Thomas Edward Lawrence Smith

PhD, MSc, FRGS, FHEA

Environment Research Cluster
Department of Geography and Environment
London School of Economics and Political Science
Houghton Street, London, WC2A 2AE

Email: t.e.l.smith@lse.ac.uk
Web: http://tinyurl.com/gsTELS

Employment

September 2021 – Present	**Associate Professor (Education) in Environmental Geography, Department of Geography and Environment, London School of Economics and Political Science**
January 2018 – August 2021	**Assistant Professorial Lecturer in Environmental Geography, Department of Geography and Environment, London School of Economics and Political Science**
April 2013 – December 2017	**Lecturer in Physical & Environmental Geography, Department of Geography, King's College London**
Feb 2012 – April 2013	**Research Associate, Department of Geography, KCL** NERC Knowledge Exchange Project: Enhancing understanding of wildfire behaviour and suppression within the UK Fire and Rescue Service: NERC Knowledge Exchange Grant NERC SAMBBA (South American Biomass Burning Analysis): NERC Responsive Mode Consortium Grant.

Education

PhD — 2008 – 2012 — King's College London — London

PhD in Physical Geography
Funded by a full NERC-ESRC Studentship
Evaluation and Application of FTIR spectroscopy for the field study of biomass burning emissions

PGCAPHE — 2013 – 2014 — King's College London — London

Postgraduate Certificate in Academic Practice
Pass with Distinction

MSc — 2007 – 2008 — King's College London — London

MSc Environmental Monitoring, Modelling and Management
Funded by a full NERC studentship
Pass with Distinction

Peter Balchin Prize – 'for the best dissertation by a masters physical geography student' (2008).

Dissertation: Towards a field method for retrieving urban surface emissivity

Environmental Remote Sensing; Modelling Environmental Change; Monitoring Environmental Change; Environmental GIS; Methods for Environmental Research; Environmental Research Design and Application

BSc — 2003 – 2006 — The University of Sheffield — Sheffield

BSc (Hons) Geography – *First Class*

Hart Prize – 'for the best overall performance in the extended essay by a single honours geography student' (2006).

Teaching Experience

Jan 2018 – August 2021 — **Associate Professor (Education), Department of Geography and Environment, LSE**

- GY120 Environmental Change, Past, Present and Future (Director)

- GY220 Environment: Science and Society (Director)
- GY248 Field Methods in Environmental Geography (Director)
- GY212 Pathways in Human Geography
- GY101 Succeeding in Your Geography Degree
- GY350 Dissertation (tutor)
- GY360 Sustainability in Practice (Director)

Jan 2018 – August 2021 **Assistant Professorial Lecturer, Department of Geography and Environment, LSE**

- GY120 Environmental Change, Past, Present and Future
- GY220 Environment: Science and Society
- GY240 Research Techniques
- GY499 Dissertation (tutor)

Sep 2013 – Dec 2017 **Lecturer, Department of Geography, KCL**

- 4SSG0140 The Changing Natural Environment (25% of 30-credit module)
- 4SSG1008 Geography Tutorials: Critical Thinking and Techniques (module co-ordinator of 30-credit module)
- Additional level 4 undergraduate field and lab co-curricular teaching (not attached to any module)
- 5SSG2043 Environmental Remote Sensing (module co-ordinator and 70% teaching of 15-credit module)
- 5SSG2049 Methods in Physical Geography (30% teaching of 15-credit module)
- 5SSG2051 Climatic Variability, Change and Society (20% teaching of 15-credit module)
- 5SSG2057 Landscapes: Biogeography, Ecology and Management (50% teaching of 15-credit module)
- 6SSG3061 Current Research in Geography (two-weeks teaching on 15-credit module)
- 6SSG0610 Independent Geographical Study (supervision of five students)
- 6SSG3070/7SSG5176 Global Environmental Change 1: Climate Science (30% teaching of 15-credit module)
- 6SSG3071/7SSG5177 Global Environmental Change 2: Earth System Dynamics (module co-ordinator and 75% teaching of 15-credit module)
- 7SSG5005 Masters Dissertation (supervision of two students)
- NERC Doctoral Training Partnership

Oct 2011 – Dec 2017 **Class Teacher, Department of Geography and Environment, LSE**

GY120: Environmental Change, Past, Present and Future
Module convenor: Prof David Jones

- 20 week course, 3 × 1 hour classes each week, 22–36 first-year undergraduates (8–15 in each class), 8 weeks since 2013/14.
- Setting and marking exam questions and coursework.

