



## GlassAC/Durham International 2014

10 September 2014 to 13 September 2014

Organised by

The Society of Glass Technology

## Programme and Room Allocation



Science : Wednesday 10th September	
	Lunch
10:00 - 10:20	Ladislav Koudelka*, Ivana Rösslerová, Petr Mošner, Lionel. Montagne, & Bertrand. Revel Faculty of Chemical Technology, University of Pardubice, Pardubice, Czech Republic Université Lille Nord de France, USTL, Villeneuve d'Ascq, France : <i>Structure and properties of lead borophosphate glasses modified with molybdenum oxide</i>
10:20 - 10:40	Panighello S. 1,2, a,*, Orsega E.F. 1, van Elteren J.T. 2, Wood M. 3, Moretto M.L. 1 and Robertshaw P. 4 1 Dept. of Molecular Sciences and Nanosystems, University Ca' Foscari of Venice (Italy) 2 Analytical Chemistry Laboratory, National Institute of Chemistry, Ljubljana (Slovenia) 3 School of Geography, Archaeology and Environmental Studies, University of the Witwatersrand, Johannesburg (South Africa) 4 Dept. of Anthropology, California State University, San Bernardino (USA) : <i>Application of Laser Ablation ICP-MS depth profiling methods</i>
10:40 - 11:00	Wenlin Chen*, Edwin Flikkema Department of Mathematics and Physics, Aberystwyth University, United Kingdom : <i>Computer simulation and visualization of glass-forming systems (poster)</i>
	Coffee am
11:20 - 11:40	Farid Modaresifar, Sheffield Hallam University : <i>Thermal conductivity of refractory glass fibres: a study of materials, standards and test methods</i>

