**BSSM 16th International Conference on Advances in Experimental Mechanics**

**Ruth Deech Building, St Anne’s College, University of Oxford**

**Programme**

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| **08:00** | **Tuesday 6th September 2022****Registration – Ruth Deech Building - Foyer** |
| **09:20** | **Introduction & Welcome** **Tsuzuki Lecture Theatre****Conference Chair: Prof. James Marrow, University of Oxford** |
|  | **Tsuzuki Lecture Theatre** | **Seminar Room 7**  | **Seminar Room 8**  |
|  | **Session 1.1a Chair: Dr Mateusz Kopec** | **Session 1.1b Chair : Prof Ben Xu** | **Session 1.1c Chair: Prof Janice Dullieu-Barton** |
|  | **Metals & Microstructure I** | **Soft Matter & Textiles** | **Testing of Composite Materials I** |
| **09:40** | **Automated Pixel-wise Quantification of Slip System Activity Fields from DIC, Applied to Nanoscale Diffuse Slip** J Hoefnagels, T Vermeij, JAC Verstijnen, RHJ Peerlings & MGD GeersEindhoven University of Technology, The Netherlands | **A Structural Gel Composite Sensor Enabled Underwater Mechano-Sensing with High Sensitivity**Z Wang, H Zhou, D Liu, X Chen, F Chen & B Bin XuNorthumbria University, UK  | **Investigation of the Strength of Adhesively Bonded Composite Joints Using a Modified Arcan Fixture**DJ Brearley, OT Thomsen, JM Dullieu-Barton & M LakrimiUniversity of Bristol, UK |
| **10:00** | **Monitoring Intrinsic Heat Dissipation in Metals by Measuring the Second-Harmonic Phase of Temperature**R Cappello, G Meneghetti, M Ricotta & G PitarresiUniversity of Palermo, Italy | **Electrospun Fiber Based Non-Woven Textile for Extreme Thermal Management**Z Qin, C Markwell, J Li & H TorunNorthumbria University, UK  | **Damage Characterisation in Open Hole Composites using Finite Element and Complementary NDE Techniques**N ChandaranaUniversity of Bristol, UK |
| **10:20** | **A Comparison of Ductility Measurement Approaches for Ti Alloy Sheet**W Heatman, J Fonseca & P ShanthrajUniversity of Manchester, UK | **Stretchable Conductive Fibres of Ultrahigh Tensile Strain and Stable Conductance Enabled by a Worm-Shaped Graphene Microlayer** X Sun, F Sun, M Tian, L Qu & X LiuUniversity of Manchester, UK | **Analysis of Electronic Fringe Patterns for Identifying in-plane Fibre Waviness in Composite Laminates**XN Li, PC Sung, EA Patterson, WC Wang & WJR ChristianUniversity of Liverpool, UK |
| **10:40** | **Pure Shear Deformation and Failure of Ti6Al4V Alloy under Quasi-static, Medium and High Strain Rate Torsional Loading**L H Zhang & D TownsendUniversity of Oxford, UK | **Design and Development of Soft Gel Based Sensor**B Bin Xu, H Zhou & F ChenNorthumbria University, UK | **Strain-based Monitoring of Damage Creation during the Impact of Composite Materials**YH Chai, WC Wang & WJR ChristianUniversity of Liverpool, UK |
| **11:00** | **Refreshments – Ruth Deech Building - Foyer** |
|  | **Session 1.2a Chair: Prof Fabrice Pierron** | **Session 1.2b Chair : Dr Hari Arora** | **Session 1.2c Chair: Dr Yevgen Gorash**  |
|  | **Materials Testing 2.0** | **Biomaterials & Biomechanics**  | **Fatigue and Fracture I**  |
