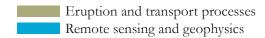
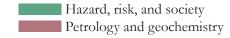
Scientific Programme





Oral presentations - Wednesday 3rd January

| Time | Presenter Title | |
|-------|------------------|--|
| 13.15 | Tegan Havard | Analogue experiments to investigate magma mixing in dykes |
| 13.30 | Magali Verkerk | Large-ensemble simulations of volcanic impacts on climate throughout the last 9000 years. |
| 13.45 | Elisa Biagoli | Magma ascent dynamics and lava flow propagation: a numerical modelling approach with examples from the 2021 Cumbre Vieja and 2014 Fogo eruptions. |
| 14.00 | Charlotte Gordon | The textural record of extreme disequilibrium crystallisation |
| 14.15 | Ben Ireland | Towards a systematic catalogue of volcano deformation source parameters from Sentinel-1 InSAR data. |
| 14.30 | Eilish Brennan | Insights into the magmatic source of Kozelsky Volcano, Kamchatka including Boron and B-Sr-Nd isotopes as tracers of FME and volatile enrichments in the mantle source. |
| 14.45 | Ed Llewellin | Emplacement of a complex lava flow field on Kīlauea, Hawaii, USA |

| Time | Presenter | Title |
|-------|----------------------------------|--|
| 15.30 | Isobel Yeo | Diverse impacts of marine volcanic eruptions on Pacific Island communities |
| 15.45 | Hannah Calleja | Inclined conduits promote flow recirculation in shallow open vent volcanic systems. |
| 16.00 | Maximillian Van Wyck de Vries | Monitoring hazard at ice-clad volcanoes: remote mapping of summit ice cap volumes. |
| 16.15 | Beitris Morrison-Evans | Source depth of basaltic-andesite magma beneath La Soufrière, St Vincent |
| 16.30 | Ceri Allgood | Particle alignment and bubble deformation in solidifying flows. |
| 16.45 | Man-Mei Chim | Disproportionate Impacts of the COVID-19 Pandemic on Early Career Researchers and Disabled Researchers in Volcanology. |

Oral presentations - Thursday 4th January

| Time | | Presenter | Title |
|-------|----------------|----------------|--|
| 08.30 | Claire Horwell | | 'All four engines have failed!': The psychological and behavioural impacts to passengers and crew on flight BA009 which flew through the 1982 Gallungung ash cloud |
| 08.45 | | Thomas Aubry | Using the Independent Volcanic Eruption Source Parameter Archive (IVESPA) to calibrate and evaluate a 1D volcanic plume model. |
| 09.00 | | Morgan Bugler | Examining the role of continental collision magmatic activity in Phanerozoic continental crustal growth |
| 09.15 | | Mark Bemelmans | Robust Observation of Volcano Displacement Using Sub-Pixel Offset Tracking on High-Resolution Satellite SAR |
| 09.30 | | Abate Melaku | The origin and magnitude of gas emissions at a major Ethiopian Rift volcanic system. |
| 09.45 | | Elliot Carter | Rapid temperature fluctuations in the early Iceland plume revealed by olivine-spinel and melt thermometry |

| Time | Presenter | Title | |
|-------|-----------------------|--|--|
| 10.30 | Amy Myers | A global analysis of lava dome and lava spine geometries | |
| 10.45 | Megan Campbell | Evaluating the role of complex topography on ground deformation modelling at marine volcanoes | |
| 11.00 | Callum Pearman | Temporal Variations In North Atlantic Mid-Ocean Ridge Magmatism and Plume-Ridge Interaction: Insights from IODP Expedition 395C. | |
| 11.15 | Nemi Walding | The effect of moisture on cohesion of pyroclastic material: implications for deposit architecture and flow behaviour. | |
| 11.30 | Jamie Farquharson | International volcanology: some publishing perspectives. | |
| 11.45 | Gabriele Radzeviciute | Populations on Volcanic Islands: Life in the Shadow of Stromboli, Aeolian Islands, Italy | |

