

Jackie E. Kendrick, PhD, FYAE

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Current Role

Since April 2022

Faculty staff, Ludwig-Maximilians-Universität, München, Germany

- Exploring magma-rock-fluid interactions using novel laboratory experimentation.
- Establishing mechanical, geochemical, geophysical and rheological characteristics of a range of volcanic rocks and magmas.
- Founding a cutting-edge high temperature *Geomechanical Laboratory*.

Previous Positions

November 2021 –
February 2022

Senior Research Associate, University of Liverpool, United Kingdom

Working in the *Volcanology and Geothermal Research Laboratory*:

- Examining the mechanisms of externally-triggered volcanic unrest.
- Management of high-T, high-P equipment, training of personnel, incl. mentorship and supervision.

March 2020 –
November 2021

Post-doctoral Research Associate, University of Edinburgh, United Kingdom

EPSRC Prosperity Partnership *Smart Pulses for Subsurface Engineering*:

- Using novel mechanical testing to elucidate the impact of pulsed pumping on hydraulic fracture generation.
- Defining strategies to enhance efficiency of resource extraction.

December 2019 -
March 2020

Guest Research Associate, University of Canterbury, Christchurch, New Zealand

Earthquake-triggered failure as a learning tool with Prof. B. Kennedy:

- Developing strategies for building virtual classrooms in geoscience.
- Interpreting rock and building materials' susceptibility to triggered failure by earthquake instabilities.

January 2017 -
February 2020

Early Career Fellow of the Leverhulme Trust, University of Liverpool, United Kingdom

Understanding the frictional behaviour of volcanic rocks and magmas:

- Integrating field and experimental studies to explore frictional behaviour.
- Developing bespoke equipment to monitor friction at high temperature.

July 2019 -
October 2019

Visiting Research Fellow, University of Iceland, Reykjavik, Iceland

Reservoir geomechanics:

- Using field and experimental studies to investigate how fluid flows in fractured geothermal reservoir rocks.

May 2013 -
December 2016

Post-doctoral Research Associate, University of Liverpool, Liverpool, United Kingdom

ERC funded project *Strain Localisation in Magmas*:

- Using field and experimental studies to investigate magma flow and fracture, and dynamic permeability evolution.
- Utilising in-situ 4D synchrotron x-ray imaging to illuminate volcanic processes.

April 2010 -
April 2013

PhD Candidate & High-T Lab Coordinator, Ludwig-Maximilians-Universität, München, Germany.

ERC funded project *Explosive Volcanism in the Earth System* with Prof. D. Dingwell:

- Rheological and petrographic investigations of deformation in magmas.
- Overseeing the experimental programme and user training for the volcanology lab.
- Experimental equipment design and modification.

Summer 2009

Intern, USGS Cascades Volcano Observatory, Washington, USA.

- Fieldwork, geophysical instrument deployment, processing of seismic data.

Qualifications

July 2013	Ph.D. (Summa cum laude) Ludwig-Maximilians-Universität, München. Thesis: <i>Strain localisation in dome building eruptions</i> . Supervisors: Prof. D.B. Dingwell, Prof. C. Trepmann.
Sept. 2009	MSci Geology (2:1), University College London. Dissertation: <i>Thermal and cyclic stressing of edifice rocks at Mount St. Helens</i> . Supervisor: Prof. P. Meredith.
June 2005	Geology, Physics, Chemistry & General Studies, (A-levels), Biology (AS-level), Hereford 6 th Form.

Scientific Output

I have 59 publications in peer-reviewed international journals, including first-author contributions in *Nature Geoscience* and *Nature Communications* and co-authored contributions in *Nature*, *Geology*, *Journal of Petrology* and *PNAS*. I have earned 1580 citations to date, giving me an H-index of 24. I have also had more than 160 abstracts at >55 conferences and workshops, including >70 first author contributions, >30 oral presentations, plus >25 invited talks and seminars at a range of conferences and international institutes.