| **11:30** | **A Thermomechanical MT2.0 test for PMMA**Q. Marcot, T Fourest, B Langrand & F PierronONERA, France | **Spatially Distributed Circumferential Strain Measurement in an Artificial Annulus Fibrosus using Fibre Bragg Gratings**M. Godfrey, S Jantzen, A Dickinson, C. Holmes, A Taylor & M BrowneUniversity of Southampton, UK  | **Multiaxial Crack Growth Prediction**B SheenImperial College London, UK |
| **11:50** | **A Novel Material Testing 2.0 Test for Bone**P. Tavianatou, L Fletcher & F PierronUniversity of Southampton, UK | **An Ultra-High-Speed Imaging Study of Cell Deformation and Mechanobiology from Ultrasonic Stimulation** M. Ballard, A Marek & F. PierronUniversity of Southampton, UK | **On the Correlation Between the Second-Harmonic of Temperature and Crack-Closure** G. Pitarresi & R. CappelloUniversity of Palermo, Italy |
| **12:10** | **Methodology for the Automated Spatial Mapping of Heterogeneous Elastoplastic Properties of Welded Joints**R. Hamill, A Marek, A Harte & F PierronUniversity of Southampton, UK | **Experimental Mechanical Modelling of the Mitral Valve**S. Javadpour, F O’Brien & C ConwayRoyal College of Surgeons in Ireland, Ireland  | **Photomechanical Experimental Methods to Characterize the Dynamic Crack Speed in Brittle Materials**P Forquin, M Sapay & Y DuplanUniversité Grenoble Alpes, France |
| **12:30** | **A Methodology to Compare the Performance of Material Models in the Framework of Material Testing 2.0**A Peshave, F Pierron, P Lava, D Moens, and D VandepitteKU Leuven, Belgium | **Measuring Microneedle Penetration into Skin using DIC and Micro-CT**R Joyce, S Evans, K Rankin, M Potts, S Coulman, J Birchall & R PullinCardiff University, UK | **Thermal Emissions-Based Structural Health Monitoring System for Crack Detection**K Amjad, P Lambert, CA Middleton, RJ Greene & EA PattersonUniversity of Liverpool & UK Atomic Energy Authority, UK |
| **12:50** | **Lunch – St Anne’s Dining Hall** |
| **13:50** | **Plenary Session – Tsuzuki Lecture Theatre Chair: Dr Daniel Mulvihill****Multi-Beam Laboratory for Engineering Microscopy**Prof. Alexander Korsunsky, University of Oxford, UK |
| **14:50** | **Refreshments – Ruth Deech Building - Foyer** |
|  | **Session 1.3a Chair: Prof Pascal Forquin** | **Session 1.3b Chair: Dr Catrin Davies** | **Session 1.3c Chair: Dr Daniel Mulvihill** |
|  | **Impact, Blast and High Strain Rate** | **Techniques for Additive Manufactured Materials** | **Novel Experimental Techniques I** |
| **15:20** | **Explosively Driven Ball Bearings: Flight Behaviour and Ball Bearing Damage**G S Langdon, R Qi, TJ Cloete, S. Chung Kim YuenUniversity of Sheffield, UK | **Residual Stress Distributions in Laser Powder Bed Fusion Steels Considering Displacive Phase Transformation**D Yang, Y Chen, FSHB Freeman, MJ Roy, I Todd & PJ WithersUniversity of Manchester, UK | **Non-destructive Ultrasonic Measurement of Longitudinal Stress in Railway Tracks**G Nicholas, J Hill, A Gower, R Lewis & RS Dwyer-JoyceUniversity of Sheffield, UK |
| **15:40** | **Strain Rate Dependent Micro-plasticity of Metal-Organic Framework Glasses**RN Widmer, AM Bumstead, M Jain, TD Bennett & J MichlerAlemnis AG & Empa Switzerland, Switzerland | **Understanding the Compressive Behaviour of Additively Manufactured Lattices**M Stagno Navarra, C Burson-Thomas, AR Hamilton & M BrowneUniversity of Southampton, UK | **Measurement of the Whole Strain Tensor by a 6-axis Embedded Sensor** MLM François & Y LecieuxUniversity of Nantes & CNRS, France |