| Time | Presenter | Title |
|-------|------------------|--|
| 13.30 | Chetan Nathwani | A zircon case for super-wet arc magmas |
| 13.45 | Janina Gilies | Formation of Pele's hair by stretching of bubbly magma |
| 14.00 | Ben Esse | Quantifying daily volcanic SO2 emissions on a global scale. |
| 14.15 | Ella Curtis | Chemical and isotopic tracers of the transition between oceanic and continental lithosphere in the Canary Islands |
| 14.30 | Hazel Knight | Assessing models for Large Igneous Province formation using a new magma productivity record spanning the North Atlantic Igneous Province |
| 14.45 | Marjorie Simbana | Sensors as a tool to understanding hazards and connecting people in hazard-prone zones. |

Oral presentations - Friday 5th January

| Time | Presenter | Title |
|-------|-----------------|--|
| 08.30 | Owen Weller | New thermodynamic models for alkaline-silicate magmatic systems |
| 08.45 | Emma Horn | New insights into the magmatic systems feeding caldera-forming eruptions from juvenile nodules in lag breccias. |
| 09.00 | Jenni Barclay | Volcanologists as Storytellers: the explanatory power of stories told about volcanic crises |
| 09.15 | Timothy Davis | A theory for mega-dyke propagation as driven by hotspot topography. |
| 09.30 | Barbara Bonechi | Direct observation of degassing and crystallisation of magma via HP-HT X-ray transparent Internally Heated Pressure Vessel |
| 09.45 | Michael Clare | When volcanoes meet the internet: The variable drivers and impacts of volcanic hazards on subsea telecommunications networks |

| Time | Presenter | Title |
|-------|-----------------|--|
| 10.30 | Matias Clunes | Artistic expressions of volcanoes in Chile: a pathway to understanding their social significance |
| 10.45 | Roxanne Buso | CO2-rich primary magmas in continental intraplate domains: Insight from olivine-hosted melt inclusions from Bas-Vivarais (French Massif Central) |
| 11.00 | Thomas Gernon | A multi-million-year legacy of volcanism in the Earth system |
| 11.15 | Bridie Davies | Volcanology in a vacuum? How lessons from the archives can help us unify perspectives on volcanic crises. |
| 11.30 | David Neave | Iron valence systematics in clinopyroxene from oceanic basalts: revisiting stoichiometric estimates of ferric iron content. |
| 11.45 | Rami Alshembari | Modelling Surface Deformation from Melt Injection to a Poroelastic Reservoir at Soufrière Hills Volcano, Montserrat |

VMSG Award Talks - Friday 5th January

| Time | Presenter | Title |
|-------|-------------------|--|
| 13.00 | Edna Dualeh | Willy Aspinell Award - Quantifying the rapid increase in extrusion rate from Synthetic Aperture Radar backscatter: 2021 dome growth at La Soufrière, St Vincent. |
| 13.20 | Martin Mangler | Zeiss Postdoctoral Keynote - Plagioclase shape variability reveals textural maturation of crystal mush due to resorption |
| 14.40 | Clive Oppenheimer | Thermo Fisher Scientific VMSG Award |

Draft schedule

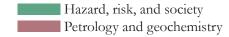
| Wednesday 3rd January | | Thursday 4th January | | Friday 5th Ja | Friday 5th January | |
|-----------------------|------------------|----------------------|-----------------------------|---------------|---------------------------------|--|
| | | 08.30 | | 08.30 | | |
| 09.00 | | 09.00 | Session 3 | 09.00 | Session 6 | |
| 09.30 | | 09.30 | | 09.30 | | |
| 10.00 | Morkobono | 10.00 | Break | 10.00 | Break | |
| 10.30 | Workshops | 10.30 | | 10.30 | | |
| 11.00 | | 11.00 | Session 4 | 11.00 | Session 7 | |
| 11.30 | | 11.30 | | 11.30 | | |
| 12.00 | Degistration | 12.00 | Lunch | 12.00 | Lunch | |
| 12.30 | Registration | 12.30 | LUTICIT | 12.30 | Lunch | |
| 13.00 | | 13.00 | PhD Forum | 13.00 | | |
| 13.30 | Welcome & | 13.30 | | 13.30 | Award talks | |
| 14.00 | Session 1 | 14.00 | Session 5 | 14.00 | | |
| 14.30 | | 14.30 | | 14.30 | Break | |
| 15.00 | Break | 15.00 | Break | 15.00 | EDI Forum | |
| 15.30 | | 15.30 | ECR Forum | 15.30 | AGM | |
| 16.00 | Session 2 | 16.00 | | 16.00 | AGIVI | |
| 16.30 | | 16.30 | Poster Session 2 | | | |
| 17.00 | | 17.00 | | | | |
| 17.30 | Poster Session 1 | 17.30 | | | | |
| 18.00 | | 18.00 | Pre-dinner event | | | |
| 18.30 | | 18.30 | rie-uiillei eveill | | | |
| 19.00 | Icebreaker | 19.00 | Conference Banquet til late | 19.00 | Outreach event at the Watershed | |