<b>11:40 - 12:00</b>	Paul Rüffer*, Andreas Heft, Bernd Grünler, Arnd Schimanski : <i>SiO<sub>x</sub>-barrier layers preventing alkali and earth alkaline metal diffusion deposited by Combustion Chemical Vapor Deposition under atmospheric pressure</i>
<b>12:00 - 12:20</b>	Jayakrishnan Chandrappan, <sup>1*</sup> Matthew Murray, <sup>1</sup> Tarun Kakkar, <sup>1</sup> D.P.Steenson, <sup>2</sup> Animesh Jha, <sup>1</sup> Gin Jose <sup>1</sup> <sup>1</sup> Institute for Materials Research, School of Process, Environmental and Material Engineering, Faculty of Engineering, University of Leeds, LS2 9 JT UK <sup>2</sup> Institute of Microwave and photonics, Electronic and Electrical Engineering, Faculty of Engineering, University of Leeds, UK LS2 9 JT : <i>Rare earth doped telluro-silica glass fabrication by femtosecond pulsed laser process</i>
<b>12:20 - 12:40</b>	Adrian C. Wright J.J. Thomson Physical Laboratory, University of Reading, : <i>The Rigidity of Vitreous Networks: An Alternative Viewpoint</i>
<b>12:40 - 13:00</b>	Maha Rai* and Gavin Mountjoy School of Physical Science, University of Kent, Canterbury, CT2 7NH, UK. : <i>Molecular dynamics modelling of the structure of barium silicate glasses BaO-SiO<sub>2</sub></i>
	Lunch
<b>14:00 - 14:20</b>	P. Mošner*, M. Vorokhta ? L. Koudelka Faculty of Chemical Technology, University of Pardubice, Studentská 573, 532 10 Pardubice, Czech Republic : <i>Structure and properties of Li<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub>-P<sub>2</sub>O<sub>5</sub>-GeO<sub>2</sub> glasses</i>
<b>14:20 - 14:40</b>	James Lloyd*, Martin Stennett and Russell Hand ISL, Department of Materials Science and Engineering, University of Sheffield, Sir Robert Hadfield Building, Mappin Street, Sheffield. S1 3JD : <i>Silicon Oxycarbide Glass for the Immobilisation of Irradiated Graphite from Nuclear Power Generation</i>
<b>14:40 - 15:00</b>	Ferdinand Drünert(a)*, Manfred Friedrich(b) <sup>2</sup> , Winfried Plass(b) <sup>2</sup> , Lothar Wondraczek(b) & Doris Möncke(a) (a)Otto-Schott-Institute, Friedrich-Schiller-University Jena, Germany (b)IAAC, Friedrich-Schiller-University Jena, Germany : <i>Quantitative Ion Speciation by Optical Spectroscopy:</i>
<b>15:00 - 15:20</b>	Brendan O'Neill, Irish Research Council (IRC)-Funded Postgraduate Scholar : <i>Forged in Fire? Craft, Industry and Society in Early Medieval Ireland AD400-1100</i>
<b>15:20 - 15:40</b>	Maximilian Fuchs <sup>1</sup> , Saroash Shahid <sup>2</sup> , Robert G. Hill <sup>2</sup> , Delia S. Brauer <sup>1,*</sup> : <i>Aluminium-free glass ionomer bone cements</i>
<b>15:40 - 16:00</b>	Goshka Bialek : <i>Inclusions of metals in glass for creative use</i>
	Coffee/Tea pm
<b>16:20 - 16:40</b>	Michal Miekina and Russell J Hand ISL, Department of Materials Science & Engineering, University of Sheffield, Mappin Street, Sheffield, S1 3JD, UK : <i>Increasing Mo incorporation in borosilicate glasses</i>
<b>16:40 - 17:00</b>	Tavs Jorgensen* and Gayle Matthias* Falmouth University Academy for Innovation and Research (AIR), Penryn Campus, Treliever Road, Penryn, Cornwall, TR10 9EZ , UK +44 (0)1326253689 tavs.jorgensen@falmouth.ac.uk gayle.matthias@flamouth.ac.uk : <i>Research into 3D Printed Glass Investment Casting Moulds</i>
<b>17:00 - 17:30</b>	E.R. Barney <sup>1</sup> , A.C. Hannon <sup>2</sup> , D. Holland <sup>3</sup> , R. Dupree <sup>3</sup> <sup>1</sup> Faculty of Engineering, University Park, University of Nottingham, Nottingham, UK <sup>2</sup> ISIS, STFC, Rutherford Appleton Laboratory, Didcot, Oxfordshire UK <sup>3</sup> Department of Physics, University of Warwick, Coventry, UK Corresponding author: Emma.Barney@nottingham.ac.uk : <i>New Materials for Optical Fibres: Using NMR to understanding the Effect of Modifier on Tellurite Glass Structure</i>

