

Dr Alister Smith MEng PhD GMICE FHEA

Senior Lecturer (Associate Professor) in Civil Engineering

School of Architecture, Building and Civil Engineering (ABCE), Loughborough University (LU), Leicestershire, UK
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EDUCATION

Doctor of Philosophy, Civil Engineering (Geotechnical), Pass (no corrections) Loughborough University Thesis: <i>Quantification of slope deformation behaviour using acoustic emission monitoring</i> Supervisors: Prof. Neil Dixon and Dr Gary Fowmes Examiners: Dr Joel Smethurst (University of Southampton) and Dr Paul Fleming	2012-2015
Master of Engineering, Civil Engineering, First Class Honours Loughborough University <i>Graduating top of the class with an average assessment of 80% and winning two prestigious University awards</i>	2008-2012

EMPLOYMENT

Senior Lecturer in Civil Engineering Loughborough University	06/2020-present
EPSRC Fellow and Lecturer in Civil Engineering Infrastructure Loughborough University	06/2017-06/2020
Lecturer in Infrastructure Engineering Loughborough University	02/2017-06/2017
EPSRC Doctoral Prize Fellow Loughborough University	09/2015-02/2017
Doctoral Researcher Loughborough University	10/2012-08/2015
Graduate Geotechnical Engineer Coffey Geotechnics, Manchester, UK	06/2012-10/2012
Research Assistant in Construction Management Loughborough University	06/2011-09/2011

PERSONAL FUNDING AWARDS (£462k)

Title: <i>Philip Leverhulme Prize in Engineering</i> Funder: The Leverhulme Trust Value: £100,000 Role: Principal Investigator Status: Awarded	2020-2022
Title: <i>Listening to Infrastructure</i> Funder: EPSRC Postdoctoral Fellowship (EP/P012493/1) Value: £284,824 Role: Principal Investigator Status: Awarded	2017-2020
Title: <i>Listening to Infrastructure: Acoustic Emission Sensing of Geotechnical Assets</i> Funder: RAEng (Engineering for Development Research Fellowship) Value: £477,089 Role: Principal Investigator Status: Offered – declined as EPSRC Fellowship accepted	2017

Title: <i>EPSRC Doctoral Prize Fellowship</i>	2015-2017
Funder: EPSRC / LU	
Value: £72,360	
Role: Principal Investigator	
Status: Awarded	
Title: <i>Hawley Award for Engineering Innovation</i>	2015-2016
Funder: Worshipful Company of Engineers (The Engineers Trust)	
Value: £5,000	
Role: Principal Investigator	
Status: Awarded	

GRANTS (£768k)

Title: <i>Assessment, Costing and enHancement of long life, Long Linear assEtS (ACHILLES)</i>	2018-2022
Funder: EPSRC Programme Grant (EP/R034575/1)	
Value: £583,669 to LU of £4,872,904 total	
Role: Co-Investigator	
Status: Awarded	
Title: <i>Community Slope SAFE: A low-cost landslide early warning system</i>	2016-2018
Funder: EPSRC IAA & Institutional Global Development	
Value: £184,100	
Role: Co-Investigator	
Status: Awarded	

SMALL GRANTS & EQUIPMENT (£120k)

Title: <i>Accelerated Infrastructure Ageing Simulator</i>	2019-2021
Funder: EPSRC Core Equipment (EP/T024704/1)	
Value: £67,100 of £200,000 award	
Role: Co-Investigator	
Status: Awarded	
Title: <i>Hosting Prof. Ian Moore (Queen's Uni, Canada) as Visiting Fellow</i>	2019
Funder: LU Institute for Advanced Studies	
Value: £1,700	
Role: Principal Investigator	
Status: Awarded	
Title: <i>Intelligent system for alerting on the movement of masses</i>	2018
Funder: Consultancy for BioNano	
Value: £6,000	
Role: Co-Investigator	
Status: Awarded	
Title: <i>Acoustic Emission data acquisition equipment</i>	2017
Funder: EPSRC (EP/R010102/1) via Newcastle University UKCRIC Laboratories	
Value: £32,420	
Role: Co-Investigator	
Status: Awarded	
Title: <i>Visiting Prof. Kenichi Soga (University of California, Berkeley)</i>	2017
Funder: Santander Mobility Award	
Value: £1,000	
Role: Principal Investigator	
Status: Awarded	