Poster Session 1 - Wednesday 3rd January

Please note that posters are associated with a posterboard number. Odd-numbered posters will be presented on Wednesday, and even number posters will be presented on Thursday.

Eruption and transport processes

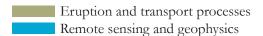
Remote sensing and geophysics

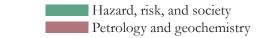


| | No. | Presenter | Title |
|---|-----|---------------------|---|
| | 1 | Gabriel Adler | Tracking Mush Disaggregation During the 1783 CE Laki Eruption. |
| | 3 | Ceri Allgood | Complex dyke architecture suggests flow localisation during magma propagation. |
| | 5 | Ryan Bailey | New insights into past and present volcanic activity of Socorro Island, Mexico |
| | 7 | Sophie Baldwin | Trace element systematics at Etinde, Cameroon Volcanic Line. |
| | 9 | Juliet Biggs | Analogue experiments show that fracturing around magma reservoirs can cause variation in surface uplift rates even at constant volumetric flux. |
| | 11 | Samuel Bright | Bizarre magmatic compositions at Volcán Ceboruco, Trans Mexican Volcanic Belt, Mexico |
| | 13 | Ri Cao | Formation of volcanic domes on Venus and the mobilization of crystal mush: Insights from the Troodos Ophiolite, Cyprus |
| | 15 | Jordan Chenery | 'Can you stop a PDC?' Assessing the impact of topography on analogue fluidized, dense granular flows. |
| | 17 | Tanvi Chopra | Modelling lahars at Merapi (Indonesia) and Rainier (USA) volcanoes using Titan2D and LaharZ computer models |
| | 19 | Leah Gingell | Developing a method to investigate waxing and waning behaviors in analogue pyroclastic density currents and their impact on deposit architecture. |
| | 21 | Sofia Della Sala | Volcanism, Sedimentation and Hydrothermal Activity in Santorini, Greece |
| | 23 | Jasmine Dibben | Seismically inferred reservoir geometry deformation model for Soufrière Hills Volcano, Montserrat. |
| | 25 | Hannah Ellis | The Porosity of Shallow, Hot Granites |
| | 27 | Molly Flynn | Refining the marine tephrostratigraphy of the central Mediterranean (40-90 ka): New insights into Late-Pleistocene Campanian explosive volcanism |
| | 29 | Fiona Gardner | Volcanic units of the early centres of the Palaeogene Mull volcano |
| | 31 | Katharine Gilchrist | Magma Mixing in Dykes and Chambers |
| | 33 | Alexandra Daniels | Understanding pyroclastic density current timescales and evacuation timescales at Volcán Fuego and Volcán Santiaguito, Guatemala. |
| | 35 | James Hickey | Social sensing the Kīlauea 2018 volcanic eruption |
| | 37 | Rahma Hassan | The formation of the lower crust in oceans: a study from the Lizard ophiolite in Cornwall. |
| | 39 | Frankie Haywood | What mechanisms control transitions in explosive-effusive eruptions for pantellerite volcanoes? |
| | 41 | Oliver Higgins | Identifying distinct pre-eruptive composition-H ₂ O-time trends using plagioclase |
| | 43 | Alastair Hodgetts | Volcanism in the Mexico City region: extending our knowledge of past eruptions over the past 400 ka. |
| | 45 | Alice Hopkins | Detecting Submarine Volcanic Eruptions from Space |
| | 47 | Bence Horanyi | Experimental Constraints on the Genesis of Lithium-rich, Felsic Melts |
| ŀ | 49 | TiVonne Howe | Deep CO ₂ systematics at La Soufriere Volcano, St Vincent |
| | 51 | Wenting Huang | Reconstructing volatile exsolution in a porphyry ore-forming magma chamber: Perspectives from apatite inclusions. |
| | 53 | Rebecca Hughes | Using pyroclast textures to investigate a change in explosivity within a low-intensity basaltic eruption. |
| | 55 | Thomas Johnston | What Can Block and Ash Flow Deposits Tell Us About Lava Dome Collapse Dynamics? |