## GlassAC : Wednesday 10th September

<b>10:00 - 10:20</b>	Danielle Caluwé Free University Brussels, Dept. of Archaeology and Art History VUB, Pleinlaan 2, Gebouw C, L&W B-1050 Brussels Belgium : <i>Mirrors, spectacles and looking glasses in Antwerp and the Duchy of Brabant in the 16th and 17th century. Aspects of production and use. The archaeological and historical evidence</i>
<b>10:20 - 10:40</b>	Cat Moore MA Dissertation, Durham University : <i>Medieval Window Glass from the Blackfriars Site in Newcastle upon Tyne – An Archaeological Assessment</i>
<b>10:40 - 11:00</b>	Jonathan Prior : <i>Ribbed Shells and the Roman Army</i>
Coffee am	
<b>11:20 - 12:00</b>	Stephen Koob : <i>Adhesives for Glass Conservation</i>
<b>12:00 - 12:20</b>	Joana Delgado* <sup>1,2,3</sup> , Márcia Vilarigues <sup>1,2</sup> , César A. T. Laia <sup>3</sup> , Luís Branco <sup>3</sup> <sup>1</sup> Department of Conservation and Restoration, FCT-UNL, Caparica, Portugal <sup>2</sup> Research Unit Vicarte – Vidro e Cerâmica para as Artes , FCT-UNL, Caparica, Portugal <sup>3</sup> Requimte, FCT-UNL, Caparica, Portugal : <i>Restoring medieval stained-glass transparency:</i>
<b>12:20 - 12:40</b>	Zuzana Zlámálová Cílová* & Irena Kucerová & Dagmar Micíková & Michaela Knížová Email: Zuzana.Zlamalova.Cilova@vscht.cz : <i>Silane Hybrid Coatings for Protection of the Medieval Glass Mosaic</i>
<b>12:40 - 13:00</b>	Alok Kumar Kanungo Humboldt Experienced Researcher, Humboldt-Universität zu Berlin Institut für Asien-und Afrikawissenschaften Zentralasien-Seminar Invalidenstrasse 118, Unter den Linden 6, 10099 Berlin : <i>Mapping Papanaidupet - The Final Stage of the most Predominant Glass Bead Industry of the World</i>
Lunch	
<b>14:00 - 14:40</b>	Dedo v Kerssenbrock-Krosigk : <i>Art and Alchemy - The Mystery of Transformation</i>
<b>14:40 - 15:00</b>	Elizabeth M. Foulds Durham University, Department of Archaeology, South Road, Durham, DH1 3LE : <i>Glass in Iron Age Britain - Insights into the past</i>
<b>15:00 - 15:20</b>	Sarah Paynter : <i>Early glass in England: Analysis of the Late Bronze Age Glass Beads from Stotfold, Bedfordshire</i>
<b>15:20 - 15:40</b>	Craig J. Kennedy* and K. Robin Murdoch Heriot Watt University, School of the Built Environment, Edinburgh, EH14 4AS : <i>Understanding the historic management of window glass in Scotland using portable X-ray Fluorescence</i>
<b>15:40 - 16:00</b>	Chloë N. Duckworth (a)* and David J. Govantes Edwards (b) (a) School of Archaeology and Ancient History, University of Leicester; (b) Independent Scholar : <i>'Like stars in the distance'(1): interdisciplinary approaches to the glass of al-Andalus</i>
Coffee/Tea pm	
<b>16:20 - 16:40</b>	Barbara Birley Assistant Curator - Vindolanda Trust : <i>Glass from Roman Vindolanda - Style on the Frontier</i>

<b>16:40 - 17:00</b>	I. Coutinho <sup>1*</sup> , S. Coentro <sup>1</sup> , T. Medici <sup>1,3</sup> , A. Lima <sup>1,2</sup> , L. C. Alves <sup>4</sup> , M. Vilarigues <sup>1,2</sup> 1Unidade de Investigação VICARTE - Vidro e Cerâmica para as Artes, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, Campus de Caparica, 2829-516 Caparica, Portugal 2 Dep. de Conservação e Restauro, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, Campus de Caparica, 2829-516 Caparica, Portugal 3 Dep. de História, Arqueologia e Artes - Secção de Arqueologia, Faculdade de Letras da Universidade de Coimbra, Largo da Porta Férrea, 3004-530 Coimbra, Portugal 4 CTN (Campus Tecnológico e Nuclear), IST/UL, Estrada Nacional 10, 2695-066 Bobadela, Portugal : <i>Chemical analysis of late medieval and early modern glasses from the archaeological excavation at Avenida Miguel Fernandes in Beja (Portugal)</i>
<b>17:00 - 17:20</b>	Dr Jessamy Kelly : <i>Imitate: Milk Glass a medium for material imitation</i>
<b>17:20 - 17:40</b>	Nick Dolan : <i>Talk Of The Century - a 20th Century Pattern Book Revealed</i>

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## GlassAC : Thursday 11th September