| **16:00** | **Material Parameters Identification Based on Dynamic Tests and Synthetic Images**Y Amani, T Fourest, P Almeida & B. LangrandDMAS/ONERA, France  | **Microstructure, Mechanical Testing, and Modeling of Wire Arc Additively Manufactured Stainless Steel**JPM Hoefnagels, L Palmeira Belotti, T van Nuland, JAW van Dommelen & MRD GeersEindhoven University of Technology, The Netherlands | **Verification of Mirror Assisted Full-Field Imaging for Large Scale Structure Testing** HL Leung, JM Dulieu-Barton & OT ThomsenUniversity of Bristol, UK |
| **16:20** | **Investigating High-speed Liquid Impingement with Full-field Measurements**CB Burson-Thomas, L Fletcher, R Wellman, TJ Harvey, RJK Wood & F PierronUniversity of Southampton, UK | **Fabrication of Copper-aluminium FGMs Through Wire and Arc Additive Manufacturing** FG Cunha, VR Duarte, TG Santos, J Xavier & F PierronNOVA University Lisbon, Portugal |  |
| **17:30** | **Welcome Drinks Reception – Ruth Deech Building – Foyer, St. Anne’s College, Oxford** |

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|  | **Wednesday 7th September 2022** |  |  |
|  | **Tsuzuki Lecture Theatre** | **Seminar Room 7** | **Seminar Room 8** |
|  | **Session 2.1a Chair: Dr Neha Chandarana** | **Session 2.1b Chair: Dr Daniel Mulvihill** | **Session 2.1c Chair: Dr Ceri Middleton** |
|  | **Testing of Composite Materials II** | **Tribology and Contact** | **Data Driven Mechanics for Prediction & Validation** |
| **09:00** | **An Experimental Investigation of Residual Stress in Rapidly Cured Composites**B Seers, RA Tomlinson & P FaircloughUniversity of Sheffield, UK | **Linking Material Strain and Friction to Triboelectric Charge Transfer**JL Armitage, A Ghanbarzadeh, MG Bryant, A NevilleUniversity of Leeds, UK | **Assessing the Quality of Sparse Datasets for use in Validation**C McElvaney, EA Patterson & K DvurecenskaUniversity of Liverpool, UK |
| **09:20** | **The Effect of the Impact Site on Repaired Carbon-Fibre Reinforced Polymer Panels**ZEC Hall, J Liu, R Brooks, Y Ding, AM Joesbury, LT Harper, H Liu, BRK Blackman, AJ Kinloch & JP DearImperial College, London, UK | **Systematic Contact Mechanics Investigation of Micro-patterned Triboelectric Nanogenerator**C Kumar, J Perris, G Min, N Gadegaard, Y Xu, R Dahiya, DM MulvihillUniversity of Glasgow, UK | **Experimental Validation of the EUCLID approach for Unsupervised Discovery of Hyperelastic Constitutive Laws** M Ricci, P Carrara, M Flaschel, S Kumar, S Marfia & L De LorenzisRoma Tre University, Italy |
| **09:40** | **Effect of Fibre Microstructure on Kinking in Unidirectional Fibre Reinforced Composites Imaged in Real Time under Axial Compression**K Nelms, Y Wang, Y. Chen, A Rack, S Rawson, E Maire & PJ WithersUniversity of Manchester, UK | **The Static Friction Peak in Frictional Hysteresis Loops**SB Jaber, Y Xu, ME Kartal, N Gadegaard & DM MulvihillUniversity of Glasgow, UK | **One-shot Characterization of Material Rate-Sensitivity from HS Images**R Seghir, A Vinei, J Rethore, J Berthe & G PortemontGeM, Centrale Nantes, France |