| 57 | Amy Kember | Investigating transitions in eruption style using textural analysis of tephra samples: a case study from Fagradalsfjall 2021 |
|-----|--------------------------|---|
| 59 | Sally Law | The formation of silicic magmas on young planetary bodies in an Iceland-like setting |
| 61 | Fathia Lutfiananda | Systematic Review of Forecast-based Early Actions (FbEA) in Response to Volcanic Hazards: Insights from Merapi Volcano, Indonesia |
| 63 | Daniel Manns | Towards Dynamic Poroelastic Numerical Analysis of Volcano Ground Deformation at Bárðarbunga Volcanic System, Iceland |
| 65 | Lorenzo Mantiloni | Stress Inversion in Calderas with a Simplified Model of Dyke Pathways: Towards a Physics-based Forecast of Eruptive Vent Locations. |
| 67 | Lorenzo Mantiloni | From Mush to Dyke: Insights into Reservoir Failure and Dyke Nucleation in Dynamic Magma Mush Reservoirs. |
| 69 | Nick Mappin | Fluid interaction in nepheline syenite, Stjernøya, Norway |
| 71 | Ed McGowan | A geochemical reevaluation of caldera-forming eruption deposits in the Upper Borrowdale Volcanic Group, English Lake District. |
| 73 | Priya Minhas | Evolution, Eruptive Recurrence Rates and Behaviour of Monogenetic Volcanism in Central Armenia |
| 75 | Sam Mitchell | The Middle Hope Volcanics: Reconstructing the eruptive history of a Carboniferous marine volcanic sequence in modern-day Somerset, UK. |
| 77 | Jacob Nash | What do volcaniclastic sediments produced by submarine flows tell us about the largest volcanic eruption this century? |
| 79 | Kendra Ni Nuallain | Volcanic dome collapse: exploring post-emplacement stability as a function of hydrothermal alteration |
| 81 | David Pyle | Vesuvius: the Model Volcano. |
| 83 | Jessica Rawlings | Constraining ascent velocities of diamond bearing kimberlite magmas using diffusion chronometry |
| 85 | Alexander Riddell | New gas analyser for high frequency, simultaneous measurements of volcanic gas species. |
| 87 | Jane Scarrow | What can zircon tell us about volcanic processes? |
| 89 | Gilles Seropian | Towards volcanic jet noise theory |
| 91 | Adam Stinton | Long-term fumarole temperature monitoring with aerial and ground-based techniques |
| 93 | Isabelle Taylor | Measurements of sulfur dioxide (SO_2) emissions from volcanoes with the Infrared Atmospheric Sounding Interferometer (IASI) for 2007 to 2021. |
| 95 | Matthew Varnam | Low fO ₂ magmatic gases released during lunar mare eruptions. |
| 97 | Daniela Vitarelli | Chemical characterization of Carboniferous age Irish volcanics. |
| 99 | Megan Watfa | Petrology and geochemistry of the Kula Volcanic Province. |
| 101 | Sebastian Watt | Volcano distribution and hazards associated with a passive continental rift: a re-evaluation of submarine volcanism in the Sicily Channel |
| 103 | Emma Watts | Afar triple junction fed by single, heterogeneous mantle upwelling |
| 105 | Rebecca Williams | Quantifying the sedimentation of ignimbrites – progress and challenges in analogue flume modelling of pyroclastic density currents and their deposits |
| 107 | Rebecca Winstanley | Generation, storage, and eruption of an intermediate composition magma on Ascension Island |
| 109 | Joshua Yonish | Development of an assessment framework for volcanic tsunami hazards at partially submerged caldera systems |
| 111 | Jingwei (David) Zhang | Records of prolonged ash-venting at a rhyolitic volcanic system, Torfajökull, Iceland |
| 113 | Tianyuan Zhu | Long-term deformation of seasonal snow-covered calderas: A case study at Laguna del Maule, Chile |

