Understanding the Effect of Refractory Spinel Phases on HLW Glass Processing.   |  |  |
| 15:05 – 15:20 | Aymeric Dugué: Ni Environment and its Structural Role in MgO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> Glasses and Glass-Ceramics.                          |  |  |
|               | Tea/Coffee   |  |  |
|               | Industrial Applications  |  |  |
|               | (Chair: Brian McMillan)  |  |  |
| 15:40 – 16:00 | Peter Sundberg: Color Prediction Software for Designers and the Glass Industry: A Tool for Art, Design and Conservation.   |  |  |
| 16:00 – 16:20 | Tetsuji Yano: Melting History of In-Flight Melted Soda-Lime-Silica Glasses using an Oxy-Fuel Combustion Burner.  |  |  |
| 16:20 – 16:40 | Helena Kočárková: Drainage and a Life Time of a Single Bubble Rising Through a Molten Glass.   |  |  |
| 16:40 – 17:00 | Julien Fourcade: New Tin Oxide Electrodes for High Temperature Applications.   |  |  |
| 17:00 – 17:20 | Isabelle Cabodi: New Highly-Resistive Zirconia Fused Cast Products for Alkali-Free Glass Melting.  |  |  |
| 17:20 – 17:40 | Stephen Pollock-Hill: Ravenscroft Revisited and Updated by a New World-Class Crystal Invention!  |  |  |
| 17:40 – 18:00 |  |  |  |

| Monson Room: Wednesday 7 <sup>th</sup> September         |   |  |
|--|---|--|
|  |   |  |
|  | History & Heritage: Stained Glass Problems  |  |
|  | (Chair: David Pye)  |  |
| 10:00 - 10:40  | David Dungworth: Historic Windows: Investigation Without the Sound of Breaking Glass.                               |  |
|  | Coffee/Tea  |  |
|  | (Chair: David Dungworth)  |  |
| 11:00 – 11:40  | Rebecca Scott: The Analysis of In-Situ 17 <sup>th</sup> Century Painted Glass from Christ Church Cathedral, Oxford. |  |
| 11:40 – 12:20  | Richard Jaques: Conservation of Historic Glazings: The Art of the Possible.   |  |
| 12:20 - 13:00  | Tobit Curteis: Vulnerable Art: The Impact of Environment on Historic Stained-Glass Windows.                         |  |
|  | Lunch   |  |
|  | History & Heritage: Stained Glass Conservation  |  |
|  | (Chair: Alun Adams?)  |  |
| 14:00 – 14:40  | Ruth Cook: Conservation of the Savile Chapel Glazing.   |  |
| 14:40 – 15:20  | Sarah Brown: Preserving the New Jerusalem: Research, Conservation and the Great East Window of York Minster.        |  |
|  | Tea/Coffee  |  |
| History & Heritage: Stained Glass Education & Technology |   |  |
|  | (Chair: Sarah Brown)  |  |
| 15:40 – 16:20  | Alun Adams: A Vision Fulfilled: Swansea's Stained Glass Tradition.  |  |
| 16:20 – 17:00  | Joanna Delgado: Further Studies of Portuguese Stained Glass.  |  |
| 17:00 – 17:40  | Peter Wren Howard: Recovery of the Lost Technology of Bright Red Copper Ruby.                                       |  |
| 17:40 – 18:00  | General Discussion.   |  |

| Conference Reception & Dinner |  |  |
|-------------------------------|--|--|
| 19:00 - 19:30                 | Drinks Reception.  |  |
| 19:30 – ??.??                 | Conference Banquet.  |  |
| ??.?? – ??.??                 | Presentation of SGT Fellowships and the Paul Award.          |  |
| ??.?? – ??.??                 | David Pye: The Shroud of Turin: A Possible Glass Connection? |  |