Awarded two **Teaching Excellence Prizes** (student feedback and staff evaluation)

Prizes

2024/25	Excellence in Education Award, LSE
2018/19	LSESU Student-led Teaching Excellence Award: Highly Commended for Research Guidance and Support.
2017/18	Excellence in Education Award, LSE
2015/16	Nominated for Teaching Excellence Awards, King's College London
2014/15	Nominated for Teaching Excellence Awards, King's College London
2013/14	Nominated for Teaching Excellence Awards, King's College London
2012/13	Teaching Excellence Prize, LSE
2011/12	Teaching Excellence Prize, LSE
2011	Institute of Physics Environmental Physics Group essay competition: *Winner*
2008	Peter Balchin Prize, Department of Geography, King's College London *'for the best dissertation by a masters physical geography student'*
2006	Hart Prize, Department of Geography, University of Sheffield *'for the best overall performance in the extended essay by a single honours geography student'*

PhD Supervision

2016 – Present Alejandro Coca Castro (PhD, funded by Funcación CEIBA Loan-Schoalrship Programme)
Modelling pan-tropical land cover and land-use trajectories of deforested areas.

2014 – 2018 Jake Simpson (PhD, funded by a NERC CASE studentship)
Quantifying greenhouse gas emissions from biomass burning in an Indonesian tropical peat swamp forest REDD+ project area.

Research Interests

- Biomass burning emissions from tropical peatlands, Australian savanna, and British moorlands.
- Open-path and solar occultation FTIR field spectroscopy.
- The use of unmanned aerial vehicles (UAVs) for the monitoring of land management fires/wildfires.
- Low-cost sensor solutions for air quality and micrometeorology.

Education Funding

Principal Investigator (>£100,000, £89,882 since joining LSE)
*****EGU*****

2019 LSE Eden Fund: Undergraduate Research Fellowships: **£50,525**
2019 LSE Student Experience Enhancement Fund: LSE Careers visit to Urban Orchard: **£300**
2018 LSE TLC Ignite Grant: Urban climate and air quality at the LSE: data visualisation and assurance for environmental geographers: **£8,848**
2018 LSE Annual Fund: LSE Geography and Environment Student Research Fellowships: **£17,036** [co-PI with Richard Perkins]
2017 LSE Student Experience Enhancement Fund: GY120 Juniper Hall Practical Fieldtrip: **£3,788**
2017 LSE Pro-Director Education Vision Fund: Making Student Makers: An integrated approach to experiential learning in environmental geography: **£10,210**
2017 FreeStation Handheld: Developing a low-cost compact weather station using Arduino open-source hardware and 3D-printing: King's College London Undergraduate Research Fellowship: **£2,150**
2016 K-Link Widening Participation Activity Programme: King's College London Department of Widening Participation Grants Scheme: **£1,800**
2016 Using new wildfire spread modelling tools to assess wildfire risk in Northumberland: King's College London Undergraduate Research Fellowship: **£2,360**
2015 K-Link Widening Participation Activity Programme: King's College London Department of Widening Participation Grants Scheme: **£3,000**
2015 Open source hardware for Geography and beyond: King's College London Faculty of Social Science and Public Policy Faculty Education Fund: **£4,900**
2015 SeNSoRRR: Sensor Networks for Soil and River Risk Resilience: King's College London Undergraduate Research Fellowship: **£2,794**

Co-Investigator

2016 NERC Doctoral Training Programme 'added value activities in innovation' Grant: **£150,446** (£24,490 to King's).

Research Grants, Fellowships and Awards

Principal Investigator (>£400,000)

2025 Seeing is Believing: From Screens to Reefs – How VR Bridges Valuation Gaps. LSE Global School of Sustainability Research Fund: **£38,400**
2025 Artivism: Imagining Anthropocene Futures. LSE Saw Swee Hock Southeast Asia Centre Research Fund: **£4,000**
2021 Seasonality in the Anthropocene: social constructions of Singapore's 'haze season': **£11,000**
2019 How do tropical peatland greenhouse gas emissions respond in the immediate aftermath of a fire? Royal Geographical Society Environment and Sustainability Grant: **£15,000**
2017 National University of Singapore Faculty of Arts & Social Sciences Isaac Manasseh Meyer Visiting Fellowship: **£3,500**