Poster Session 2 - Thursday 4th January





| 2 | Fay Amstuz | Isotopic constraints on volcano tectonically controlled assimilation at Campi Flegrei caldera. |
|----|---------------------------|--|
| 4 | Thomas Austin | Benchmarking a Distinct Element Method model of volcanic deformation |
| 6 | Charlie Bates | Modelling Volcanic Umbrella Ash Clouds for Aviation Purposes |
| 8 | Katie Baumber | Relating Changes in Melt Genesis to Dynamic Conditions of the Demise of a Continental Arc: Antarctic Peninsula Arc |
| 10 | Frances Beckett | Conducting Multi Agency Volcanic Ash Cloud Exercises: Practicing forecast evaluation procedures and the pull-through of scientific advice to the London VAAC |
| 12 | Rachel Bilsland | Modeling Surface Deformation due to Magma Migration through Mush Zones |
| 14 | Daniela Bowden- Haynes | Bang, spatter, and plop: welding dynamics of proximal ignimbrite agglomerates. |
| 16 | Jack Bronziet | Magmatism and Mineralisation Along the Great Glen Fault, NW Highlands |
| 18 | Joshua Brown | A complex magmatic plumbing system beneath Bagana volcano, Papua New Guinea |
| 20 | Frankie Butler | The Rheological Feasibility of Magma Mixing at the Drumadoon Sill, Isle of Arran. |
| 22 | Caitlin Chalk | Deciphering flux-driven dyke dynamics with experimental and numerical models. |
| 24 | Dee Cirium | Volatiles and their Sources in the Afro-Arabian LIP |
| 26 | Matias Clunes | Dike-induced strain and stress field influenced by dipping heterogeneous crustal layers: insights from analogue modelling |
| 28 | David Colby | Unlocking volatile budgets at Santorini, Greece using Apatite |
| 30 | Edna Dualeh | Separating volcanic deformation signals using ICA: Corbetti Caldera, Ethiopia |
| 32 | Sam Engwell | The North Atlantic Volcanic Hazards Partnership: An Introduction |
| 34 | Eshbal Geifman | Geochemical Tracers of Assimilation in North Atlantic Paleogene Dykes |
| 36 | Janina Gillies | Evolution of highly vesicular basaltic pyroclasts during fountaining |
| 38 | Emma Hadre | Geomorphometric analysis and semi-automatic classification of blocks and cones in a volcanic flank collapse debris field offshore Fogo, Cape Verde. |
| 40 | Claire Harnett | Introducing ROTTnROCK: a new project to explore the role of hydrothermal alteration in unpredicted volcanic hazards |
| 42 | Ryan Hill | Comparing and interpreting the mechanics of formation of collapse calderas on Io and on Earth |
| 44 | Melina Hoehn | Petrological and geochemical characterisation of eruption products from the Rabaul Caldera Complex, Papua New Guinea |
| 46 | Jade Hrintchuk | Investigating magma flow dynamics in a dyke: a microstructural study of the Budj Bim Volcanic Complex, Australia |
| 48 | Matthew Johnson | Experimental modelling of thalwegs in pyroclastic density currents - the dynamic influence of progressive aggradation upon a migrating flow axis |
| 50 | Thomas Jones | Accretionary lava balls record the Pāhoehoe to `A`ā transition. |
| 52 | Ben Latimer | Magma mush remobilisation during replenishment of granitic intrusions: evidence from localised fabric heterogeneity |
| 54 | Milan Lazecký | Current Volcanic Activity at Azores Islands Observed by Sentinel-1 and GNSS |
| 56 | Amanda Lindoo | Plagioclase shape: implications for magma mush dynamics |
| 58 | Natalia Lipiejko | Permeability of granular mixtures under shearing conditions: implications for pyroclastic density currents. |
| 60 | Natalia Lipiejko | Experimental and numerical rheometer: insights into the flow properties of fluidised and non-fluidised granular mixtures. |
| 62 | Ed Llewellin | The evolution of a basaltic fissure eruption |