Honours and Awards

- EUSA Teaching Award nominee (2022)
- **Honorary IUGG delegate and council member** (2019)
- Elected **Fellow of the Young Academy of Europe** (2018-)
- **Outstanding Young Scientist Award** of the European Geosciences Union, Geochemistry-Mineralogy-Petrology-Volcanology (GMPV) division (2016)
- Daiwa Foundation Award (2015)

Leadership and Management Roles

- Advisory role - Equality, Diversity and Inclusivity policy of the Volcanic & Magmatic Study Group (VMSG; 2021)
- **UK envoy and representative** for the IUGG council (2019)
- **IAVCEI representative** at the IUGG General Assembly (2019)
- **Athena Swan** - silver award application advisory committee, U. Liverpool (2018-2019)
- Early career volcanology liaison for the Geological Society of London (2018-2019)
- **Lead organiser of the Joint Assembly** (attendance: 450) of TSG-VMSG-BGA, Liverpool (2017)
- Project co-ordination and management as PI, Leverhulme Trust ECF (2017-2020)
- Committee member of the VMSG (2017-2020)
- **Scientific Advisory Committee** member for the GMPV division of EGU (2017-2019)
- Advisory role for the A-level Geology examination board OCR (2017-2019)
- Early Career Researcher funding committee member, distributing £100k annually (2017-2018)
- **Research Strategy Group** early career representative (2016)
- Supervision of 5 PDRAs, 11 PhDs, 3 interns and 6 MSc/ MSci students (2015-)
- Department seminar series co-organiser (2015-16)
- Planning, management and reporting of research finances for ERC and UKRI funds (2014-2020)
- Website design and content manager for Volcanology in Liverpool (2014-2020)
- Member of organising committee for British Geophysics Association (BGA) meeting, Liverpool (2014)
- Laboratory facility manager, U. Liverpool (2013-2020)
- Laboratory Safety co-ordinator, U. Liverpool (2013-2018)
- Post-graduate group spokesperson for Mineralogy & Volcanology, LMU-Munich (2010-2013)
- Social Secretary and year-group representative of the Greenough Society (Geology) at UCL (2006-2008)

Societal Activities and Positions of Trust

- Earth & Environmental Sciences **Evaluator and funding panel member**, *Fundação para a Ciência e a Tecnologia* (FCT), Scientific Employment Stimulus, Portugal (2021-2022 and 2022-2023)
- Member of the Research Staff Forum, Geological Sciences, U. Edinburgh (2021)
- Convener of Explosive or Effusive? What Controls Eruptive Style, and How Can We Forecast It? at AGU, USA (2021)
- Invited member of the UK Research & Innovation (UKRI) Early Career Forum (2021-)
- Evaluator for various funding agencies, incl. NERC, United Kingdom and FWF Der Wissenschaftsfonds, Austria (2020-)
- Communications, social media and outreach for the Young Academy of Europe (2019)
- Public Lecture for the Institute of Physics, Liverpool (2019)
- Distribution of permeability test kits to schools/ colleges & online teaching material development (2018-2019)
- Social media (twitter) for VMSG @vmsg_uk, >3,000 followers (2018-2019)
- Contributing member of LivWiSE [Liverpool Women in Science and Engineering] (2018-2020)
- **Assistant Editor** for Journal of Volcanology and Geothermal Research (2018-)
- Session convener at Cities on Volcanoes, Naples, Italy (2018)
- Continuing Professional Development (CPD) course design and delivery for A-level Geology teachers (2017-2019)
- Convener of Lava domes and flows at IAVCEI general assembly, Portland, USA (2017)
- **Review Editor** - Frontiers for Young Minds (2017-)
- EGU and TSG blog writer (2016-2017)
- Organiser and leader of CV workshops for PhD students, U. Liverpool (2016-2017)
- **Exhibitor and exhibit designer of 4D Science**, the Royal Society Summer Science Exhibition (2016)
- Exhibitor and exhibit designer of 4D Science, Manchester Science Festival, by the Royal Society (2016)
- Convener of Pores, Cracks, Fluids & Permeability, EGU, Vienna (2015-2019)
- Convener of Rheological and Mechanical Influences on Volcanic Eruptions, IUGG, Prague (2015)
- **Review Editor** - Frontiers in Earth Science - Volcanology (2015-)
- Session convener at Volcanologists and Igneous Petrologists Meeting, Liverpool (2015)

- Coordinator of Volcanology in Liverpool social media (twitter) @VolcanoLiver, >3,000 followers (2014-2022)
- University of Liverpool school visitor outreach content design and delivery (2014-2019)
- Demonstrator for University of Liverpool discovery days and school visits (2013-2019)
- Reviewer for various journals, incl. Springer-Nature, Elsevier, EGU and AGU (2012-)