<b>09:00 - 09:20</b>	Cristina Fornacelli <sup>1,3*</sup> , Susanna Bracci <sup>2</sup> , Isabella Memmi Turbanti <sup>3</sup> , Marcello Picollo <sup>4</sup> 1. Department of Earth Science, University of Pisa, Italy . 2. Institute for Conservation and Valorization of Cultural Heritage (ICVBC), National Council of Research (CNR), Sesto Fiorentino, Florence, Italy. 3. Department of Physical sciences, Earth and environment, University of Siena, Italy. 4. Institute of Applied Physics "Nello Carrara" IFAC , National Research Council (IFAC-CNR), Sesto Fiorentino, Florence, Italy. : <i>Galileo Chini and the Italian Liberty Style in glass production: Characterization of early XX century glasses by Fiber Optic Reflectance Spectroscopy (FORS)</i>
<b>09:20 - 09:40</b>	Douglas Hogg Ex head of stained/architectural glass course, Edinburgh College of Art : <i>Archive and Legacy: a 20th Century Lineage - glimpses into the growth, nature and development of the Edinburgh School</i>
<b>09:40 - 10:00</b>	Mark Hursty* & Dr. Kevin Petrie & Dr. Jeffrey Sarmiento : <i>Capital Letters: techniques and creative implications of raised print in pressed glass.</i>
<b>10:00 - 10:20</b>	Colin* & Sue Brain : <i>Drinking glass design around 1670</i>
<b>10:20 - 10:40</b>	Jianyong Guo : <i>The art of inside painting on glass</i>
<b>10:40 - 11:00</b>	Ms Francesca Giubilei : <i>Glass, an imaginative impulse for contemporary art</i>
Coffee am	
<b>11:20 - 12:00</b>	Marco Verita : <i>Renaissance enamelled Venetian glass</i>
<b>12:00 - 12:20</b>	Alexandra Rodriguesa,*, Anísio Francob, Bruno Martinhoc & Márcia Vilariguesa a) Departamento de Conservação e Restauro, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, Portugal and Research unit, VICARTE - Glass and Ceramics for the Arts b) Museu Nacional de Arte Antiga, Lisboa, Portugal c) Parques de Sintra – Monte da Lua SA, Palácio Nacional da Pena : <i>Venetian and façon-de-Venise glass objects</i>
<b>12:20 - 12:40</b>	Elzbieta Greiner-Wronowa AGH- Technical University of Science and Technology Ave.Mickiewicz 30, Kraków, POLAND : <i>STUDY OF GLASS - METAL JOINS DEGRADATIO</i>
<b>12:40 - 13:00</b>	Colin Rennie : <i>Digital-Glass Interface</i>
Lunch	

## Science : Thursday 11th September

<b>09:00 - 09:40</b>	J. Henderson <sup>1</sup> , S. Chenery <sup>2</sup> , J. Kröger <sup>3</sup> , J. Evans <sup>2</sup> , E. Faber <sup>1</sup> and S Bertier <sup>4</sup> . 1. Department of Archaeology, School of Humanities, University of Nottingham, University Park, Nottingham, NG7 2RD, UK 2The British Geological Survey, Keyworth, Nottinghamshire, NG12 5GG, UK; srch@bgs.ac.uk 3. Bodestraße 1-3, 10178 Berlin, Germany 4. L.A.M.M., Aix en Provence, France : <i>Chemical Evidence for Production and Trade of Islamic glass along the Silk Road</i>
<b>09:40 - 10:20</b>	Georges Calas*, Laurence Galois, Laurent Cormier & Gérald Lelong Institute of Mineralogy, Physics of Materials and Cosmochemistry, University Pierre and Marie Curie and CNRS, Paris, France : <i>Colored glasses: the eye's pleasure and much more.</i>
<b>10:20 - 11:00</b>	John V. Hanna Department of Physics, University of Warwick, : <i>The Advancements in Solid State NMR Experimentation, Methodologies and Instrumentation Impacting Upon Glass Science and Technology</i>
	Coffee am
<b>11:20 - 12:00</b>	Mario Affatigato, Coe College, USA : <i>Modern Techniques: Aerolevitation, Time of Flight Mass Spectrometry, and Bactericidal Glasses</i>
<b>12:00 - 12:40</b>	Daniel William Hewak, Kevin C C Huang, Khouler Khan, Paul Bastock, Chris Craig and Edwin Weatherby, Optoelectronics Research Centre, University of Southampton, Southampton SO17 1BJ : <i>Manufacturing High Purity Chalcogenide Glass</i>
	Questions/Answer Session all speakers
	Lunch
	EPSRC/NMR Facility