Title: <i>COST ACTION TU1202 events in ETH Zurich and Lisbon</i>	2014-2016
Funder: COST ACTION TU1202	
Value: £1,500	
Role: Co-Investigator	
Status: Awarded	
Title: <i>Stability monitoring of a flood embankment at South Ferriby</i>	2016
Funder: Consultancy for the Environment Agency	
Value: £5,750	
Role: Co-Investigator	
Status: Awarded	
Title: <i>Stability monitoring of landslides in Monmouthshire</i>	2016
Funder: Consultancy for Monmouthshire County Council	
Value: £4,000	
Role: Co-Investigator	
Status: Awarded	
Title: <i>Visiting Prof. Andy Take (Queen's Uni, Canada) and Prof. Jon Fannin (UBC, Canada)</i>	2013
Funder: Robert's International Travel Fund	
Value: £1,000	
Role: Co-Investigator	
Status: Awarded	

ENTERPRISE & IMPACT HIGHLIGHTS

World-wide exclusive license of AE slope monitoring IP to RST Instruments Ltd.	2017–present
Co-author of a REF2021 ICS on Slope ALARMS and Community Slope SAFE	2017-2021
Field trials of Community Slope SAFE in Malaysia and Myanmar	2017-2021
Field trials of Slope ALARMS in the UK, Italy, Austria and Canada	2012-2021
Interview in televised film on Slope ALARMS for BBC One	2016
Interview in televised film on Slope ALARMS for the Discovery Channel	2014
Support of a REF2014 ICS on Slope ALARMS	2014

EXTERNAL AWARDS

Thomas Telford Premium (Institution of Civil Engineers)	2021
<i>Awarded for the 'best paper of the year' in ICE: Smart Infrastructure & Construction (Smith & Dixon, 2020)</i>	
Philip Leverhulme Prize in Engineering (£100,000)	2019
<i>One of five winners in Engineering, selected by the Leverhulme Trust Board</i>	
<i>For "researchers whose work has had international impact and whose future research career is exceptionally promising"</i>	
<i>External referees for my application were Prof. Kenichi Soga (University of California, Berkeley), Prof. Jonathan Fannin (University of British Columbia, Canada) and Prof. David Chapman (University of Birmingham)</i>	
Professor W. R. Dearman QJEGH Young Author of the Year Award	2017
<i>Voted by the Editorial Board of the Quarterly Journal of Engineering Geology & Hydrogeology</i>	
Hawley Award (£5,000) for Engineering Innovation (Worshipful Company of Engineers)	2015
<i>Awarded annually by the Engineers Trust for 'the most outstanding engineering innovation that delivers demonstrable benefit to the environment' after a presentation and panel interview</i>	
Thomas Telford Premium (Institution of Civil Engineers)	2015
<i>Awarded for the 'best paper of the year' in Géotechnique Letters (Smith et al., 2014)</i>	
Institution of Civil Engineers Merit Award – Studies and Research Category winner	2015
<i>Awarded for development of the Slope ALARMS landslide early warning system</i>	
Best paper and presentation winner (British Geotechnical Association)	2014
<i>Awarded at the 13th Young Geotechnical Engineers Symp. after competing with 37 other researchers and practitioners</i>	

UNIVERSITY AWARDS

Early Career Achievement Award (ABCE Awards 2019)	2019
<i>“Alister combines outstanding research with enterprise activity that is enabling his work to have impact across the world”</i>	
<i>“His research and international profile are outstanding for someone so early in their academic career”</i>	
Outstanding Research Project Award (LU Built Environment Awards)	2018
<i>Awarded for the Community Slope SAFE (low-cost landslide early warning system) project</i>	
Research Paper of the Year (LU Built Environment Awards)	2018
<i>Highly commended for the Smith et al. 2017 Géotechnique paper</i>	
Loughborough University Enterprise Awards – ‘One to watch’ category	2017
<i>Highly commended for “Community Slope SAFE: Low cost landslide early warning system”</i>	
Institution of Civil Engineers Prize (£250)	2012
<i>Awarded annually by LU to the undergraduate MEng civil engineer who graduates at the top of the cohort</i>	
East Midlands Geotechnical Group Prize (£200)	2012
<i>Awarded annually by LU for the best undergraduate geotechnical research project</i>	

PROFESSIONAL AFFILIATIONS

Fellow of the Higher Education Academy
 Fellow of the Geological Society of London
 Graduate Member of the Institution of Civil Engineers (CEng Career Appraisal Approved)
 Member of the British Geotechnical Association
 Member of the International Society for Soil Mechanics and Geotechnical Engineering