Funding

Significant grants	<ul style="list-style-type: none"> • Royal Society of New Zealand Te Aparangi Marsden project (Co-Investigator) Shaking magma to trigger volcanic eruptions, U. Canterbury (2017-2022), 650k NZD • Leverhulme Trust Early Career Fellowship (Principal Investigator) Understanding the frictional behaviour of volcanic rocks and magmas, U. Liverpool (2017-2020), £282k • German Research Foundation (DFG) Grant (Co-Investigator) 2D and 3D fabric quantification of conduit textures to understand eruption dynamics and mechanisms: unique in situ example of Mt Unzen, LMU-Munich (2016-2021) ~580k EUR • Landsvirkjun PhD studentship sponsor funding (Co-Investigator) for 3 years Constraining mechanical and permeability properties of the Krafla geothermal reservoir, U. Liverpool (2015-2019) ~£45k
Small grants & seed funds	<ul style="list-style-type: none"> • Equipment fund (Principal Investigator) for acoustic monitoring of large-scale testing (2021) £9k • Early Career Researchers Fund (Principal Investigator) for studying magma fragmentation (2019) £5k • Early Career Researchers Fund (Principal Investigator) to test resilience to ballistic impacts, forging connections between volcanology and engineering (2017) £2k • Impact Funds Bursary (Principal Investigator) to develop a low-cost A-level Geology permeability practical including test kits (2017) £800 • Bursary from the Tectonic Study Group for Geological Hazards of California field school (2017) £1k • Landsvirkjun Research Funds bursary (Co-Investigator) for optimising energy extraction from deep geothermal resources (2016-2019) ~£28k • Daiwa Foundation Award (Co-Investigator) for field study of Unzen volcano (2015) £7.5k • Diamond Light Source (Co-Investigator) beam-time EE12581 (2015), equivalent funding ~£24k • Registration Grant for IUGG in Prague, Czech Republic (2015) ~£800 • Registration Grant for IAVCEI in Kagoshima, Japan (2013) ~£1k • Diamond Light Source (Co-Investigator) beam-time SP9220 (2013), equivalent funding ~£29k • Registration Grant for Cities on Volcanoes 7 in Colima, Mexico (2012) ~£500 • Student Travel Grant for Goldschmidt in Montreal, Canada (2012) ~£2k • DAAD Teaching Assistantship “Rock-fluid interaction”, LMU Munich (2012-2013) 3k EUR • DAAD Teaching Assistantship “Petrophysics”, LMU Munich (2011-2012) 3k EUR
Funding partnerships	<ul style="list-style-type: none"> • European Research Council, consolidator grant (project partner) MODERATE: Magma outgassing during eruptions and geothermal exploration, U. Liverpool, now LMU-Munich (2021-2026). 2.7M EUR • NERC standard grant (project partner) Transient magma permeability and gas flow: a combined experimental and theoretical model, U. Liverpool, now LMU-Munich (2021-2024). £633k • The GeoX Suite (project partner) of XCT-synchrotron facilities funded by NERC (2019-). Led by U. Strathclyde, with input from over 20 institutions (2019-2023). £271k • NERC urgency Grant (project partner) Rapid deployment of a multi-parameter geophysical experiment at Santiaguito volcano, Guatemala, U. Liverpool (2016-2017). £38k • NERC standard grant (project partner) Shedding new light on volcanoes: real time synchrotron x-ray tomography of magmatic phenomena, U. Manchester and U. Liverpool (2015-2018). £489k • European Research Council, starting grant (project partner) Strain Localisation in Magmas, U. Liverpool (2012-2017). 2.1M EUR

Teaching

- Teaching assistant for “Applied Environmental Hydrogeology” master course, U. Edinburgh (2021) **nominated for an EUSA Teaching Award*
- Invited field leader and lecturer for “Frontiers Abroad” masters-level residential field school “Geology of New Zealand” with U. Canterbury (2020)
- Online learning materials development for “**GeoHub**” (2019)
- Distribution of permeability test kits to 12 A-level Geology schools and colleges (2019)
- Demonstrator for igneous petrology and microscopy, 3rd Yr. undergraduate level, U. Liverpool (2019)
- Lecturer and content co-designer, Continuing Professional Development course for A-level Geology teachers, University of Liverpool, accredited by the Geological Society of London (2017-2019)
- Geology residential field school “Introductory methods”, Pembrokeshire, U. Liverpool (2017-2018)
- Leader for post-graduate, academic field trip “Geology of Long Valley Caldera”, California (2017)
- Post-graduate field school “Natural Hazards”, California, in conjunction with the Tectonics Study Group (2017)

