

Dr Alister Smith MEng PhD GMICE FGS FHEA

EPSRC Fellow and Lecturer in Civil Engineering Infrastructure

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

Tel: +44(0) 1509 565179, Email: A.Smith10@lboro.ac.uk, Web: www.alistersmith.co.uk, twitter.com/Alister_Smith10**EDUCATION**

Doctor of Philosophy, Civil Engineering (Geotechnical), Pass (no corrections) 2012-2015

Loughborough University

Thesis: *Quantification of slope deformation behaviour using acoustic emission monitoring*

Supervisors: Prof. Neil Dixon and Dr Gary Fowmes

Examiners: Dr Joel Smethurst (University of Southampton) and Dr Paul Fleming

Master of Engineering, Civil Engineering, First Class Honours 2008-2012

Loughborough University

*Graduating top of the class with an average assessment of 80% and winning two prestigious University awards***EMPLOYMENT**

EPSRC Fellow and Lecturer in Civil Engineering Infrastructure 07/2017-present

Loughborough University

Lecturer in Infrastructure Engineering 02/2017-07/2017

Loughborough University

EPSRC Doctoral Prize Fellow 09/2015-02/2017

Loughborough University

Doctoral Researcher 10/2012-08/2015

Loughborough University

Graduate Geotechnical Engineer 06/2012-10/2012

Coffey Geotechnics, Manchester, UK

Research Assistant in Construction Management 06/2011-09/2011

Loughborough University

RESEARCH FUNDING (£1.2M)Title: *Philip Leverhulme Prize in Engineering* 2020-2022

Funder: The Leverhulme Trust

Value: £100,000

Role: Principal Investigator

Status: Awarded

Title: *Assessment, Costing and enHancement of long lIfe, Long Linear assEtS (ACHILLES)* 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: *Listening to Infrastructure* 2017-2020

Funder: EPSRC Postdoctoral Fellowship (EP/P012493/1)

Value: £284,824

Role: Principal Investigator

Status: Awarded

Title: *Listening to Infrastructure: Acoustic Emission Sensing of Geotechnical Assets* 2017

Funder: RAEng (Engineering for Development Research Fellowship)

Value: £477,089

Role: Principal Investigator

Status: Offered – declined as EPSRC Fellowship accepted

Title: *EPSRC Doctoral Prize Fellowship* 2015-2017
 Funder: EPSRC / LU
 Value: £72,360
 Role: Principal Investigator
 Status: Awarded

Title: *Community Slope SAFE: A low-cost landslide early warning system* 2016-2018
 Funder: EPSRC IAA & Institutional Global Development
 Value: £184,100
 Role: Co-Investigator
 Status: Awarded

SMALL GRANTS & EQUIPMENT (£120k)

Title: *Accelerated Infrastructure Ageing Simulator* 2019-2021
 Funder: EPSRC Core Equipment (EP/T024704/1)
 Value: £67,100 of £200,000 award
 Role: Co-Investigator
 Status: Awarded

Title: *Hosting Prof. Ian Moore (Queen's Uni, Canada) as Visiting Fellow* 2019
 Funder: LU Institute for Advanced Studies
 Value: £1,700
 Role: Principal Investigator
 Status: Awarded

Title: *Intelligent system for alerting on the movement of masses* 2018
 Funder: Consultancy for BioNano
 Value: £6,000
 Role: Co-Investigator
 Status: Awarded

Title: *Acoustic Emission data acquisition equipment* 2017
 Funder: EPSRC (EP/R010102/1) via Newcastle University UKCRIC Laboratories
 Value: £32,420
 Role: Co-Investigator
 Status: Awarded

Title: *Visiting Prof. Kenichi Soga (University of California, Berkeley)* 2017
 Funder: Santander Mobility Award
 Value: £1,000
 Role: Principal Investigator
 Status: Awarded

Title: *COST ACTION TU1202 events in ETH Zurich and Lisbon* 2014-2016
 Funder: COST ACTION TU1202
 Value: £1,500
 Role: Co-Investigator
 Status: Awarded

Title: *Stability monitoring of a flood embankment at South Ferriby* 2016
 Funder: Consultancy for the Environment Agency
 Value: £5,750
 Role: Co-Investigator
 Status: Awarded

Title: *Stability monitoring of landslides in Monmouthshire* 2016
 Funder: Consultancy for Monmouthshire County Council
 Value: £4,000
 Role: Co-Investigator
 Status: Awarded

Title: *Visiting Prof. Andy Take (Queen's Uni, Canada) and Prof. Jon Fannin (UBC, Canada)* 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-present
 Field trials of Community Slope SAFE in Malaysia and Myanmar 2017-present
 Field trials of Slope ALARMS in the UK, Italy, Austria and Canada 2012-present
 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