EXTERNAL SERVICE

Peer Review, United States Department of Agriculture Innovation Fund	2019
Peer Review College, UKRI, Future Leaders Fellowships	2018–present
Panel Member and Peer Review, NERC, Innovative Monitoring Approaches Call	2017
Editorial Board Member, Quarterly Journal of Engineering Geology & Hydrogeology	2017-2019
Expert Peer Review for 20 international journals, including:	2014–present
<i>Applied Acoustics</i>	IF=2.297, SJR=0.824, SNIP=1.614
<i>Bulletin of Engineering Geology and the Environment</i>	IF=2.349, SJR=0.896, SNIP=1.249
<i>Canadian Geotechnical Journal</i>	IF=3.128, SJR=1.753, SNIP=1.930
<i>Energies</i>	IF=2.990, SJR=0.612, SNIP=1.156
<i>Engineering Geology</i>	IF=4.420, SJR=2.209, SNIP=2.338
<i>Geotechnical Testing Journal</i>	IF=1.362, SJR=0.781, SNIP=1.182
<i>Géotechnique</i>	IF=4.090, SJR=2.571, SNIP=2.785
<i>Géotechnique Letters</i>	IF=2.004, SJR=1.224, SNIP=1.055
<i>International Journal of Rock Mechanics and Mining Sciences</i>	IF=4.560, SJR=2.185, SNIP=2.519
<i>Journal of Civil Structural Health Monitoring</i>	IF=2.450, SJR=0.654, SNIP=1.412
<i>Journal of Geophysical Research: Earth Surface</i>	IF=4.250, SJR=1.964, SNIP=1.555
<i>Journal of Hydrology</i>	IF=4.938, SJR=1.830, SNIP=1.917
<i>Landslides</i>	IF=5.447, SJR=1.880, SNIP=1.928
<i>Measurement</i>	IF=2.826, SJR=0.724, SNIP=1.746
<i>Natural Hazards</i>	IF=2.604, SJR=0.880, SNIP=1.191
<i>Natural Hazards and Earth System Sciences</i>	IF=3.321, SJR=1.024, SNIP=1.336
<i>Near Surface Geophysics</i>	IF=1.186, SJR=0.436, SNIP=1.159
<i>Proceedings of the ICE: Geotechnical Engineering</i>	IF=1.219, SJR=0.763, SNIP=0.822
<i>Quarterly Journal of Engineering Geology and Hydrogeology</i>	IF=1.263, SJR=0.443, SNIP=0.695
<i>Sensors</i>	IF=3.302, SJR=0.443, SNIP=1.550

INTERNAL SERVICE

Undergraduate Industrial Placements Coordinator, ABCE	2020-present
Mentoring Fellowship (EPSRC, UKRI FLF, RAEng) applicants, LU <i>Supported 15+ applicants via sitting on panels, mock interviews, proposal peer review and one-to-one advice</i> <i>Recent successes include Dr Olumasola Afolabi (RAEng Fellowship) and Dr Long Seng To (RAEng Fellowship)</i>	2017-present
Research Committee, ABCE	2017-2020
Infrastructure Research Group Workshops Coordinator, ABCE	2017
Staff-Student Liaison Committee, Engineering Doctorates, ABCE	2017
Welfare and Communications Committee, ABCE <i>Part of the team responsible for a successful Athena Swan Bronze Award submission in 2017</i>	2014–2017
UG Open Days and Visit Days, ABCE	2013-present