- Module co-leader, course writer and lecturer for “Introduction to Volcanology” for the general public, Continuing Education, Liverpool (2016) **commended for being rated 10/10 by all participants*
- Short-course “Thermal imaging methods”, Workshops on Volcanoes, Quetzaltenango, Guatemala (2015)
- Developed course “Peer review training” for PhD students, UoL (2015-2019)
- Field-guide for 3rd Yr. Structural mapping in Nisyros Caldera, Greece (2014)
- Demonstrator for U. Liverpool Earth and Environmental Science open days for course applicants (2013-2016)
- Taught “Introduction to Geology for Civil Engineers”, School of Engineering, U. Liverpool (2013-2017)
- Teaching Assistant and lecturer (DAAD funded) for the Master level class “Rock-fluid interaction”, Ludwig-Maximilians-Universität, Munich (2012-2013)
- Design and delivery of short course “Multiphase magma rheology and experimentation in volcanology” Ludwig-Maximilians-Universität, Munich (2012)
- Teaching Assistant and lecturer (DAAD funded) for the Master level class “Petrophysics”, Ludwig-Maximilians-Universität, Munich (2011-2012)

Supervision

Current	A. Lamur	PDR (UoL then LMU) 2021-2024: <i>Transient magma permeability</i>
	J. Weaver	PhD 2017-2022 (UoL): <i>Porosity and permeability development in evolving fragmental volcanic systems</i>
Former	A. Martin	MSc (UoE) 2020-2021: <i>Cement integrity to hydrogen storage</i>
	J. Schauthroth	RA 2017-2021 (UoL): <i>Foaming magma in differential stress and temperature fields</i>
	A. Hughes	PhD 2016-2021 (UoL): <i>Frictional behaviour of volcanic debris avalanches following catastrophic flank collapses</i>
	E. Hartung	PDR (UoL) 2018-2020: <i>Mineralogical fingerprints of strain localisation</i>
	T. Yilmaz	PDR (LMU Munich) 2016-2020: <i>2D and 3D fabric quantification of conduit textures to understand eruption dynamics</i>
	T. Lea	MSci 2018-2019 (UoL): <i>Controlling gas flow and foaming fragmental magma</i>
	A. Colgate	MSc 2017-2019 (Portsmouth): <i>Remote monitoring of flank instability at Mt. Etna</i>
	A. Lamur	PDR 2017-2018 (UoL): <i>Permeability in volcanic and geothermal systems</i>
	A. Bain	PhD 2014-2018 (Edinburgh, informal): <i>Eruption dynamics of cyclic vulcanian explosions from Galeras volcano, Colombia</i>
	M. Churka	Intern 2017 (UoL): <i>A low-cost, bench-top permeability method for teaching A-level Geology</i>
	D. Alsmairi	MSci 2016-2017 (UoL): <i>High-velocity impact of volcanic ballistic clasts</i>
	G. Eggertsson	PhD 2015-2019 (UoL): <i>Constraining mechanical and permeability properties of the Krafla geothermal reservoir, North-East Iceland</i>
	P. Wallace	PhD 2015-2019 (UoL): <i>Dynamic rheology of ascending magma during lava dome eruptions: Effusive–explosive activity</i>
	R. Coats	PhD 2015-2019 (UoL): <i>The rheology of pore and crystal bearing magmas.</i>
	C. Harnett	PhD 2015-2019 (Leeds, informal): <i>Mechanics of discontinuities under elevated temperatures and pressures</i>
	R. Wall	PDR 2015-2016 (UoL): <i>Lava rupture in extensional regimes</i>
	A. Rogers	MSci 2015-2016 (UoL): <i>Thermo-mechanics of material failure</i>
	R. Kendrick	Intern 2015 (UoL): <i>Geomagnetism in lavas with varying degrees of shear</i>
	A. Lamur	PhD 2014-2017 (UoL): <i>Development, impact and longevity of fractures in magmatic, volcanic and geothermal systems</i>
O. Lamb	PhD 2014-2017 (UoL, informal): <i>A seismic, acoustic and experimental study of lava dome eruptions</i>	
F. Iddon	Intern 2014-2015 (UoL): <i>Thermal stressing and columnar jointing</i>	
W. Rozanski	MSci 2014-2015 (UoL): <i>Assessment of structural stability of Mt. Etna, Italy</i>	
A. Hornby	PhD 2013-2016 (UoL): <i>Fracture, friction and fragmentation: Brittle processes in lava domes</i>	