2016 King's Worldwide Partnership Fund (to work with collaborators at Monash University Malaysia and National University of Singapore): **£1,468**
2015 Land degradation and tropical peatland fires: Evaluation of biogeochemical and physical factors affecting gaseous and particulate emissions: King's College London Department of Geography Department Research Innovation Fund: **£1,196**
2014 Improved assessment of emissions from peat swamp fires: new emission factors for REDD+ projects in tropical peatlands: Royal Geographical Society Small Grant: **£3,000**
2014 FIREfficient: Operational tools for improving efficiency in wildfire risk reduction in EU landscapes: European Commission Civil Protection Financial Instrument (Preparedness and Prevention Projects): **£374,900** (£68,890 to King's)
2014 How does ecosystem functioning in tropical peatlands influence potential fire emissions?: King's College London Department of Geography Department Research Innovation Fund: **£1,730**
2013 Supporting UK Fire & Rescue Service Wildfire Training in Catalonia: King's College London Department of Geography Research and Impact Support Fund: **£1,000**
2010 King's College London Department of Geography Small Grants Fund: **£250**
2008 NERC/ESRC PhD studentship: **£66,000**
2007 NERC MSc studentship: **£16,000**

Co-Principal Investigator (>£250,000)

Jun 2014 Measuring biomass burning emission factors for southeast Asian peat swamp fires: NERC Field Spectroscopy Facility equipment loans: **£51,650**
Jun 2010 Improving trace gas emissions estimation for tropical biomass burning events: NERC Field Spectroscopy Facility equipment loans: **£51,650**
Feb 2010 Linking trace gas emissions measurements with coincidental measurements of aerosol optical depth: NERC Field Spectroscopy Facility emergency equipment loans: **£18,100**
Nov 2009 Monitoring vehicle pollution emissions and pollution transport in a city using FTIR: NERC Field Spectroscopy Facility equipment loans: **£51,650**
Jun 2009 Monitoring vehicle pollution emissions and pollution transport in a city using FTIR: NERC Field Spectroscopy Facility equipment loans: **£51,650**
Nov 2008 Assessing the use of FTIR for urban air pollution and vehicle emission studies: NERC Field Spectroscopy Facility equipment loans: **£51,650**

Co-Investigator (>£7,500,000)

2020 Drought and peatland fires in Indonesian Borneo: Understanding drivers and impacts to build resilience through sustainable development. NERC Directed International (GCRF): **£4,508,132**, May 2020–April 2023.
2020 Toward a UK fire danger rating system: Understanding fuels, fire behaviour and impacts. NERC Directed: **£2,463,786**, January 2020–December 2023.
2019 European Cooperation in Science & Technology (COST) Action Network 18135 – Fire in the Earth System: Science & Society: **€780,000** (4 years).
2015 NERC Urgency Grant: 'Key in situ measures of El Niño exacerbated fires in Indonesia: **£54,649**

Researcher Co-Investigator (named scientist, >£450,000)

2014 NERC CASE PhD studentship (co-supervisor and contributor to proposal): **£66,000**
2012 South American Biomass Burning Analysis (SAMBBA): NERC Consortium: **£303,123** to KCL
2011 Enhancing understanding of wildfire behaviour and suppression within the UK Fire and Rescue Service: NERC Knowledge Exchange Grant: **£98,216**

Travel Support

Sep 2022 Accommodation for fieldwork in Malaysia. Funded by Liverpool John Moores University.
Apr 2018 Accommodation and car hire for Brunei fieldwork. Funded by National University of Singapore.
Sep 2016 Return flights to Jakarta for British Council workshop on 'Tropical forest biodiversity and carbon storage: developing a roadmap for a long-term forest monitoring network in Indonesia'. Funded by the British Council.
Dec 2014 Return train travel and accommodation for laboratory measurements at CEH Edinburgh.

Funded by CEH.

Apr 2013 Flights to Sydney and Kuala Lumpur for visits to University of Wollongong and Monash University (Kuala Lumpur campus). Funded by KCL Department of Geography.

Apr 2013 Return flights to Bandar Seri Begawan for ASEM conference and iCUBE committee meeting. Funded by the British High Commission in Brunei.

Jan 2012 Return flights to Bandar Seri Begawan for iCUBE workshop. Funded by KCL SSPP.

Sep 2009 Return flights to Darwin for fire emissions field work. Funded by Tropical Spatial Sciences, School of Environmental and Life Sciences, Charles Darwin University, Darwin, Australia

Jul 2009 Return flights to Darwin for fire emissions field work. Funded by Tropical Spatial Sciences, School of Environmental and Life Sciences, Charles Darwin University, Darwin, Australia

Publications: Journal Articles

2025 (accepted)

Liu, F.H.M., Yian, V., Holden, J., and **Smith, T.E.L.** (under review 2025). Seasonality in the Anthropocene: On the construction of Southeast Asia's 'haze season'. *The Anthropocene Review*.