INVITED TALKS

Invited evening lectures for professional bodies: <i>British Geotechnical Association, Institution of Civil Engineers, London</i> <i>Vancouver Geotechnical Society, Canadian Geotechnical Society, Vancouver (cancelled due to COVID-19)</i>	2020-present
Invited seminar talks at academic institutions: <i>University of Alberta, Civil Engineering Seminar Series, Edmonton, Canada</i> <i>University of Birmingham, Civil Engineering Seminar Series, UK (two times)</i> <i>University of British Columbia, Civil Engineering Seminar Series, Vancouver, Canada (two times)</i> <i>University of California, Berkeley, Civil Engineering Seminar Series, USA</i> <i>University of Cambridge, Smart Infrastructure & Construction Seminar Series, UK</i> <i>University of Oxford, Civil Engineering Seminar Series, UK</i> <i>Queen's-RMC GeoEngineering Seminar Series, Kingston, Canada (three times)</i> <i>Tongji University, Department of Geotechnical Engineering, Shanghai, China</i> <i>Tsinghua University, Department of Engineering Physics, Beijing, China</i>	2014-present
Invited seminar talks at industry and stakeholder organisations: <i>Alberta Transportation, Alberta, Canada</i> <i>BC Hydro, Vancouver, Canada (two times)</i> <i>Canadian Railways (National and Pacific), Alberta, Canada</i> <i>Community Care for Emergency Response & Rehabilitation (CCERR), Myanmar</i> <i>Fugro, UK</i> <i>Mobiltex, Calgary, Canada</i> <i>Network Rail, UK</i> <i>Public Works Department of Malaysia, Kuala Lumpur</i> <i>RST Instruments Ltd., Vancouver, Canada</i> <i>Severn Trent Water, UK</i> <i>SlopeWatch community group, Malaysia</i> <i>Thurber Engineering Ltd., Alberta, Canada</i>	2014-present
Invited plenary talks at conferences: <i>Fellowship Inaugural Lecture, Loughborough, UK</i> <i>Agile Researcher Conference, Loughborough, UK</i> <i>East Midlands University Association Conference 'Inspiring Futures', UK</i> <i>Kazakhstan PhD Association Research & Enterprise Webinar Series</i> <i>Permanent Way Institution Technical Seminar, Nottingham, UK</i> <i>Vadose zone workshop, Newcastle, UK</i>	2015-present

POSTDOCTORAL RESEARCH ASSOCIATES

Dr Shijin Li	2021-present
Project: <i>Modelling acoustic emission generation in soils using DEM</i>	
Dr Amr Morsy	2020-present
Project: <i>ACHILLES (EPSRC Programme Grant) Research Challenge 2: Asset Performance</i>	
Dr Harry Postill	2018-2020
Project: <i>ACHILLES (EPSRC Programme Grant) Research Challenge 2: Asset Performance</i>	

PHD STUDENT SUPERVISION

Lizheng Deng	2020
<i>Visiting PhD student from Tsinghua University, China</i>	
Primary Supervisor: Prof. Neil Dixon	
Secondary Supervisor: Dr Alister Smith	
Visit: February 2020 to August 2020	
Dan Gibbs	2019-2022
<i>Climate change impacts on infrastructure earthworks</i>	
Primary Supervisor: Dr Alister Smith	
Secondary Supervisor: Dr Tom Dijkstra and Dr Ashraf El-Hamalawi	
Thesis submission: September 2022	
Hao Wang	2019-2022
<i>Structural health monitoring and big data analysis for resilient infrastructure</i>	
Primary Supervisor: Dr Alister Smith	
Secondary Supervisor: Dr Giorgio Barone	
Thesis submission: September 2022	
Tiago Biller	2017-2021
<i>Early detection of seepage-induced internal instability using acoustic emission</i>	
Primary Supervisor: Dr Alister Smith	
Secondary Supervisor: Prof. Neil Dixon	
Thesis submission: March 2021	
Helen Heather-Smith	2016-2020
<i>Generation and propagation of acoustic emission in buried steel infrastructure for monitoring soil-structure interactions</i>	
Primary Supervisor: Dr Alister Smith	
Secondary Supervisors: Prof. Neil Dixon and Dr James Flint	
Completed: May 2020	

UNDERGRADUATE RESEARCH PROJECT SUPERVISION

Emily Turnbull, <i>Monitoring pile-soil interaction using acoustic emission sensing</i>	2020-2021
Owen Wilson, <i>Modelling acoustic emission generation in soils using DEM</i>	2020-2021
Ben Hulme, <i>Monitoring soil-structure interaction using acoustic emission sensing</i>	2020-2021
Jordan Tweed, <i>Monitoring soil-concrete interaction using acoustic emission sensing</i>	2019-2020
David Pennie, <i>Monitoring pile-soil interaction using acoustic emission sensing</i>	2018-2019
James Wordingham, <i>Monitoring soil-structure interaction using acoustic emission sensing</i>	2017-2018
Daniel Parkinson, <i>Detecting seepage erosion in soils using acoustic emission sensing</i>	2017-2018
Thomas Bailey, <i>Community Slope SAFE: performance and interpretation</i>	2017-2018
Liam Keenan, <i>Acoustic emission monitoring of soil nails</i>	2016-2017
Marko Andjelkovic, <i>Community Slope SAFE: quantification of deformation rates</i>	2016-2017