Solicited presentations

- Invited speaker at American Geophysical Union (AGU), New Orleans/ virtual, USA (2021)
- Keynote presentation at VMSG (virtual), UK (2021)
- Volcanology Group Seminar, University of Canterbury, New Zealand (2020)
- Institute of Physics public lecture, Liverpool, UK (2019)
- Geosciences EPS seminar, University of Edinburgh, UK (2019)
- Geophysics group seminar, Karlsruhe Institute of Technology, Germany (2019)
- Department Seminar, University of Iceland, Iceland (2019)
- Bullard Lecture, University of Cambridge, UK (2019)
- Workshop on Rock Friction, University of Liverpool, UK (2019)
- Manchester-Liverpool volcanology showcase, University of Manchester (2019)
- School of Environmental Sciences research showcase speaker, University of Liverpool, UK (2019)

- Invited speaker at American Geophysical Union (AGU), Washington DC, USA (2018)
- Invited speaker at Cities on Volcanoes (CoV), Naples, Italy (2018)
- School Forum speaker, Ludwig-Maximilians-Universität, München, Germany (2018)
- Department Seminar, University of Canterbury, New Zealand (2018)
- Department Seminar, University of Portsmouth, UK (2017)
- PGR conference keynote speaker, University of Portsmouth, UK (2017)
- Keynote – GMPV Division, Outstanding Young Scientist Award presentation at the European Geoscience Union (EGU), Vienna, Austria (2016)
- Department Seminar, University of East Anglia, UK (2016)
- Invited speaker at European Geoscience Union (EGU), Vienna, Austria (2015)
- Research in-progress seminar, University of Liverpool, UK (2015)
- Department Seminar, University of Liverpool, UK (2014)
- Invited speaker at European Geoscience Union (EGU), Vienna, Austria (2013)
- Department Seminar, University of Liverpool, UK (2013)
- Department Seminar, Universidad de Colima, Mexico (2012)
- Department Seminar, Ludwig-Maximilians-Universität, München, Germany (2012)

Experimental and Analytical Experience

- True triaxial and polyaxial rock deformation testing (GREAT cell)
- Hydraulic fracture testing using monotonic and pulsed pressure rigs
- High-velocity rotary shear experiments to study frictional properties of rocks/ magmas (Marui)
- High-T triaxial and in-situ permeability tests using MAGDA, a 200MPa triaxial press (Sanchez)
- In-situ tomographic imaging of high-T magma deformation at Diamond Light Source synchrotron using:
 - A custom-built uniaxial rig
 - Modified concentric cylinder apparatus
- Modification and optimisation of low to high temperature apparatus (Instron, Marui, STS, various)
- Rheological studies using a high temperature uniaxial presses (Instron, Voggenreiter, various)
- Magma viscosity investigations using concentric cylinder (Brucker)
- Gas and water permeability measurements (Sanchez and Vinci permeameters)
- Strength and creep tests using room-temperature, uniaxial presses (Instron, Voggenreiter, Dartec, various)
- Active and passive monitoring of experiments using acoustic emissions (ASC, Mistras, Physical Acoustic Corp.)
- Thermal stressing experiments and handling melt (various high-temperature furnaces)
- Ballistic impact testing using a 100 bar pressure-drop gas gun
- Fragmentation threshold studies using rapid decompression apparatus
- Quantitative element mapping using a FEI QEMSCAN SEM
- Electron back-scatter diffraction (EBSD) using both CamScan and Philips SEMs
- FLIR infra-red imaging of experiments and explosive volcanic eruptions
- Micropenetration viscosity measurements using a push-rod Bähr 802 V dilatometer
- Rock magnetic measurements using VFTB and Kappabridge
- Differential scanning calorimetry on a NETZSCH DSC 404 F1 Pegasus
- Quantitative Electron-probe Microanalysis (EPMA)
- WDA on, amongst others, a CAMECA SX100 scanning electron microprobe (SEM)
- XRF using a Philips Magix-Pro X-ray fluorescence spectrometer
- Powder XRD using a Philips X'Pert Pro Multipurpose X-ray Diffractometer
- Investigations into mass movement dynamics at the experimental debris-flow flume (Deschutes)
- Use of TinyPerm portable permeameter for in-situ measurements
- Experience with sample preparation for above procedures