2025 (under review)

Ivison, K., Orpin, A., Belcher, C., Clay, G., … **Smith, T.E.L.**, *et al.* (revise and resubmit, 2025). Heatwaves harmonise drivers of fuel moisture creating extreme temperate wildfire risk. *Nature Geoscience*

Liu, F.H.M., Varkkey, H., **Smith, T.E.L.**, Reynolds, P., Li, H.L., Bungar, S. (revise and resubmit, 2025) Artivism for Cleaner Air? An exploration of the Artistic Representation of 'Haze' in Southeast Asia. *Environmental Communication*

Lyon, C., Winkler, K.J., Hamilton, J… Liu, F.H.M., **Smith, T.E.L.**, Rieb, J., Stringer, L.C., Mueller, C.M. (under review 2024). Temporal mismatches in social-ecological systems. *Ecology and Society.*

2025

Smith, T.E.L., and Liu, F.H.M. (2025) Seasons and the Anthropocene. *Progress in Environmental Geography* https://doi.org/10.1177/27539687251348470

Varkkey, H., Liu, F., **Smith, T.E.L.** and Trott, S., 2025. 'Seasons of the Anthropocene': Politicization of the haze season in Southeast Asia. *Singapore Journal of Tropical Geography*, *46*(1), pp.116-137.

2024

Graham, A.M., Spracklen, D.V., McQuaid, J.B., **Smith, T.E.L.**, Nurrahmawati, H., Ayona, D., Mulawarman, H., Adam, C., Papargyropoulou, E., Rigby, R. and Padfield, R., 2024. Updated smoke exposure estimate for Indonesian peatland fires using a network of low-cost PM2. 5 sensors and a regional air quality model. *GeoHealth*, *8*(11), p.e2024GH001125.

Hu, Y., **Smith, T.E.L.**, Santoso, M.A., Amin, H.M., Christensen, E., Cui, W., Purnomo, D.M., Nugroho, Y.S. and Rein, G., 2024. GAMBUT field measurement of emissions from a tropical peatland fire experiment: from ignition to spread to suppression. *International Journal of Wildland Fire*, *33*(11).

Nikonovas, T., Santin, C., Belcher, C.M., Clay, G.D., Kettridge, N., **Smith, T.E.L.** and Doerr, S.H., 2024. Vegetation phenology as a key driver for fire occurrence in the UK and comparable humid temperate regions. *International Journal of Wildland Fire*, *33*(10).

2023

Fuertes, E., Jarvis, D., Lam, H., Davies, B., Fecht, D., Candeias, J., Schmidt-Weber, C.B., Douiri, A., Slovick, A., Scala, E. and **Smith, T.E.L.**, 2023. Phl p 5 levels more strongly associated than grass pollen counts with allergic respiratory health. *Journal of Allergy and Clinical Immunology*.

2022

Santoso, M.A., Christensen, E.G., Amin, H.M., Palamba, P., Hu, Y., Purnomo, D.M., Cui, W., Pamitran, A., Richter, F., **Smith, T.E.L.** and Nugroho, Y.S., 2022. GAMBUT field experiment of peatland wildfires in Sumatra: from ignition to spread and suppression. *International journal of wildland fire*, *31*(10), pp.949-966.

Si, E.L.Y., Chadwick, M.A., **Smith, T.E.L.**, Sukri, R.S. and Adamczyk, B., 2022. Evaluating ex situ rates of carbon dioxide flux from northern Borneo peat swamp soils. *Experimental Results*, *3*.

2021

Fernandez-Anez, N., Krasovskiy, A., Müller, M., Vacik, H., Baetens, J., Hukić, E., Kapovic Solomun, M., Atanassova, I., Glushkova, M., Bogunović, I. and **Smith, T.E.L.**, 2021. Current wildland fire patterns and challenges in Europe: a synthesis of national perspectives. *Air, Soil and Water Research*, *14*, p.11786221211028185.

Rowney, F.M., Brennan, G.L., Skjøth, C.A., Griffith, G.W., McInnes, R.N., Clewlow, Y., Adams-Groom, B., Barber, A., De Vere, N., Economou, T. and Hegarty, M. **with consortium**, 2021. Environmental DNA reveals links between abundance and composition of airborne grass pollen and respiratory health. *Current Biology*, *31*(9), pp.1995-2003.