| **10:00** | **Progress in Hybrid Testing of Composite Structures**T Laux, OT Thomsen, JM Dullieu-BartonUniversity of Bristol, UK | **Measuring the Compressive Modulus of Soft Thin Films Using the Elastic Foundation Model**CB Burson-Thomas, M Godfrey & M BrowneUniversity of Southampton, UK | **Validation of Damage Models using Full-Field Data of Open-Hole Composite Specimens**RC Bullock, T Laux, OT Thomsen, JM Dullieu-BartonUniversity of Bristol, UK |
| **10:20** | **Exhibitor Introductions Chair: Dr Hari Arora** |
| **10:40** | **Refreshments and EMex22 Exhibition – Ruth Deech Building – Foyer B****Exhibitors:****Alemnis AG, Correlated Solutions, GOM, Hottinger Bruel & Kjaer UK, Instron, iX-Cameras, LaVision UK, MatchID, Photonlines, Photo-Sonics International, Photron, Quantum Design UK and Ireland, Shimadzu, Specialised Imaging & Techni Measure** |
|  | **Session 2.2a Chair: Dr Ceri Middleton** | **Session 2.2b Chair: Prof Giuseppe Pitarresi** | **Session 2.2c Chair: Dr Geir Olafsson**  |
|  | **Smarter Testing of Aerospace Structures** | **Fatigue and Fracture II** | **Novel Experimental Techniques II** |
| **11:10** | **Challenges to overcome for relying on virtual testing in aerospace** CA Middleton & EA Patterson University of Liverpool, UK | **Technical Challenges in Accelerated Very High Cycle Fatigue Testing of Structural Steels and Welds**Y Gorash, T Comlekci, G Styger, J Kelly, F Brownlie & L MilneUniversity of Strathclyde, UK | **Probing the Stability Landscape of Thin-Walled Composite Cylinders**RL Lincoln, C.J. McInnes, M. O’Leary, F. Morabito, A. Pirrera, R.M.J. Groh, S. Akromah, T. Brereton, A. Chen, E. Georgiou, J. Griffith, I. Lee, C. Stewart, M. Veyrat Cruz-Guzman, T. Wilcox, L. Zhu, M.L. LonganaUniversity of Bristol, UK |
| **11:30** | **Ontologies for Experimental Mechanics** JL Hippolyte, P. Duncan, M Bevilacqua & M. ChrubasikNational Physical Laboratory, UK | **Mesoscale Ultrasonic Fatigue with Non-Contact Fatigue Crack Detection Method & Environmental Testing Capabilities**R Scales, J Gong & AJ WilkinsonUniversity of Oxford, UK | **The industrial Applications of a Rapid Reflection Photoelastic Coating**WH Fraser, RA Tomlinson & AJ ParnellUniversity of Sheffield, UK |
| **11:50** | **Application of an Enhanced Validation Protocol to an Industrial Structure**K Dvurecenska & EA PattersonUniversity of Liverpool, UK | **Evaluation of the Strain Rate Effect in UFT Testing of Structural Steels**L Milne, Y Gorash, T Comlekci & D MacKenzieUniversity of Strathclyde, UK | **Approximating Loads in Kick Scooters with Measured Strain**S Pearson, E Tarleton & F HofmannUniversity of Oxford, UK |
| **12:10** | **From Sensor Placement in the Context of CAD to Measured Data: Traceability through 3DEXPERIENCE** A Goff & D SheppardDassault Systèmes UK Limited, UK | **Digital Imaging Correlation for Strain Control during Fatigue Cycling** D Coon, M Maric, C Palmer, D Hollis & A WisbeyJacobs, UK & LaVision, UK | **Measuring Young's Modulus of Polymer Sheets by Ultrasonic Lamb Waves** H Lu & G MenaryQueens University Belfast, UK |
| **12:30** | **Plenary Session – Tsuzuki Lecture Theatre Chair: Prof Johan Hoefnagels****BSSM Best Paper in ‘Strain’ Fylde Prize for 2021****Combined Thermographic Phosphor and Digital Image Correlation (TP+ DIC) for Simultaneous Temperature and Strain Measurements." Strain (2021): e12415**Elizabeth MC Jones, Amanda R. Jones, and Caroline Winters. Sandia National Laboratories, USA |