UNDERGRADUATE TEACHING

Soil Mechanics & Geology (CVB102) <i>Responsibilities: Responsible Examiner / Module Leader</i>	2020-present
Practical Skills for Civil Engineering (CVB104) <i>Responsibilities: Geotechnical field course in the Peak District</i>	2020-present
Ground Engineering (CVC014) <i>Responsibilities: Developed new module content, responsible for ~50% of the module (12 lectures and tutorials per year since 2016), set exam questions, exam marking and feedback</i> <i>Student feedback scores: 4.6/5 (2016-17), 4.7/5 (2017-18) and 4.3/5 (2018-19)</i>	2016-present
Research Methods (CVP319) <i>Responsibilities: Delivered a guest lecture on developing high-quality research proposals</i>	2019-20
Geotechnics 1 & 2 (CVB002) <i>Responsibilities: Delivered 6 lectures and tutorials, set coursework and exam questions, coursework and exam marking and feedback</i>	2016-17, 2019-20
Engineering Materials (CVA010) <i>Responsibilities: Delivered 6 lectures, set exam questions, exam marking and feedback</i>	2016-17
Building Materials (CVA016) <i>Responsibilities: Acting Module Leader, delivered 8 lectures, set coursework and exam questions, coursework and exam marking and feedback</i>	2016-17
Structural Analysis and Mechanics 4 (CVC001) <i>Responsibilities: Delivery of 8 tutorials on pre-stressed concrete, set exam questions, exam marking and feedback</i>	2016-17
Geotechnical Engineering (CVC082) <i>Responsibilities: Supervision of 12 soil mechanics laboratory sessions</i>	2013-14 & 2014-15
Surveying 1 (CVA009) <i>Responsibilities: Supervision of >60 hours of surveying practical sessions</i>	2013-14 & 2014-15

POSTGRADUATE EXAMINATIONS

Internal PhD Thesis Examiner, <i>Luigi Parente</i> , LU	2020
Internal Assessor for EngD Progression, <i>Harry McGowan</i> , LU	2020-present
Internal Assessor for EngD Progression, <i>Katerina Kyrkou</i> , LU	2018-present
Internal Assessor for PhD Progression, <i>Alessandro de Luca di Roseto</i> , LU	2016-2018

TRAINING & DEVELOPMENT HIGHLIGHTS

Institution of Civil Engineers Career Appraisal and Professional Review, UK	2020-2021
Medici Enterprise Training Programme, Birmingham, UK	2018-2019
Media Players International Public Engagement Training, Loughborough, UK	2018
Practice interviews for EPSRC and RAEng Fellowship panels, Loughborough, UK	2017
Grant writing with Prof. Andrew Derrington, Loughborough, UK	2017
ERC Grant writing with Mette Skraastad, Loughborough, UK	2016
Fast Track Impact with Prof. Mark Reed, Loughborough, UK	2016

COLLABORATORS

Alberta Transportation, Canada; British Geological Survey, UK; Canadian National Railway, Canada; Canadian Pacific Railway, Canada; CH2M, UK; Community Care for Emergency Response and Rehabilitation (CCERR), Myanmar; Costain Ltd, UK; Datalink Electronics Ltd, UK; Durham University, UK; Environment Agency, UK; ETH Zurich, Switzerland; fbi360, Myanmar; Geotechnical Observations Ltd, UK; INGLAS GmbH Impact Sentinel, Germany; Monmouthshire County

Council, UK; National Research Council Italy; Network Rail, UK; Newcastle University, UK; OeBB (Austrian Federal Railway), Austria; Queen's University GeoEngineering Group, Canada; RST Instruments Ltd, Canada; Scarborough Borough Council, UK; Severn Trent Water, UK; SlopeWatch community group, Malaysia; The Public Works Department of Malaysia (JKR – Slope Engineering Branch); Thurber Engineering Ltd, Canada; University of Alberta, Canada; University of Southampton, UK; University Sains Malaysia, Malaysia; WSP Parsons Brinckerhoff, UK

PUBLICATIONS SUMMARY

20 high-quality journal papers published since 2014 (15 in top 25%), 12 conference papers, four articles in trade press, one book chapter, five best paper awards, 600 GS citations (142 in 2020), i10-index=15