Philip Leverhulme Prize in Engineering (£100,000) 2019
*One of five winners in Engineering, selected by the Leverhulme Trust Board
 For "researchers whose work has had international impact and whose future research career is exceptionally promising"
 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)*

Professor W. R. Dearman QJEGH Young Author of the Year Award 2017
Voted by the Editorial Board of the Quarterly Journal of Engineering Geology & Hydrogeology

Hawley Award (£5,000) for Engineering Innovation (Worshipful Company of Engineers) 2015
*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*

Institution of Civil Engineers Merit Award – Studies and Research Category winner 2015
Awarded for development of the Slope ALARMS landslide early warning system

Thomas Telford Premium (Institution of Civil Engineers) 2015
Awarded to the authors of the paper judged to be the 'best of the year' by the Editorial Board of Géotechnique Letters

Best paper and presentation winner (British Geotechnical Association) 2014
Awarded at the 13th Young Geotechnical Engineers Symp. after competing with 37 other researchers and practitioners

UNIVERSITY AWARDS

Early Career Achievement Award (ABCE Awards 2019) 2019
*"Alister combines outstanding research with enterprise activity that is enabling his work to have impact across the world"
 "His research and international profile are outstanding for someone so early in their academic career"*

Outstanding Research Project Award (LU Built Environment Awards) 2018
Awarded for the Community Slope SAFE (low-cost landslide early warning system) project

Research Paper of the Year (LU Built Environment Awards) 2018
Highly commended for the Smith et al. 2017 Géotechnique paper

Loughborough University Enterprise Awards – 'One to watch' category 2017
Highly commended for "Community Slope SAFE: Low cost landslide early warning system"

Institution of Civil Engineers Prize (£250) 2012
Awarded annually by LU to the undergraduate MEng civil engineer who graduates at the top of the cohort

East Midlands Geotechnical Group Prize (£200) 2012
Awarded annually by LU for the best undergraduate geotechnical research project

PROFESSIONAL AFFILIATIONS

Fellow of the Higher Education Academy
 Fellow of the Geological Society of London
 Graduate Member of the Institution of Civil Engineers
 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 18 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>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>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

Mentoring Fellowship (EPSRC, UKRI FLF, RAEng) applicants, LU <i>Supported 10+ applicants via sitting on panels, mock interviews, proposal peer review and one-to-one advice</i> <i>Recent successes include Dr Oluwasola Afolabi (RAEng Fellowship) and Dr Long Seng To (RAEng Fellowship)</i>	2017-present
Research Committee, ABCE	2017-present
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 seminar talks at academic institutions:	2014-present
<i>University of Alberta, Civil Engineering Seminar Series, Edmonton, Canada</i>	
<i>University of Birmingham, Civil Engineering Seminar Series and EPSRC Fellows Seminar Series, UK</i>	
<i>University of British Columbia, Civil Engineering Seminar Series, Vancouver, Canada</i>	
<i>University of California, Berkeley, Civil Engineering Seminar Series, USA</i>	
<i>University of Cambridge, Smart Infrastructure & Construction Seminar Series, UK</i>	

University of Oxford, Civil Engineering Seminar Series, UK
Queen's-RMC GeoEngineering, Golder Associates Seminar Series, Kingston, Canada
Tongji University, Department of Geotechnical Engineering, Shanghai, China
Tsinghua University, Department of Engineering Physics, Beijing, China

Invited seminar talks at industry and stakeholder organisations: 2014-present

Alberta Transportation, Alberta, Canada
BC Hydro, Vancouver, Canada
Canadian Railways (National and Pacific), Alberta, Canada
Community Care for Emergency Response & Rehabilitation (CCERR), Myanmar
Fugro, UK
Network Rail, UK
Public Works Department of Malaysia, Kuala Lumpur
RST Instruments Ltd., Vancouver, Canada
Severn Trent Water, UK
SlopeWatch community group, Malaysia
Thurber Engineering Ltd., Alberta, Canada

Invited plenary talks at conferences: 2015-present

Agile Researcher Conference, Loughborough, UK
East Midlands University Association Conference 'Inspiring Futures', UK
Permanent Way Institution Technical Seminar, Nottingham, UK
Vadose zone workshop, Newcastle, UK

RESEARCH ASSOCIATES

Dr Harry Postill 2018-present
 Project: *ACHILLES (EPSRC Programme Grant) Research Challenge 2: Asset Performance*