## GlassAC : Friday 12th September

Coffee am	
<b>09:00 - 09:40</b>	: <i>Presidents Address</i>
<b>09:40 - 10:00</b>	Wantana Klysubun : <i>Characterization and replication of the 19th century yellow and blue mirrored glass of the Temple of Emerald buddha, Bangkok, Thailand</i>
<b>10:00 - 10:20</b>	Kevin Petrie : <i>Recent developments in creative glass research — case studies from art and design</i>
<b>10:20 - 10:40</b>	Jin Qu : <i>Developing artworks using Chinese philosophical notion of 'non-action' through pâte de verre glass</i>
<b>10:40 - 11:00</b>	Sophie Hylands : <i>Turning the spotlight on Turner</i>
Lunch	
<b>11:20 - 12:00</b>	Prof John Parker : <i>Making Light Work</i>
<b>12:00 - 12:20</b>	Andreia Machado* a), b) & Márcia Vilarigues a), b) a) Research Unit VICARTE - Vidro e Cerâmica para as Artes – FCT/UNL, Caparica, Portugal b) Department of Conservation and Restoration – FCT/UNL, Caparica, Portugal : <i>Enamels in stained glass windows: a quest for blue</i>
<b>12:20 - 12:40</b>	Myrtille Hunault1 *, Georges Calas1, Laurence Galois1, Claudine Loisel2, Fanny Bauchau2, Michel Hérold3 1 Institut de Minérlogie et de Physique des Matériaux et de Cosmochimie (IMPMC), University Pierre and Marie Curie, 75005 Paris, France 2 Laboratoire de Recherche des Monuments Historiques (LRMH), 77420 Champs sur Marne, France 3 Centre André Chastel, 75002 Paris France : <i>Mediaeval Blue Stained Glasses: from spectroscopy to history</i>
<b>12:40 - 13:00</b>	Eve Koha* & Liisi Junolainen Estonian Academy of Arts, Estonia Av. 7, 10147 Tallinn, Estonia; : <i>The analysis of historic glass painting technology based on the conservation of coat of arms of the Great Guild head Johan Christopher Husen (1753) in St. Olaf's Church in Tallinn</i>
Lunch	
<b>14:00 - 14:40</b>	Sarah Brown : <i>Looking for John Thornton in the Conservation of York Minster's Great East Window</i>
<b>14:40 - 15:00</b>	Mathilda Larssona, Alexandra Rodriguesa, Andreia Machadoa, Bruno Martinhob, Luís C. Alvesc, Victoria Corregidorc, Rui C. da Silvac & Márcia Vilarigues* a) Departamento de Conservação e Restauro, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, Portugal and Research unit, VICARTE - Glass and Ceramics for the Arts, Torre da Caparica, Portugal b) Parques de Sintra – Monte da Lua SA, Palácio Nacional da Pena, Sintra, Portugal c) Departamento de Física, Instituto Tecnológico e Nuclear, Instituto Superior Técnico, Universidade Técnica de Lisboa, Sacavém, Portugal : <i>The Stained-Glass Collection of King Ferdinand II</i>
<b>15:00 - 15:20</b>	Susanna Bracci*1, Marcello Picollo2, Giovanni Bartolozzi2, Americo Corallini3 1-Institute for Conservation and Valorization of Cultural Heritage-CNR, Florence, Italy 2-Institute for Applied Physics "Nello Carrara"-CNR, Florence, Italy 3-Studio Fenice S.n.c., Bologna, Italy : <i>Three stained glass windows from Santa Croce Basilica in Florence Materials comparison for understanding the history of production</i>
<b>15:20 - 15:40</b>	Oksana Kondratyeva : <i>Hidden Treasures of Ukrainian Stained Glass</i>
<b>15:40 - 16:00</b>	Rachel Welford* & Cate Watkinson Rachel Welford – PhD Research Student, Glass and Ceramics