| **13:00** | **Lunch and EMex22 Exhibition – Ruth Deech Building - Foyer B****Exhibitors:** **Alemnis AG, Correlated Solutions, GOM, Hottinger Bruel & Kjaer UK, Instron, LaVision UK, MatchID, Photonlines, Photo-sonics International, Photron, Shimadzu, Quantum Design UK and Ireland, Specialised Imaging & Techni Measure** |
| **14:00** | **Plenary Session – Tsuzuki Lecture Theatre Chair: Dr Neha Chandarana****BSSM Young Stress Analyst Competition Finalists:**1. **Percutaneous Screws for the Treatment of Long-Bone Fracture Non-Union**

Jack Chester, Proctor & Chester Measurements, UK1. Integrated Experimental-Numerical Testing of “2D” Steel Microstructures

 Tijmen Vermeij, 1Eindhoven University of Technology, The Netherlands1. Subsurface Damage Assessment in Composite Laminates Using a Novel Full Field Imaging Technique.

Rafael Ruiz-Iglesias,, University of Bristol, UK1. **Measurement of 3D Shroud Contact Forces in Forced Vibration Testing of Shrouded Turbine Blade**

 Rizwan Ahmed, Politecnico di Torino, Italy |
| **15:20** | **Refreshments and EMex Exhibition – Ruth Deech Building – Foyer B** |
| **15:50** | **Plenary Session – Tsuzuki Lecture Theatre Chair: Andrew Ramage****BSSM Measurements Lecture 2022** **Light Weighting Aircraft Structures for Greener Aviation – Design, Optimisation and Structural Health Monitoring**Prof. Carol Featherston, Cardiff University, UK |
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| **19:00** | **Chairman’s Gala Dinner and Awards Ceremony – Mansfield College Chapel, Mansfield College, Oxford** |

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|  | **Thursday 8th September 2022** |  |  |
|  | **Tsuzuki Lecture Theatre** | **Seminar Room 7** | **Seminar Room 8** |
|  | **Session 3.1a Chair: Prof Johan Hoefnagels** | **Session 3.1b Chair: Prof Genevieve Langdon** | **Session 3.1c Chair: Prof Ole Thomsen** |
|  | **Metals and Microstructure II** | **Dynamic Behaviour of Materials** | **Fracture and Failure of Composites** |
| **09:00** | **Effect of Static Magnetic Field on High Temperature Mechanical Behaviour of Grade P91 Steel**M Mokhtarishirazabad, A Harte, Y Wang & M MostafaviUniversity of Bristol, UK | **Application of Ultra-high Speed Imaging to Understand Surgical Ultrsonic Cutting**A Marek & F PierronUniversity of Southampton, UK | **The Effect of Moisture Ingress on Mode-I Fracture Toughness of Carbon/epoxy Laminates with Hybrid Toughening Using Core-shell Rubber Particles and Thermoplastic Veils**S Wang, KB Katnam, Z Zou & P PotluriUniversity of Manchester, UK |
| **09:20** | **Microscale Damage Prediction enables High-Resolution in-situ Measurement and CP Simulation of Plasticity-to-damage in Dual-Phase Steel**T Vermeij, CJA Mornout, NA van de Straat, V Rezazadeh & JPM HoefnagelsEindhoven University of Technology, The Netherlands | **An Image Based Inertial Impact Test for the Characterization of Viscoelastic Materials** A Matejunas, L Fletcher & L LambersonUK Atomic Energy Authority, UK | **Impact of Repaired CFRPs: Ultrasonic Evaluation and Microscopic Analysis of Internal Damage** RA Brooks, J Liu, ZEC Hall Y Ding, AM Joesbury, LT Harper, H Liu, BRK Blackman, AJ Kinloch & JP DearImperial College London, UK |