Ford, A.E., Harrison, S.P., Kountouris, Y., Millington, J.D., Mistry, J., Perkins, O., Rabin, S.S., Rein, G., Schreckenberg, K., Smith, C. and **Smith, T.E.L.**, 2021. Modelling human-fire interactions: combining alternative perspectives and approaches. *Frontiers in Environmental Science*, p.418.

2020

Akhtar, H., Lupascu, M., Sukri, R.S., **Smith, T.E.L.**, Cobb, A.R. and Swarup, S., 2020. Significant sedge-mediated methane emissions from degraded tropical peatlands. *Environmental Research Letters*, *16*(1), p.014002.

McCarty, J.L., **Smith, T.E.L.**, & Turetsky, M.R. (2020). Arctic fires re-emerging. *Nature Geoscience*, *13*(10), 658-660.

Tan, S.H.A., **Smith, T.E.L.** (2020) An optimal environment for our optimal selves?: An autoethnographic account of self-tracking personal exposure to air pollution. *Area.* **doi.org/10.1111/area.12671**

Liu, F.H.M., Ganesan, V., **Smith, T.E.L.** (2020) Contrasted Narratives of Sustainability in the Media Coverage of Palm Oil Agriculture on Tropical Peatlands in Indonesia, Malaysia and Singapore. *Environmental Science & Policy* **114**, 162–169.

Chan, K., Schillereff, D., Tebbs, E., **Smith, T.E.L.** et al. (2020) Low-cost electronic sensors for environmental research: pitfalls and opportunities. *Progress in Physical Geography.*

Levermore, J., **Smith, T.E.L.**, Kelly, F., Wright, S. (2020) Detection of microplastics in ambient particulate matter using Raman Spectral Imaging and chemometric analysis. *Analytical Chemistry* **92**(13), 8732–8740.

Lupascu, M., Akhtar, H., **Smith, T.E.L.**, Sukri, R.S. (2020) Post-fire Carbon Dynamics in the Tropical Peat Swamp Forests of Brunei reveal long-term elevated CH4 flux. *Global Change Biology* doi.org/10.1111/gcb.15195

2019

Bernhard, K., **Smith, T.E.L.**, Sabuhoro, E., Nyandwi, E., Munanura, I.E. (2019) Effects of integrated conservation-development projects on unauthorized resource use in Rwanda's volcanoes national park: a mixed-methods spatiotemporal approach. *Oryx* [paper accepted].

Brearley, F.Q., Adinugroho, W.C., Cámara-Leret, R., Krisnawati, H., Ledo, A., Qie, L., **Smith, T.E.L.**, Aini, F., Garnier, F., Lestari, N.S. and Mansur, M., (2019) Opportunities and challenges for an Indonesian forest monitoring network. *Annals of Forest Science*, **76**(2), p.54.

Padfield, R., Hansen, S., Davies, Z.G., Ehrensperger, A., Slade, E., Evers, S., Papargyropoulou, E., Bessou, C., Abdullah, N., Page, S. and Ancrenaz, M. … **Smith, T.E.L.**, et al. (2019) Co-producing a research agenda for sustainable palm oil. *Frontiers in Forests and Global Change*, **2**, p.13.

2018

Smith, T.E.L., Evers, S., Yule, C.M., Gan, J.Y. (2018) *In situ* tropical peatland fire emission factors and their variability, as determined by field measurements in Peninsula Malaysia. *Global Biogeochemical Cycles* doi:10.1002/2017gb005709.

Veeraswamy, A., Galea, E.R., Filippidis, L., Lawrence, P.J., Haasanen, S., Gazzard, R.J., **Smith, T.E.L.** (2018) The simulation of urban-scale evacuation scenarios with application to the Swinley Forest Fire. *Safety Science* **102**: 178–193

Hu, Y., Fernandex-Anez, N., **Smith, T.E.L.**, Rein, G (2018) Review of emissions from smouldering peat fires and their contribution to regional haze episodes. *International Journal of Wildland Fire.* Doi:10.1071/WF17084

Roulston, C., Paton-Walsh, C., **Smith, T.E.L.**, Guérette, E.-A., Evers, S., Yule, C.M., Rein, G., van der Werf, G. (2018) Fine particle emissions from tropical peat fires decrease rapidly with time since ignition. *Journal of Geophysical Research - Atmospheres.* Doi:10.1029/2017JD027827