| 64 | Sarah MacDonald | Carbonatite-syenite interaction and assimilation, Stjernøya, Norway. |
|-----|-------------------------|---|
| | Ana Martinez- Garcia | Model of the shallow crustal density distribution of the Krafla Volcanic System |
| 68 | Rhian Meara | Eldfell, 1973: Reconstructing the eruption night using archived documents and personal accounts |
| 70 | Rhian Meara | Magmatic Memories: Eldfell, 1973. |
| 72 | Kerys Meredew | The relationship between volcano growth, eruption style and instability at Anak Krakatau, Indonesia. |
| 74 | Sam Mitchinson | Identifying earthquake swarms at Mt. Ruapehu, a Machine Learning approach |
| 76 | Alexandra Morand | Upscaling host rock strength in Discrete Element Method models of viscous magma intrusion. |
| 78 | Wasim Mustafa | Preliminary textural and petrological insights from recent eruptive products of Fuego and Pacaya volcanoes, Guatemala |
| 80 | Ailsa Naismith | Once Upon A Time In The West: Communicating volcanic disaster through participatory arts-based methods $ \frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac$ |
| 82 | Julia Neukampf | Post-eruptive mobility of lithium in plagioclase |
| 84 | Alexander Nies | A novel model of volcanic plume evolution from high-temperature chemistry to reactive halogen processing in the atmosphere |
| 86 | Geri Peykova | Estimating volcanic ash plume heights using buoyancy waves |
| 88 | Jeremy Phillips | The Story So Far: Impacts and prospective hazard analysis of rainfall-triggered lahars on St. Vincent 2021-2022 |
| 90 | Shane Rooyakkers | Distinct but linked magma storage zones fed the 1975-1984 Krafla Fires eruptions |
| 92 | Pete Rowley | Spontaneous unsteadiness and resulting particle size mixing in PDCs and their deposits. |
| 94 | Ritwick Sen | Estimation of Volatile Degassing during Deccan Traps Eruption |
| 96 | Linda Sobolewski | Post-eruption lava dome development in the crater of Mount Saint Helens, Washington (USA) |
| 98 | Rahul Subbaraman | Imaging and visualising mesoscale 3D mush textures. |
| 100 | Rebecca Tanner | Research Outlook: Towards multi-method estimates of the intensity of explosive volcanic eruptions |
| 102 | Zoltan Taracsak | The sulfur content and isotopic composition of the subarc mantle. |
| 104 | Helen Thornhill | Precise determination of melt inclusion volumes using micro-XCT analysis |
| 106 | Norbert Toth | A three-dimensional insight into Icelandic magmatic mush |
| 108 | Gregor Weber | Coupling long-term magma evolution and short-term volcano deformation: Implications for uplift-subsidence patterns |
| 110 | Kate Williams | $\label{lem:emplacement} Emplacement\ Processes\ of\ the\ Whin\ Sill,\ Northern\ England-insights\ from\ macroscopic\ and\ microscopic\ structure\ observations$ |
| 112 | Rebecca WIlliams | Quantifying the sedimentation of ignimbrites – progress and challenges in analogue flume modelling of pyroclastic density currents and their deposits |
| 114 | Lindsay Young | The Petrogenesis of Virgin Island Granitoids: Implications for the growth of early-Earth-like continental material. |
| | | |