| **09:40** | **Recent Development in Sheet Metal Forming of Titanium Alloys**M Kopec, L Wang, K Wang, X Liu & ZL KowalewskiPolish Academy of Sciences & Imperial College London, UK | **Characterisation of the Dynamic Compressive Behaviour of Ceramic using Planar Plate-impact and Shockless Plate-impact Experiments**J Genevois, P ForquinUniversité Grenoble Alpes, France | **Identifying Impact Fatigue Damage in Carbon Fiber Composites Using Infrared Deflectometry and the Virtual Fields Method**I Mendoza & L LambersonColorado School of Mines, USA |
| **10:00** |  | **Investigation of the Strain-rate Sensitivity of two Alumina Ceramics Thanks to Shockless Plate-impact Spalling Tests**P Forquin, J Genevois, H Chauhan & A CoscuellaUniversité Grenoble Alpes, France |  |
| **10:20** | **Refreshments – Ruth Deech Building Foyer** |
| **10:40** | **Plenary Session – Tsuzuki Lecture Theatre Chair: Dr Hari Arora****Image Analysis Techniques for Novel Analysis of Creep Tests**Dr Catrin Mair Davies, Imperial College London, UK |
|  | **Session 3.2a Chair : Prof James Marrow** | **Session 3.2b Chair: Dr Dave Hollis** | **Session 3.2c Chair: Dr Charchit Kumar** |
|  | **Infrared & Thermal Methods**  | **Digital Image Correlation I** | **Testing of Polymers** |
| **11:40** | **Characterisation of Complex Composite Geometries using Thermal Imaging**G Olafsson, R. Ruiz-Iglesias 2, O.T. Thomsen3 and J.M. Dulieu-Barton4University of Bristol, UK | **Evaluation of the Reliability of 2D and 3D DIC Creep Deformation**E Muyupa, HK Kim & J BouchardThe Open University, UK | **Evaluating the Effect of the Filler Amount on the Crack Growth Behavior of Natural Rubber and the Strain Distribution**H Mitamura, K Iizuka & S YoneyamaAoyama Gakuin University, Japan |
| **12:00** | **Thermographic Non-destructive Assessment for Impacted Flax Fiber-reinforced Composite Laminates**K Srihi, N Massé, A El-Hafidi, J Rousseau & B MartinUniversité Bourgogne Franche-Comté, France | **Digital Image correlation for Strain Measurement on Notched and Welded Specimens** T Kosco & V ChmelkoSlovak University of Technology in Bratislava, Slovakia | **Energy Harvesting Performance of Polymer Composites Dispersed Potassium Sodium Niobate Piezoelectric Particles**K Maruyama, X Liu, Y Kawakami, H Kurita & F NaritaTohoku University, Japan & University of Manchester, UK |
| **12:20** | **Study of Thermo-mechanical Properties of NiCoCrAlY Bond Coats using Microtensile Samples and 2D-DIC**S Kumar, P Kumar, S Sampath & V JayaramIndian Institute of Science, Bangalore, India | **An Automated High-Resolution Digital Image Correlation System for Capturing Fatigue Crack Growth Mechanisms**E Breitbarth, F Paysan, T Strohmann, D Melching & G RequenaInstitute of Materials Research, Germany | **Syntheses and experimental characterisations of carbon nanotubes-enhanced natural rubbers for wave energy harvesting applications**M Hossain, Ali Esmaeili, Ian MastersSwansea University, UK |
| **12:40** | **Development of Infra-red Camera Models to Assess Accuracy and Precision in Thermoelastic Stress Analysis**I Jiménez-Fortunato, C Devivier & JM Dulieu-BartonUniversity of Bristol, UK | **Measurement Discontinuous Strain Around the Dissimilar Materials Interface Using Global Digital Image Correlation**Y Tsujii, N Iketa, K Lizuka & S YoneyamaAoyama Gakuin University, Japan |  |