Guérette, E.-A., Paton-Walsh, C., Desservettaz, M., **Smith, T.E.L.**, Volkova, L., Weston, C.J., Meyer, C.P. (2018) Emissions of trace gases from Australian temperate forest fires: emission factors and dependence on modified combustion efficiency. *Atmospheric Chemistry and Physics* **18**: 3717–3735 https://doi.org/10.5194/acp-2017-883

2017

Simpson, J.E., **Smith, T.E.L.**, Wooster, M.J. (2017) Assessment of errors caused by forest vegetation structure in airborne LiDAR-derived DTMs. *Remote Sensing* **9**(1), 1101; doi:10.3390/rs9111101

Wijedasa, L.S., Jauhiainen, J., Könönen, M., Lampela, M., Vasander, H., LeBlanc, M.C., Evers, S., **Smith, T.E.L.**, Yule, C.M., Varkkey, H. and Lupascu, M. *et al.* (2017) Denial of long-term issues with agriculture on tropical peatlands will have devastating consequences. *Global Change Biology* **23**(3): 977–982.

2016

Simpson, J.E., Wooster, M.J., **Smith, T.E.L.**, Trivedi, M., Vernimmen, R.R.E., Dedi, R., Shakti, M., Dinata, Y. (2016) Tropical peatland burn depth and combustion heterogeneity assessed using UAV Photogrammetry and airborne LiDAR during the 2015 El Niño. *Remote Sensing* **8**(12): 1000; doi:10.3390/rs812000

2015

Wilson, D., Dixon, S.D., Artz., R.R.E., **Smith, T.E.L.**, et al. (2015) Derivation of greenhouse gas emission factors for peatlands managed for extraction in the Republic of Ireland and the UK. *Biogeosciences* **12**: 5291–5308.

2014

Smith, T.E.L., Paton-Walsh, C., et al. (2014) New emission factors for Australian vegetation fires measured using open-path Fourier transform infrared spectroscopy. Part 2: Australian tropical savannas. *Atmospheric Chemistry and Physics* 14, 5, 6311–6360

Paton-Walsh, C., **Smith, T.E.L.**, et al. (2014) New emission factors for Australian vegetation fires measured using open-path Fourier transform infrared spectroscopy. Part 1: Methods and Australian temperate forests *Atmospheric Chemistry and Physics* 14, 4, 4327–4381

Kotthaus, S., **Smith, T.E.L.**, Wooster, M.J., and Grimmond, C.S.B. (2014) Application of field spectroscopy to characterise short- and long-wave radiative response of impervious urban materials. *ISPRS Journal of Photogrammetry and Remote Sensing* doi: 10.1016/j.isprsjprs.2014.05.005

2012

Meyer, C.P., Cook, G.D., Reisen, F., **Smith, T.E.L.**, Tattaris, M., Russell-Smith, J., Maier, S.W., Yates, C.P., and Wooster, M.J. Direct measurements of the seasonality of emission factors from savanna fires in northern Australia. Submitted to *Journal of Geophysical Research.*

2011

Wooster, M.J., Freeborn, P.H., Archibald, S., Oppenheimer, C., Roberts, G.J., **Smith, T.E.L.**, Govender, N., Burton, M., and Palumbo, I. Field determination of biomass burning emission ratios and factors via open-path FTIR spectroscopy and fire radiative power assessment: headfire, backfire and residual smouldering combustion in African savannahs, *Atmospheric Chemistry and Physics* **11**(22): 11591-11615, 2011.

Loridan, T., Grimmond, C. S. B., Offerle, B. D., Young, D.T., **Smith, T. E. L.**, and Järvi, L. Local-scale Urban Parameterization Scheme (LUMPS): Longwave radiation parameterization and seasonality related developments, *Journal of Applied Meteorology and Climatology* **50**(1): 185-202, 2011.

Smith, T.E.L., Wooster, M.J., Tattaris, M., and Griffith, D.W.T., Absolute accuracy and sensitivity analysis of OP-FTIR retrievals of CO_2, CH_4 and CO over concentrations representative of “clean air” and “polluted plumes”, *Atmospheric Measurement Techniques* **4**: 97-116, 2011.

2010

von Bobrutzki, K., Braban, C. F., Famulari, D., Jones, S. K., Blackall, T., **Smith, T. E. L.**, Blom, M., Coe, H., Gallagher, M., Ghalaieny, M., McGillen, M. R., Percival, C. J., Whitehead, J. D., Ellis, R., Murphy, J.,

Mohacsi, A., Pogany, A., Junninen, H., Rantanen, S., Sutton, M. A., and Nemitz, E.: Field inter-comparison of eleven atmospheric ammonia measurement techniques, Atmospheric Measurement Techniques **3:** 91-112, 2010.