PHD STUDENT SUPERVISION

Dan Gibbs 2019-2022

Climate change impacts on infrastructure earthworks
 Primary Supervisor: Dr Alister Smith
 Secondary Supervisor: Dr Tom Dijkstra and Dr Ashraf El-Hamalawi
 Thesis submission: September 2022

Hao Wang 2019-2022

Structural health monitoring and big data analysis for resilient infrastructure
 Primary Supervisor: Dr Alister Smith
 Secondary Supervisor: Dr Giorgio Barone
 Thesis submission: September 2022

Tiago Biller 2017-2020

Early detection of seepage-induced internal instability using acoustic emission
 Primary Supervisor: Dr Alister Smith
 Secondary Supervisor: Prof. Neil Dixon
 Thesis submission: September 2020

Helen Heather-Smith 2016-2020

Generation and propagation of acoustic emission in buried steel infrastructure for monitoring soil-structure interactions
 Primary Supervisor: Dr Alister Smith
 Secondary Supervisors: Prof. Neil Dixon and Dr James Flint
 Thesis submission: December 2019

UNDERGRADUATE RESEARCH PROJECT SUPERVISION

Jordan Tweed, *Monitoring soil-concrete interaction using acoustic emission sensing* 2019-2020

David Pennie, *Monitoring pile-soil interaction using acoustic emission sensing* 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 (NCVB002) <i>Responsibilities: Responsible Examiner / Module Leader</i>	2020-21
Practical Skills for Civil Engineering (NCVB004) <i>Responsibilities: Lead for soil mechanics and geotechnical engineering components</i>	2020-21
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>	2016-17-18-19-20
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>Katerina Kyrkou</i> , LU	2018-present
Internal Assessor for PhD Progression, <i>Alessandro de Luca di Roseto</i> , LU	2016-2018

TRAINING & DEVELOPMENT HIGHLIGHTS

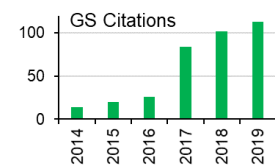
Medici Enterprise Training Programme, Birmingham, UK	2018-2019
Media Players International Public Engagement Training, Loughborough, UK	2018
Practice interviews for EPSRC and RAEng Fellowship panels, Loughborough, UK	2017
Grant writing with Prof. Andrew Derrington, Loughborough, UK	2017
ERC Grant writing 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

18 high-quality journal papers published since 2014 (14 in top 25%), 12 conference papers, four articles in trade press, one book chapter, four best paper awards, 362 GS citations (113 in 2019), i10-index=11



JOURNAL PAPERS

- [J18] **Smith A**, Heather-Smith H, Dixon N, Flint JA and Pennie D (2019) 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
- [C4] Dixon N, Codeglia D, **Smith A**, Fowmes G and Meldrum P (2015) An acoustic emission slope displacement rate sensor - case studies. *9th Int. Symp. on Field Measurements in Geomechanics*. Sydney, Australia, September
- [C3] Dixon N, Moore R, Spriggs MP, **Smith A**, Meldrum P and Siddle R (2014) Performance of an acoustic emission monitoring system to detect subsurface ground movement at Flat Cliffs, North Yorkshire, UK. *LAEG XII Congress*, 2, 117-120, Turin, Italy, September 2014
- [C2] **Smith A** and Dixon N (2014) Acoustic emission monitoring of active waveguides to quantify slope stability. *13th BGA Young Geotechnical Engineers' Symposium*. University of Manchester, June. **Awarded best presentation.**
- [C1] **Smith A**, Dixon N, Berg N, Take A and Proudfoot D (2014) Listening for Landslides: Method, Measurements and the Peace River Case Study. *Geohazards 6*, Ontario, Canada June 2014

BOOKS AND CHAPTERS

- Dixon N and **Smith A** (2020) Acoustic Emission Monitoring in Geotechnical Engineering. *Taylor & Francis* [in development]
- Smith A** (2017) Chapter 7: 'Landslides'. In: Boshier L and Chmutina K (Eds.) Disaster risk reduction for the built environment: an introduction. *Wiley-Blackwell*

TRADE / PRESS ARTICLES

- Smith A** (2019) Listening to Infrastructure: Early warning systems for infrastructure deterioration. *Open Access Government*, January 2019 [Access link](#)
- Smith A** (2018) Listening to Infrastructure, EPSRC Fellowship. *Impact* 5:25-27 [Access link](#)
- Smith A** (2018) Fine-tuning an EPSRC postdoc Fellowship. *Research Professional and Research Fortnight*, May
- Smith A**, Dixon N, Codeglia D and Fowmes G (2016) An acoustic emission slope displacement rate sensor: Comparisons with established instrumentation. *Geotechnical Instrumentation News*, December 2016 [Access link](#)