| Simkins Lee Lecture Theatre: Thursday 8 <sup>th</sup> September |   |  |
|---|---|--|
|   | SIMILIES DOS ECONOS CONTROLES   |  |
|   | (Chair: Adrian Wright)  |  |
| 09:00 - 09:50   | John Parker: Glass: Colouring our View of Life.   |  |
|   |   |  |
|   | Transition Metals & Colour  |  |
|   | (Chair: Doris Ehrt)   |  |
| 10:00 – 10:40   | Georges Calas: Structural Properties Related to Transition Elements in Oxide Glasses: Application to Glass Colouration.   |  |
|   | Coffee/Tea  |  |
| 11:00 – 11:40   | Paul Bingham: The Complex Behaviour of Iron in Oxide Glasses: A Multispectroscopic Investigation.   |  |
| 11:40 – 12:20   | Doris Möncke: Photoionisation of Transition Metal Ions in Glasses.  |  |
| 12:20 – 12:40   | Adrian Wright: The Environment of $Fe^{3+}/Fe^{2+}$ and $Dy^{3+}$ Ions in Oxide Glasses.  |  |
| 12:40 – 13:00   |   |  |
|   | Lunch   |  |
|   | Rare Earth Elements   |  |
|   | (Chair: Alex Hannon)  |  |
| 14:00 – 14:20   | Doris Ehrt: Photolyminescence of Rare earth and transition metals in glasses.   |  |
| 14:20 – 14:40   | Odile Majérus: Nd <sup>3+</sup> Environment and Solubility in Multicomponent Silicate Glasses.  |  |
| 14:40 – 15:00   | Mohamed Marzouk: Ultraviolet, visible, ESR and Infrared Spectroscopic Studies of CeO <sub>2</sub> -Doped Lithium Phosphate Glasses and the Effect of                      |  |
|   | Gamma Irradiation.  |  |
| 15:00 – 15:20   | Estelle Molieres: Structural Investigation of Rare-Earth-Doped Borosilicate Glass and Gel.  |  |
|   | Tea/Coffee  |  |
|   | Bio-Glass, Sol-Gel & Oxy-Halide Systems   |  |
| 15 10 16 00   | (Chair: Robert Hill?)   |  |
| 15:40 – 16:00   | Athina Angelopoulou: Evolution of P Environment in 45S5 Bioglass During the First Stage of HA Formation.  |  |
| 16:00 – 16:20   | Agnese Stunda: Crystallization of Niobium-Containing Bioactive Phosphate Glass.   |  |
| 16:20 – 16:40   | Alfonz Plško: Dielectric Properties of SiO <sub>2</sub> -TiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> Thin Films Prepared by the Sol-Gel Method for Humidity Sensors. |  |
| 16:40 – 17:00   | Andrey Kiprianov: On the Binding of Halogens in Binary Alkali-Silicate Melts.   |  |
| 17:00 – 17:10   | Closing Ceremony  |  |

| Talbot Hall: Thursday 8 <sup>th</sup> September    |   |  |
|--|---|--|
| · ·  |   |  |
| Glass Surfaces/Interfaces & Durability             |   |  |
| (Chair: Sarah Fearn?)                              |   |  |
| 10:00 - 10:40                                      | Russell Hand: Vitrification and Durability: Strategies for Vitrifying Wastes Containing Challenging Anions.                       |  |
| Coffee/Tea   |   |  |
| 11:00 – 11:20                                      | Tetsuji Yano: Structures of Iron-Phosphate Glasses with High Chemical Durability.   |  |
| 11:20 - 11:40                                      | Mike Harrison: Investigation of the Long-Term Dissolution of UK HLW Glass Using High Surface Area – to – Volume (S/V) Ratio Leach |  |
|  | Tests.  |  |
| 11:40 - 12:00                                      | Ksenia Shandarova: Mask-Etching as a Tool to Determine the Chemical Resistance of Glass Surfaces.                                 |  |
| 12:00 - 12:20                                      | Lee Gerrard: Interfacial Reactions and Diffusion Characteristics of Binary Alloys with Silicate Glass-Ceramics.                   |  |
| Workshop on Durability & Conservation of Glass I   |   |  |
| (Chair: Paul Bingham)                              |   |  |
| 12:20 - 13:00                                      | Stephen Koob: Crizzling Glasses: Problems and Solutions.  |  |
| Lunch  |   |  |
| Workshop on Durability & Conservation of Glass II  |   |  |
| (Chair: Mike Harrison)                             |   |  |
| 14:00 - 14:40                                      | Sarah Fearn: Room Temperature Corrosion of Museum Glass: An Investigation using High Resolution SIMS.                             |  |
| 14:40 - 15:20                                      | Denis Strachan: Glass Dissolution.  |  |
| Tea/Coffee   |   |  |
| Workshop on Durability & Conservation of Glass III |   |  |
| (Chair: Russell Hand)                              |   |  |
| 15:40 – 16:20                                      | Denis Strachan: Approaches and Test Methods for Corrosion Testing of Vitrified Waste Forms.                                       |  |
| 16:20 - 17:00                                      | Leena Hupa: Durability of Bioactive Glasses.  |  |