JOURNAL PAPERS

- [J20] Deng L, **Smith A**, Dixon N and Yuan H (2021) Automatic classification of landslide kinematics using acoustic emission measurements and machine learning. *Landslides*, 1-16. 10.1007/s10346-021-01676-8
- [J19] **Smith A** and Dixon N (2020) Listening for deterioration and failure: Towards smart geotechnical infrastructure. *Proceedings of the Institution of Civil Engineers: Smart Infrastructure and Construction*, 10.1680/jsmic.19.00019
- [J18] **Smith A**, Heather-Smith H, Dixon N, Flint JA and Pennie D (2020) Acoustic emission generated by granular soil-steel structure interaction. *Géotechnique Letters*. (IF=2.041, SJR=1.174, SNIP=1.238)
- [J17] **Smith A**, Moore ID and Dixon N (2019) Acoustic Emission Sensing of Pipe-Soil Interaction: Full-scale Pipelines Subjected to Differential Ground Movements. *Journal of Geotechnical and Geoenvironmental Engineering*. 10.1061/(ASCE)GT.1943-5606.0002185 (IF=3.305, SJR=2.664, SNIP=2.619) [Access link](#)
- [J16] **Smith A** and Dixon N (2019) Acoustic emission generated by glass beads in compression and shearing. *Granular Matter*, 10.1007/s10035-019-0944-0 (IF=2.216, SJR=0.789, SNIP=1.615) [Access link](#)
- [J15] **Smith A** and Dixon N (2019) Acoustic emission behaviour of dense sands. *Géotechnique* 69(12): 1107-1122, 10.1680/jgeot.18.P.209 (Citations=5, IF=2.982, SJR=3.256, SNIP=2.947) [Access link](#)
- [J14] Dixon N, **Smith A**, Flint JA, Khanna R, Clark B and Andjelkovic M (2018) An acoustic emission landslide early warning system for communities in low-income and middle-income countries. *Landslides* 15:1631–1644. (Citations=9, IF=3.811, SJR=1.802, SNIP=2.135) [Access link](#)
- [J13] Berg N, **Smith A**, Russell S, Dixon N, Proudfoot D and Take A (2018) Correlation of acoustic emissions with patterns of movement in an extremely slow-moving landslide at Peace River, Alberta, Canada. *Canadian Geotechnical Journal* 55(10): 1475-1488 (Citations=9, IF=2.565, SJR=1.930, SNIP=2.019) [Access link](#)
- [J12] Smethurst JA, **Smith A**, Uhlemann S, Wooff C, Chambers J, Hughes P, Lenart S, Springman SM, Lofroth H and Hughes D (2017) Current and future role of instrumentation and monitoring in the performance of transport infrastructure slopes. *Quarterly Journal of Engineering Geology and Hydrogeology* 50(3): 271-286. **Professor Dearman Young Author of the Year Award** (Citations=15, IF=1.102, SJR=0.687, SNIP=0.836) [Access link](#)
- [J11] **Smith A**, Dixon N, Moore R and Meldrum P (2017) Acoustic emission monitoring of coastal slopes in NE England, UK. *Quarterly Journal of Engineering Geology and Hydrogeology* 50(3): 239-244 (Citations=3, IF=1.102, SJR=0.687, SNIP=0.836) [Access link](#)
- [J10] **Smith A**, Dixon N and Fowmes G (2017) Early detection of first-time slope failures using acoustic emission measurements: large-scale physical modelling. *Géotechnique* 67(2): 138-152 (Citations=22, IF=2.982, SJR=3.256, SNIP=2.947) [Access link](#)
- [J9] Uhlemann S, Chambers J, Wilkinson P, Maurer H, Merritt A, Meldrum P, Kuras O, Gunn D, **Smith A** and Dijkstra T (2017) Four-dimensional imaging of moisture dynamics during landslide reactivation. *Journal of Geophysical Research: Earth Surface* 122: 398–418 (Citations=32, IF=3.412, SJR=2.369, SNIP=1.475) [Access link](#)