	Dept. Faculty of Arts, Design, & Media, University of Sunderland, National Glass Centre, Liberty Way, Sunderland SR6 OGL, UK Cate Watkinson, PhD Director of Studies, & Senior Lecturer, Glass and Ceramics Dept. Faculty of Arts, Design, & Media, University of Sunderland, National Glass Centre, Liberty Way, Sunderland SR6 OGL, UK : <i>The Ephemeral in Glass Artworks</i>
	Coffee/Tea pm
<b>16:20 - 16:35</b>	Alun Adams : <i>Stained Glass in Non-Conformist Chapels - a Welsh Legacy</i>
<b>16:35 - 17:00</b>	Jonathan & Ruth Cooke : <i>Out of the Darkness: discovering late Georgian glass in Leeds</i>
<b>17:00 - 17:20</b>	Jill Turnbull : <i>Adding colour to Scottish Glass</i>
<b>17:20 - 17:40</b>	Colin* & Sue Brain : <i>English and Irish lead crystal glass in the 1670s: a reappraisal</i>



## Science : Friday 12th September

<b>09:00 - 09:40</b>	Roger Penlington : <i>Presidents Address</i>
<b>09:40 - 10:00</b>	Bo Jonson*1 Anna Ihr 2 1 Linnaeus University, Växjö, Sweden; 2 University of Gothenburg, Gothenburg, Sweden : <i>Chemical analysis of glass and glazes found in the Swedish medieval settlement Lödöse</i>
<b>10:00 - 10:20</b>	Dotsika E1,2., Longinelli A3., Degryse P4., Blomme4 A., Silvestri A5 ., Poutoukis D6., Ignatiadou D.7 1 NCSR "Demokritos", I.M.S., Stable Isotope Unit, 153 10 Aghia Paraskevi, Attiki, Greece 2C.N.R. Institute of Geosciences and Earth Resources, Via G. Moruzzi 1, 56124 Pisa, Italy 3 Univ. of Parma, Department of Earth Sciences, V. G.P. Usberti 157 A, 43100, Parma, Italy 4 Division of Geology, Department of Earth and Environmental Sciences, KU Leuven, Celestijnenlaan 200E, B-3001 Leuven, Belgium 5University of Padova, Department of Geosciences, Via Giotto 1, 35137 Padova, Italy 6General Secretariat for Research and Technology, Mesogion 14-18, 11510 Athens, Greece 7Archaeological Museum, 6 M. Andronikou street, Thessaloniki, Greece : <i>d18? measurements of Greek-Roman glass (1th-6th century AD )</i>
<b>10:20 - 10:40</b>	J. Kenneth Leap - Stained Glass Artist & Designer : <i>Seeing Red: Lawrence Saint and the Quest for Medieval Striated Ruby</i>
<b>10:40 - 11:00</b>	Hans Reiner Meindl, Glashütte Lamberts Waldsassen GmbH : <i>Mouth blown glass with integrated UV protection</i>
	Coffee am
<b>11:20 - 11:40</b>	Laurence Galois, Mathieu Chassé & Georges Calas Institut de Minéralogie, de Physique, des Matériaux et de Cosmochimie : <i>Why are obsidians black?</i>
<b>11:40 - 12:00</b>	Odile Majérus*, Victor de Seauve, Aurélie Tournié, Patrice Lehuédé, Isabelle Biron Daniel Caurant Institut de Recherche de Chimie Paris, CNRS-Chimie Paristech, CNRS UMR 8243, Ecole Nationale Supérieure de Chimie de Paris, 11 rue Pierre et Marie Curie, 75005, Paris, France Centre de Recherche et Restauration des Musées de France (C2RMF), Palais du Louvre, 14 quai François Mitterrand, 75001 Paris, France : <i>Effect of Zn<sup>2+</sup> and Cu<sup>2+</sup>-bearing salts on the dissolution of silicate and borosilicate glasses</i>
<b>12:00 - 12:20</b>	Alex C. Hannon1*, Oliver L. G. Alderman2,3 & Diane Holland4 1ISIS Facility, Rutherford Appleton Laboratory, Chilton, Didcot, Oxon OX11 0QX, UK 2Materials Development, Inc., Arlington Heights, IL 60004, USA 3X-ray Science Division, Advanced Photon Source, Argonne National Laboratory, Argonne, IL 60439, USA 4Department of Physics, University of Warwick, CV4 7AL, UK : <i>Density and Packing in Germanate Glasses</i>
<b>12:20 - 12:40</b>	Doris Möncke*(a), Matthias Müller(a), Manfred Friedrich(b), Doris Ehart(a) et al (a)Otto-Schott-Institute, Friedrich-Schiller-University Jena, Germany (b)IAAC, Friedrich-Schiller-University Jena, Germany : <i>Unusual Cobalt and Nickel Species in Glasses:</i>
<b>12:40 - 13:00</b>	Michelle Cowley & Adrian Gate* Sellafield Ltd, Seascale, Cumbria, CA20 1PG *National Nuclear Laboratory, Sellafield, Seascale, Cumbria, CA20 1PG : <i>Factors that affect yellow phase formation during vitrification of highly active wastes</i>
	Lunch
<b>14:00 - 14:20</b>	Edwin Fikkema, Aberystwyth University : <i>Molecular Dynamics simulation of alkali-silicate glasses</i>