| **13:00** | **Lunch – St Anne’s College Dining Hall** |
|  | **Session 3.3a Chair: Prof Genevieve Langdon**  | **Session 3.3b Chair : Prof James Marrow** | **Session 3.3c Chair : Dr Charchit Kumar** |
|  | **Materials in Extreme Dynamic Environments** | **X-Ray Tomography & Radiography** | **Digital Image Correlation II** |
| **14:00** | **Application of the Virtual Fields Method to Reconstruct Full-Field Surface Pressures During the Dynamic Response of Blast Loaded Steel Plates** R Kaufmann, SN Olufsen, E Fagerholt & V AuneNorwegian University of Science and Technology, Norway | **Evaluation of Digital Volume Correlation (DVC) Applicability in Silicon Dioxide (SiO2) Particle-doped Carbon Fibre Reinforced Polymers using *In Situ* Synchrotron Radiation Computed Tomography (SRCT)**Y Lee, E. Schöberl1**,** K. Ball1**,** C. Furtado2,3**,** P. Patel2**,** A. Arteiro3**,** M. Majkut4**,** L. Helfen5**,** B. Wardle2**,** T. Tsuneo6**,** F. Yasuhiro6**,** S. Naoki6**,** M. Jalalvand1**,** M.N. Mavrogordato1**,** S.M. Spearing1**,** I. Sinclair1University of Southampton, UK, 2Massachusetts Institute of Technology, USA 3University of Porto, Portugal 4European Synchrotron Radiation Facility, France 5Institut Laue-Langevin, France 6Mitsubishi Chemical Corporation, Japan | **Feasibility of In-situ Elastic Mechanical Characterisation of Masonry Using the Virtual Fields Method** MRW Judd, M Sangirardi & S AcikgozUniversity of Oxford, UK |
| **14:20** | **Experimental Determination of Initial Velocity Distribution in Blast Loaded Plates**R Curry, GS Langdon, JP Tyler, S Clarke & A TyasUniversity of Sheffield, UK | **Projection-DIC Analysis of Projected 3D data for a 6xxx Aluminium Alloy Under Plane Strain Tension Imaged by *in situ* Absorption Contrast Tomography**M Gille, H Proudhon, J Oddershede & MorgeneyerMINES Paris - PSL, France | **Validating Finite Element Models of Metallic Specimens during V-bending and Relaxation**Q Lin, Z Guan & WJR ChristianUniversity of Liverpool, UK |
| **14:40** | **Ballistic Performance of Wadded Angle-interlock Fabric Panels for Ballistic Helmet**M Yang & X ChenUniversity of Manchester, UK | **Strain Mapping in Graphite and MAX phase during High-Temperature Disc Compression via In-Situ Synchrotron X-ray Radiography and Diffraction** R Whybrow, M Williamson & TJ MarrowUniversity of Oxford, UK | **Determining the Modulus of Elasticity of Concrete using Digital Image Correlation**Tick Boon LohNewcastle University in Singapore, Singapore |
| **15:00** | **Nanomechanical response of surface and coatings in extreme condition: Temperature and strain rate dependence** H Zhang, M Gee & AT FryNational Physical Laboratory (NPL), UK |  |  |
| **15:20** | **Closing Plenary Session – Tsuzuki Lecture Theatre****Conference Chair: Prof. James Marrow****Announcement of BSSM 17th International Conference on Advances in Experimental Mechanics 2023 – University of Glasgow**Conference Chair: Dr Daniel Mulvihill, University of Glasgow, Glasgow, UK**Wednesday 30th August - Friday 1st September 2023** |
| **15:30** | **Refreshments & Conference Close – Ruth Deech Building - Foyer** |