



Hybrid Conference

26 – 27 February 2026

**Analytical Microscopy in Earth and Planetary Sciences**  
**CONFERENCE PROGRAMME**



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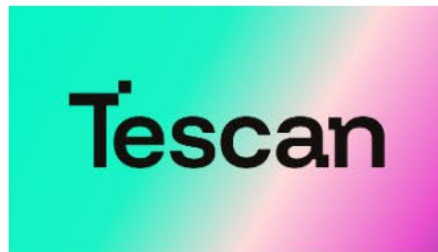
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Thursday 26 February 2026		
0930 – 1000	Registration & Coffee	
1000 – 1010	Welcome Address	Natasha Stephen, Geological Society of London
1010 – 1100	<b>Keynote:</b> Precise quantitative mineral analysis by EDS-SEM	Johan Lissenberg, <i>Cardiff University</i>
SESSION ONE		
1100 – 1120	No WDS? No Problem! Why Do Geoscientists Continue to Overlook EDS?	George Stonadge, <i>Oxford Instruments</i>
1120 – 1140	Element mapping of the lawsonite to epidote transition	Sara Hanel, <i>University of Minnesota</i>
1140 – 1200	Lithium to Uranium: A New Analytical SEM for Environmental Research hosted by UCL Earth Sciences	Andy Thompson, <i>University College London</i>
1200 -1210	Automated Mineralogy as a part of complex analytical workflows	Marek Dosbaba, <i>Tescan</i>
1210 – 1230	Break	
SESSION TWO		
1230 – 1250	Quantifying Facies-Controlled Pore Connectivity in Heterogeneous Porous Media with Alloy Intrusion Porosimetry (AIP)	Joyce Schmatz, <i>MaP - Microstructure and Pores GmbH</i> & Julia Schmitz
1250 – 1310	SEM-BEX Mapping on Unprepared and Uncoated Samples: did we find the oldest extraterrestrial zircons?	Alexandra Stavropoulou, <i>Oxford Instruments</i>
1310 – 1330	The Importance of being oriented: a review of thirty years of Electron Backscatter Diffraction research in Earth and Planetary Sciences	John Wheeler, <i>University of Liverpool</i>
1330 - 1430	Lunch	
COMMUNITY UPDATES		
1430 – 1445	High resolution structural and chemical analysis at the electron Physica Sciences Imaging Centre	Chris Allen, <i>ePSIC</i>
1445 – 1500	Imaging & Characterisation at the Henry Royce Institute: Facilities and Access	Alexander Massey, <i>Henry Royce Institute</i>
1500 – 1515	The Space Nanomaterials atom probe (SNAP) providing an atoms eye view of the Solar System	Luke Daly, <i>University of Glasgow</i>
1515 – 1530	TBC	Neil Robinson, <i>EPSRC UKRI</i>
1530 – 1600	Break	
1600 – 1610	Automated Mineralogy: Faster, Smarter geological insights with MapsMin	Salomé Larmier, <i>Thermo Fisher Scientific</i>

Continued on the next page...

VIRTUAL POSTER SESSION		
1610 – 1620	Resolving Mixed Spinel Signatures with EPMA Element Mapping in Metasomatized Peridotites	Danielle Carr, <i>University of Texas at Arlington</i>
1620 – 1630	The Macroscopic and microscopic mineralisation controlled by the Yanshanian movement surface in the Xitian area, Hunan Province, South Central China	Hongyuan Zhang, <i>China University of Geosciences (Beijing)</i>
1630 – 1640	High-resolution Scanning Electron Microscopy Imaging in Mudstone Thin Sections with Different Metallisation Alternatives	Mateus A Rodrigues, <i>Fluminense Federal University</i>
1640 – 1655	Lighting session	
1655 - 1830	Poster session & Drinks Reception	

Posters	
Resolving Mixed Spinel Signatures with EPMA Element Mapping in Metasomatized Peridotites	Danielle Carr, <i>University of Texas at Arlington (Virtual)</i>
Telling the time with SEM-EDS: Application of quantitative EDS to diffusion chronometry	Joe Gardener, <i>University of Liverpool</i>
The macroscopic and microscopic mineralization controlled by the Yanshanian movement surface in the Xitian area, Hunan Province, South Central China	Hongyuan Zhang, <i>China University of Geoscience, Beijing (Virtual)</i>
Quantifying Porosity and Mineralogy in Rock Samples through Integrated SEM/EDS and Machine Learning Approaches	Joyce Schmatz, <i>MaP - Microstructure and Pores GmbH</i>
High-resolution Scanning Electron Microscopy Imaging in Mudstone Thin Sections with Different Metallization Alternatives	Renan de Melo Correia Lima / Mateus A. Rodrigues, <i>Fluminense Federal University (Virtual)</i>

Friday 27 February 2026		
0900 – 0930	Registration & Coffee	
0930 - 1010	Panel Discussion: Collaboration in Lab Management, challenges, opportunities, and the eternal quest for funding	
1020 – 1040	Microscopic Meteorites: Art, Science and Stories from space	Lorelei Robertson, <i>University of Nottingham</i>
1040 – 1100	Building a pilot open-access correlative rock microscope	Marco A. Acevedo Zamora, Queensland University of Technology
1100 - 1120	From Sparse Measurements to Full Maps: Machine Learning Prediction of Mineral Phase Data	Julia Schmitz, <i>MaP - Microstructure and Pores GmbH, Germany</i>
1120 – 1150	Break	
THEME THREE		
1150 - 1210	Micro to nanoscale characterisation of olivine, wadsleyite and ringwoodite in the Catherwood L6 ordinary chondrite and implications for the evolution of high-pressure mineral assemblages in planetary materials	Lee White, <i>Open University</i>
1210 - 1230	Hydrothermal Alteration of Isle of Rum Peridotite – A Jezero Crater Analogue	Cesca Willcocks, <i>University of Leicester</i>
1230 - 1250	Constraints on Basaltic Volcanism on Vesta: Insights from Pb-Pb Isotope Systematics in Eucrites	Hayley Lowe, <i>University of Manchester</i>
1250 - 1410	Lunch & Sponsor Networking	
1410 - 1420	Light Element Chemical State Analysis with New Soft X-ray Grating for SEM	Calum Dickinson, <i>JEOL (UK) Ltd</i>
THEME FOUR		
1420 - 1440	Analysis of the CM chondrite meteorite Winchcombe by FIB-TOFSIMS and SEM-EDS as advanced complimentary techniques	Diane Johnson, <i>Cranfield University</i>
1440 - 1500	4D STEM and Correlative EDS Analyses of Planetary Materials	Niamh Topping , <i>University of Leicester (Virtual)</i>
1500 - 1520	Novel Combinations of Quantum Diamond Microscopy and Electron Probe Microanalysis Reveal Intricate Intergrowths in an Unusual Meteorite	Jennifer T. Mitchell, <i>University of Minnesota</i>
1520 - 1530	Title TBC	<i>Bruker</i>
1530 - 1600	Break	
THEME FIVE		
1600 - 1650	<b>Keynote:</b> Laser-induced breakdown spectroscopy (LIBS) as a tool for planetary exploration: From the macroscale to the microscale on Mars and beyond.	Candice Bedford, <i>Purdue University (Virtual)</i>
1650 - 1710	GSL Publications & closing words	

## Convenors:

**Natasha Stephen** (GSL & Imperial College London, UK)

**Cesca Willcocks** (University of Leicester, UK)

**Duncan Muir** (Cardiff University, UK)

**Jen Mitchell** (University of Minnesota, USA)

## THANK YOU

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