Publications: Book Chapters

2024

Smith, T.E.L. & Schulte, J.T. (2024) Engaging Undergraduate Students in Citizen Science: Measuring Air Pollution as a Pedagogical Approach. In: Garnham & Oprandi (Eds.) *Outdoor Learning: Education Beyond the Seminar Room*. Routledge.

2023

Chan, K., **Smith, T. E.L.**, & Wooster, M. (2023). Remote Sensing and Satellite Earth Observation. In *Key Methods in Geography* (p. 470). Sage.

Padfield, R. W., Dales, A., Mishra, J., & **Smith, T.E.L.** (2023). Digital disruption: Towards a research agenda for sustainability and business in a digital world. *A Research Agenda for Sustainability and Business*, 185.

2022

Smith T.E.L. & Varkkey H. 2022. Southeast Asian haze and socio-environmental–epidemiological feedback. In: Shin, H *et al* (eds.), *COVID-19 in Southeast Asia*. London: LSE Press.
DOI: https://doi.org/10.31389/lsepress.cov.j

2016

Wooster, M.J., **Smith, T.E.L.**, Drake, N.A. (2016) Remote Sensing and Satellite Earth Observation. In Clifford et al., *Key Methods in Geography*, Sage, London.

2013

Hecker, C., **Smith, T.E.L.**, Ribeiro da Luz, B., Wooster, M.J. TIR Spectroscopy in the laboratory and field in support of land surface remote sensing. In: Kuenzer, C. (Ed.) *Thermal Infrared.* Springer, New York.

Conference Proceedings, Research Reports, Unrefereed Papers

2019

Hu, Y., Santoso, M.A., **Smith, T.E.L.**, Nugroho, Y.S., Rein, G. (2019) Field and laboratory studies of haze emissions from peat fires. *The 16th International Congress on Combustion By-Products and Their Health Effects: July 10-12, 2019. University of Michigan, Ann Arbor, MI, USA.*

Lupascu, M., Akhtar, H., **Smith, T.E.L.**, Sukri, R.S. (2019) Post-fire fluxes and sources of carbon in tropical peatlands, Brunei. *EGU General Assembly 2019 EGU2019-6674*.

Akhtar, H., **Smith, T.E.L.**, Lupascu, M., Sukri, R.S. (2019) Effects of post-fire vegetation structure on CH4 emissions from a degraded tropical peatland in Brunei. *EGU General Assembly 2019 EGU2019-12694.*

2017

Coca Castro, A., Reymondin, L., Rebetez, J., Mejia, H.F.S., Perez-Uribe, A., Mulligan, M., **Smith, T.E.L.**, Hyman, G. Big earth-observation data analytics for modelling pan-tropicalland-use change trajectories for newly deforested areas. *Geophysical Research Abstracts* **19**: EGU2017-1195-2.

Lupascu, M., Akhtar, H., **Smith, T.E.L.,** Sukmaria, R. Post-fire fluxes and sources of carbon in previously burnt tropical swamp peatlands, Brunei. *AGU Fall Meeting Abstracts, 2017.*

2016

Smith, T.E.L., Yule, C.M., Evers, S., Paton-Walsh, C., Gan, J.Y. First *in situ* measurements of tropical peatland fire emissions: new emission factors for greenhouse gas reporting and haze forecasting. *Proceedings of the 15th International Peat Congress, 15–19 August 2016*, Kuching, Malaysia.

Simpson, J.E., Smith, T.E.L., Trivedi, M., Wooster, M.J. Demonstration of a cost-effective UAV system to measure depth of burn for emissions estimates from peat fires in Indonesia. *Proceedings of the 15th International Peat Congress, 15–19 August 2016*, Kuching, Malaysia.

Yule, C.M., Evers, S., **Smith, T.E.L.**, Gan, H.M., Too, C.C., Eng, W.W.H. Impact of fire on microbial diversity and community structure in Malaysian peatlands. *Proceedings of the 15th International Peat Congress, 15–19 August 2016*, Kuching, Malaysia.

Page, S.E., Hooijer, A., Vernimmen, R., Miettinen, J.I., Rosse, M., Gaveau, D., **Smith, T.E.L.** The ring of fire: Tackling Indonesia's Peatland Dynamic [***Keynote paper***] *Proceedings of the 15th International Peat Congress, 15–19 August 2016*, Kuching, Malaysia.