- [J8] **Smith A**, Dixon N and Fowmes G (2016) Monitoring buried pipe deformation using acoustic emission: quantification of attenuation. *International Journal of Geotechnical Engineering* 11(4): 418-430 (Citations=10, IF=0.673, SJR=0.319, SNIP=0.578) [Access link](#)
- [J7] Wilkinson P, Chambers J, Uhlemann S, Meldrum P, **Smith A**, Dixon N and Loke MH (2016) Reconstruction of landslide movements by inversion of 4D electrical resistivity tomography monitoring data. *Geophysical Research Letters* 43 (3), 1166-1174 (Citations=16, IF=4.456, SJR=2.819, SNIP= 1.429) [Access link](#)
- [J6] Uhlemann S, **Smith A**, Chambers J, Dixon N, Meldrum P, Dijkstra T, Haslam E, Merritt A and Gunn D (2016) Assessment of ground-based monitoring techniques applied to landslide investigations. *Geomorphology* 253(1): 438-451 (Citations=61, IF=3.308, SJR=1.435, SNIP= 1.412) [Access link](#)
- [J5] Dixon N, **Smith A**, Spriggs MP, Ridley A, Meldrum P and Haslam E (2015) Stability monitoring of a rail slope using acoustic emission. *Proceedings of the Institution of Civil Engineers: Geotechnical Engineering* 168(5): 373-384 (Citations=25, IF=1.056, SJR=0.681, SNIP=0.964) [Access link](#)
- [J4] Dixon N, Spriggs MP, **Smith A**, Meldrum P and Haslam E (2015) Quantification of reactivated landslide behaviour using acoustic emission monitoring. *Landslides* 12(3): 549-560 (Citations=47, IF=3.811, SJR=1.802, SNIP=2.135) [Access link](#)
- [J3] **Smith A** and Dixon N (2015) Quantification of landslide velocity from active waveguide-generated acoustic emission. *Canadian Geotechnical Journal* 52(4): 413-425 (Citations=29, IF=2.565, SJR=1.930, SNIP=2.019) [Access link](#)
- [J2] **Smith A**, Dixon N, Meldrum P, Haslam E and Chambers J (2014) Acoustic emission monitoring of a soil slope: Comparisons with continuous deformation measurements. *Géotechnique Letters* 4(4): 255-261. **Awarded the ICE Thomas Telford Premium (Best Paper of the Year Prize)** (Citations=39, IF=2.041, SJR=1.174, SNIP=1.238) [Access link](#)
- [J1] **Smith A**, Dixon N, Meldrum P and Haslam E (2014) Inclinator casings retrofitted with acoustic real-time monitoring systems. *Ground Engineering* 10: 24-29 (Citations=9, SJR=0.112) [Access link](#)

CONFERENCE PAPERS

- [C12] **Smith A**, Biller T, Heather-Smith H, Dixon N and Flint JA (2019) Acoustic emission monitoring in geotechnical element tests. *17th European Conference on Soil Mechanics and Geotechnical Engineering*, Reykjavik Iceland, 1-6 September 2019
- [C11] **Smith A**, Moore ID and Dixon N (2019) Acoustic emission sensing of pipe-soil interaction: Development of an early warning system for buried pipe deformation. *International Conference on Smart Infrastructure and Construction*, University of Cambridge, 8-10 July 2019
- [C10] Biller T, **Smith A** and Dixon N (2019) Monitoring seepage-induced internal erosion using acoustic emission. *European Working Group on Internal Erosion, 27th Annual Meeting*, University of British Columbia, 18-21 June
- [C9] Biller T, **Smith A** and Dixon N (2018) Early detection of seepage-induced internal erosion using acoustic emission monitoring. *15th BGA Young Geotechnical Engineers Symposium*, University of Surrey, 2-3 July 2018
- [C8] Heather-Smith H, **Smith A**, Dixon N and Flint JA (2018) Monitoring buried infrastructure deformation using acoustic emission. *9th European Workshop on Structural Health Monitoring*, Manchester UK, 10-13 July 2018
- [C7] Uhlemann S, Wilkinson PB, Meldrum P, **Smith A**, Dixon N, Merritt A, Swift RT, Whiteley J, Gunn D and Chambers JE (2017) The Hollin Hill Landslide Observatory - a decade of geophysical characterization and monitoring. *AGU Fall Meeting*, San Francisco
- [C6] Uhlemann S, Chambers J, Wilkinson P, Maurer H, Meldrum P, Gunn D, **Smith A** and Dijkstra T (2016) Long-term 4D geoelectrical imaging of moisture dynamics in an active landslide. *AGU Fall Meeting*, San Francisco

- [C5] Uhlemann S, **Smith A**, Chambers JE, Dixon N, Wilkinson PB, Dijkstra T and Gunn D (2015) Comparison of Sensor Types for Landslide Monitoring. *COST Action TU1202 Working Group Meeting*, Ljubljana, Slovenia, October
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