<b>14:20 - 14:40</b>	G. Jose, T. Kakkar, M. Murray, J. Chandrappan, T. T. Fernandez, A. Jha, R. Ajjan, P. Grant Institute for Materials Research, University of Leeds, Leeds LS2 9JT, United Kingdom : <i>Femtosecond laser plasma processing of glass for biosensing</i>
<b>14:40 - 15:00</b>	A. Roula Jijel Univ. ; Fac. Sci. & Technol. ; LIME ; Jijel ; 18000 ; Algeria : <i>The isobaric thermal capacity, the crystallization driving force and the Glass forming Ability of Bulk Metallic Glasses</i>
<b>15:00 - 15:20</b>	Anirudh Yadav : <i>Effect of transition metal ions on electrical conductivity of zinc phosphate glasses</i>
<b>15:20 - 15:40</b>	Mike Harrison* 1 and Carl Steele 2 1 National Nuclear Laboratory, Sellafield, Cumbria, UK, CA20 1PG 2 Sellafield Ltd, Sellafield, Cumbria, UK, CA20 IPG : <i>Increasing the Sodium Content of UK Vitrified High Level Waste</i>
<b>15:40 - 16:00</b>	Nick R. Gribble1* Tracey Taylor1 & Carl J. Steele2 1 National Nuclear Laboratory, Sellafield, United Kingdom; 2 Sellafield Ltd, Sellafield, United Kingdom : <i>A Study of Rhenium Volatility During Simulated Highly Active Waste Vitrification</i>
	Coffee/Tea pm
<b>16:20 - 16:40</b>	Matthew Murray*, Jayakrishnan Chandrappan, Tarun Kakkar, Robert Mathieson, Mehrdad Pasha, Billy Richards, Mojtaba Ghadiri and Gin Jose Institute for Materials Research, School of Chemical and Process Engineering, Faculty of Engineering, University of Leeds, LS2 9JT, UK : <i>Glass strengthening through plasma implantation</i>
<b>16:40 - 17:00</b>	Dr Paul Bingham Sheffield Hallam Unviersity : <i>Iron-rich oxide glasses: formation, structure and properties</i>