Field Experience

- Geology and hazards of the central volcanic zone, New Zealand (teaching, field school)
- Reconnaissance and mapping of lava flows at Landmannalaugar, Iceland
- Examination/ sampling of cores from geothermal reservoirs with Landsvirkjun and Reykjanesvirjun, Iceland
- Mapping and shear zone sampling at Markagunt and Sevier gravity slides, Utah, USA
- Exploring strain localisation across scales in Long Valley Caldera, USA (teaching, field school)
- Mapping and logging of landslide deposits at Pichu-Pichu volcano, Peru
- Geological and Environmental hazards of California, USA (teaching, TSG Field school)
- Geological history of Pembrokeshire, UK (teaching, field school)
- Thermal, optical, seismic and acoustic monitoring of Santiaguito volcano, Guatemala
- Lava dome, ash and ballistic examination and sampling at Santiaguito volcano, Guatemala
- Mapping and sample collection to study flank instability at Etna, Italy
- Sample collection and mapping of the Holuhraun/ Bárðarbunga fissure eruption, Iceland
- Structural mapping, thermal monitoring and in-situ permeability at Nisyros Caldera, Greece
- Thermal, seismic and acoustic monitoring at Pacaya volcano, Guatemala

- Structural mapping, in-situ permeability and sample collection at Pacaya volcano, Guatemala
- Structural investigations, magnetic surveys and in-situ permeability at Mount Unzen, Japan (x3)
- Ash collection at Sakurajima volcano, Japan
- Structural mapping at Glencoe, Scotland
- Field mapping and sampling of dykes at Krafla volcano, Iceland
- Mapping of columnar jointing morphologies in basalt and sample collection in Iceland
- Structural mapping of the dome and sample collection at Volcán de Colima, Mexico
- Structural mapping and sample collection at Ceboruco volcano, Mexico
- Reconnaissance fieldtrip to the “giant pumices” of La Primavera, Mexico
- Remote monitoring and sampling at the Soufrière Hills volcano, Montserrat
- Mapping of shear zones at Tarawera volcano, New Zealand
- Preliminary visit and sample collection at Ngongataha volcano, New Zealand
- Sample collection in and around Mount St. Helens, USA in collaboration with the USGS, University College London and the University of British Columbia
- Lava flow mapping and sample collection at Newberry Caldera, USA (with USGS and USFS)
- Logging of tephra deposits at Mount St. Helens, USA (with USGS and PIRE)
- Assistance with the deployment of spiders (portable telemetered stations) at Mount St. Helens, USA for the OASIS (Optimized Autonomous Space In-situ Sensor-web) project with USGS and NASA
- Setting up GPS and seismic base stations at Crater Lake, USA (with CVO)
- Mapping volcanic deposits cut by the Toutle River, Washington, USA (with CVO)
- GPR and magnetic surveys in the Abruzzo Mountains, Central Italy
- Additional field experience - Campi Flegrei and Vesuvius, Italy; Almeria and Pyrenees, Spain; Ries Crater, Germany; Lake District, Snowdonia, Devon, Cornwall, Isle of Wight and Isle of Arran, UK.

Selected Media Coverage

2020	<i>The Giant's Causeway</i> episode for <i>Impossible Planet</i> , Blizzard Road Productions
2019	<i>International Day of Women and Girls in Science</i> interview for the Bournemouth Echo
2019	<i>Volcanic ash particles under the microscope</i> on European Commission News; after Hornby et al., <i>Nat. Sci. Rep.</i> 2019: also generated 13 related news articles; >3.7k social media interactions; potential audience >29M
2018	<i>Hot, warm or cold? New insight into how Giant's Causeway formed</i> ; after Lamur et al., <i>Nat. Comms.</i> 2018: generated 71 related articles (incl. Guardian); >14k social media interactions; potential audience = 207 Million
2015	<i>'Frictional heat' as a new trigger for explosive volcanic eruptions</i> ; after Lavallée et al., <i>Nature</i> 2015: generated 19 related articles; >8k social media interactions; potential audience >29 Million
2014	<i>Volcanic drumbeat seismicity</i> ; after Kendrick et al., <i>Nat. Geosci.</i> 2014: generated 33 related articles; >1.5k social media interactions; potential audience >35 Million
2009	<i>Mt. Saint Helens: Back from the Dead</i> , 30 th anniversary documentary, NOVA