| Monson Room: Thursday 8 <sup>th</sup> September |   |  |
|---|---|--|
|   |   |  |
| History & Heritage: Alchemy, Chemistry & Colour |   |  |
| (Chair: Adrian Wright)                          |   |  |
| 10:00 - 10:40                                   | Dedo von Kerssenbrock-Krosig: Glass of the Alchemists: A Retrospect on an Exhibition at The Corning Museum of Glass 2008.               |  |
| Coffee/Tea                                      |   |  |
| (Chair: David Martlew)                          |   |  |
| 11:00 – 11:40                                   | Kaj Karlsson: Mikhail Lomonosov and Erik Laxman and the Dawn of Glass Technology.   |  |
| 11:40 - 12:20                                   | Michael Cable: Tracing the Path of Glass Technology from Theophilus to Henrivaux.   |  |
| 12:20 - 13:00                                   | Carlos Queiroz: The 18th Century Arcana of William Stephens.  |  |
| Lunch   |   |  |
| History & Heritage: Glassmaking Techniques      |   |  |
| (Chair: Andrew Smith)                           |   |  |
| 14:00 – 14:40                                   | Martina Bertini: Experimental Reproduction of Iron Age Scottish Glass Beads: Linking Analytical Techniques to the Production of Replica |  |
|   | Artefacts.  |  |
| 14:40 – 15:20                                   | Sally Haden: They went to larn 'em: British Glassmakers Help to Establish Japan's First Western-Style Glassworks, 1873-1884.            |  |
| Tea/Coffee                                      |   |  |
| History & Heritage: Glass Furnaces              |   |  |
| (Chair: Peter Wren Howard)                      |   |  |
| 15:40 – 16:20                                   | Andrew Smith: Further Archaeological Work at the Site of the Nailsea Glassworks New House Cone (SAM 28884).                             |  |
| 16:20 – 17:00                                   | Marie-Helene Chopinet: Developements of Siemens Regenerative and Tank Furnaces in Saint-Gobain in the XIXth Century.                    |  |

## **Posters**

- P1: Lubo Aleksandrov: *Glasses in the MoO*<sub>3</sub>- $La_2O_3$ -MgO- $B_2O_3$  *System.*
- P2: Petra Cincibusová: Dissolution of Sand Particles and Bubble Removal in a Model Melting Channel.
- P3: Mária Chromčíková: Viscosity and Viscous Flow Activation Energy of PbO-WO<sub>3</sub>-P<sub>2</sub>O<sub>5</sub> Glasses.
- P4: Mihail Elisa: Optical and Structural Characterization of  $Eu^{3+}$ ,  $Dy^{3+}$ ,  $Ho^{3+}$  and  $Tm^{3+}$  Doped Phosphate Glasses.
- P5: Jana Holubová: Raman Spectra, Structure and Thermodynamic Model of As<sub>2</sub>S<sub>3</sub> Sb<sub>2</sub>S<sub>3</sub> Glasses.
- P6: M. Jebavá: Bubble Removal from Glass Melts with Slow Vertical Circluations.
- P7: Odile Majérus: Nucleating Effect of MoO<sub>3</sub> on the Crystallisation of Apatite in a Rare-Earth-Rich Aluminoborosilicate Glass.
- P8: Petr Mošner: Structure and Properties of TeO<sub>2</sub>-Containing Lead Phosphate Glasses.
- P9: Masahiro Seto: Temperature and Compositional Dependence of Na<sub>2</sub>O activity in Soda-Lime-Silicate Melts.
- P10: Vojtech Soltész: Corrosion of Bourre Glass Fibers in Borate Water Solution.
- P11: Vladislava Tonarová: The Behaviour of the Bubbles in Glass Melts in a Centrifugal Field.