Professional Memberships

<i>Since</i> -	2018: Young Academy of Europe; Euroscience
	2017: Geological Society of London
	2014: VMSG; TSG
	2012: Geochemical Society; IAVCEI
	2009: AGU; EGU; GSA

Conferences, Symposia and Workshops

2022	DMG joint sections meeting Geochemistry/Petrology (Mainz, Germany)
2021	VMSG (virtual, UK); TSG (virtual, UK); EGU (virtual, Austria); Young Academy of Europe Annual meeting (virtual, Spain); AGU (virtual, USA)
2020	COUFRAC (virtual, South Korea); EGU (virtual, Austria); 8th European Geothermal Workshop (virtual, Europe); AGU (virtual, USA)
2019	VMSG (St. Andrews, UK); EGU (Vienna, Austria); Building Bridges joint assembly of Academia Europaea and the Young Academy of Europe (Barcelona, Spain); Paywall: The business of scholarship (Liverpool, UK); IUGG (Montreal, Canada); Workshop on Rock Friction (Liverpool, UK); European Academies meeting (Helsinki, Finland)
2018	VMSG (Leeds, UK); EGU (Vienna, Austria); Building Bridges joint assembly of the Academia Europaea and the Young Academy of Europe (Barcelona, Spain); Cities on Volcanoes (Naples, Italy); AGU (Washington DC, USA)
2017	Joint Assembly of TSG-VMSG-BGA (Liverpool, UK); EGU (Vienna, Austria); Joint meeting of Academia Europaea, All European Academies and the Young Academy of Europe (Budapest, Hungary); Fault zone processes (Manchester, UK); IAVCEI (Portland, USA); AGU (New Orleans, USA)
2016	EGU (Vienna, Austria); Workshops on Volcanoes (Quetzaltenango, Guatemala)

- 2015** VMSG (Norwich, UK); EGU (Vienna, Austria); IUGG (Prague, Czech Republic); 11th Euroconference on Rock Physics and Geomechanics (Ambleside, UK); AGU Joint Assembly (Montreal, Canada); Volcanologists and Igneous Petrologists (Liverpool, UK)
- 2014** Advances in Earthquake Source Physics (London, UK); MEMOVOLC (Pisa, Italy); 10th Euroconference on Rock Physics and Geomechanics (Aussois, France); British Geophysical Association (Liverpool, UK); AGU (San Francisco, USA)
- 2013** VMSG (Bristol, UK); EGU (Vienna, Austria); The Signals of Magma Motion Symposium (Organised, Liverpool, UK); IAVCEI (Kagoshima, Japan); UCL Johnston-Lavis workshop (London, UK); AGU (San Francisco, USA)
- 2012** EGU (Vienna, Austria); Goldschmidt (Montreal, Canada); Melts, Glasses and Magmas (Munich, Germany); Cities on Volcanoes 7 (Colima, Mexico); AGU (San Francisco, USA)
- 2011** EGU (Vienna, Austria); 9th Euroconference on Rock Physics and Geomechanics (Trondheim, Norway); Fragile Earth (Munich, Germany); IUGG (Melbourne, Australia); AGU (San Francisco, USA)
- 2010** EGU (Vienna, Austria); Melts, Magmas and Glasses (Munich, Germany); Physico-chemical processes in seismic faults (Padova, Italy); AGU (San Francisco, USA)
- 2009** GSA (Portland, USA); AGU (San Francisco, USA)

Publications:

1. Kendrick, J.E., Lavallée, Y., Ferk, A., Perugini, D., Leonhardt, R. and Dingwell, D.B., 2012, Extreme frictional processes in the volcanic conduit of Mount St. Helens (USA) during the 2004-2008 eruption, *Journal of Structural Geology*, vol. 38, 61-76. <http://dx.doi.org/10.1016/j.jsg.2011.10.003>
2. Kendrick, J.E., Lavallée, Y., Hess, K-U., Heap, M.J., Gaunt, H.E., Meredith, P. and Dingwell, D.B., 2013, Tracking the permeable porous network during strain-dependent magmatic flow, *Journal of Volcanology and Geothermal Research*, vol. 260, 117-126. <http://dx.doi.org/10.1016/j.jvolgeores.2013.05.012>
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