2011

Smith, T.E.L., Allen, K., Marrs, R., Harris, M., Dold, J. and Wooster, M.J. Emissions of greenhouse gases and selected volatile organic compounds from UK moorland burning estimated using open-path FTIR spectrometry and burnt area measures. *Geophysical Research Abstracts* **13**, EGU2011-10782-1, 2011, EGU General Assembly 2011, 2011.

2010

Smith, T.E.L., Wooster, M.J. and Tattaris, M. Open-Path FTIR spectroscopy of CO_2, CH_4 & CO: Experimental accuracy evaluation for ambient to highly polluted concentrations. *Proceedings of the remote sensing and photogrammetry society conference. Remote Sensing and the Carbon Cycle, Burlington House, London, 5th May 2010*, 2010.

Tattaris, M., Wooster, M.J., **Smith, T.E.L.**, and Paugam, R. Quantifying gaseous emissions from tropical savanna fires in northern Australia using UV-DOAS and FTIR remote sensing. *Proceedings of the remote sensing and photogrammetry society conference. Remote Sensing and the Carbon Cycle, Burlington House, London, 5th May 2010*, 2010.

Dold, J., Tsitsopoulos, V., Khan, I., Scott, K., McMorrow, J., Lowe, E., Danson, F.M., Ramirez, A., Doerr, S., Bryant, T., Harris, M., Tollitt, T., Allen, K., Paugam, R., Freeborn, P., **Smith, T.E.L.**, Davies, H., Wooster, M., Legg, C., Gibson, S., Elliott, A., Yearsley, S. Report on field experiments in Northumberland, March 2010. *Proceedings of the VI International Conference on Forest Fire Research*, Viegas, D.X. (Ed.), 2010

Meyer, C.P., Cook, G., Reisen, F., Schatz, J., **Smith, T.E.L.**, Tattaris, M., Russell-Smith, J., Yates, C., Watt, F. Seasonality of burning emissions from savanna fires in southern Africa and northern Australia: evidence and implications for land management and greenhouse gas inventories. NAILSMA government report. CSIRO, 2010.

2009

Smith, T.E.L., and Wooster, M.J. Emissivity Measurements with a Portable FTIR Spectrometer. *Exploration Remote Sensing - The 20th Annual Meeting of the Geological Remote Sensing Group (GRSG), 15-17 December 2009, The Geological Society of London*, 2009.

Beevers, S., Grimmond, C.S.B., Klostermann, J., Kotthaus, S., **Smith, T.E.L.**, Young, D.T. *Sustainable Urban Planning in London: Communities of Practice meeting in London #1 – 24 August 2009, King's College London*, 2009.

Invited Presentations

2025

Defra Environment Strategy Directorate: Climate Change Adaptation Team. Whitehall, 18 March 2025.
Smith, T.E.L.: Wildfires, Climate Change, and Risk Assessment for London and the Rest of the UK.

2024

Smith, T.E.L. For Peat's Sake: Why are tropical peatlands burning? And what are the consequences? *University of Sheffield Department of Geography Seminar Series*, March 2024.

2023

Institute of Highways Engineers Highway Sector Resilience and Response Conference, 8 November 2023. Member of panel on *'Adapting Highways to a Changing Climate'*.
Smith, T.E.L.: Wildfires – Urban/Rural Interface

National Preparedness Commission Extreme Weather Conference, 30 June 2023. Member of panel on '*Build resilience to extreme weather in communities through the provision of resources, information and*

guidance'.
Smith, T.E.L.: Towards a UK wildfire danger rating system

Smith, T.E.L. For Peat's Sake: Why are tropical peatlands burning? And what are the consequences? *University of York Department of Environment & Geography Seminar Series*, November 2023.

Smith, T.E.L. For Peat's Sake: Why are tropical peatlands burning? And what are the consequences? *Liverpool John Moores University School of Biological and Environmental Sciences Seminar Series*, November 2023.

Smith, T.E.L. Arctic Wildfires: What can (and can't) we know from satellites? *EU Copernicus Sentinel Seminar Series,* April 2023.

GRI How should London cope with more summer heatwaves and wildfires? Panel Discussion, 26 June 2023.
Smith, T.E.L.: Wildfire Risk in the UK

2021

Smith, T.E.L. Arctic Fires. *University of Leicester Department of Geography Seminar Series*, November 2021.

2020

Smith, T.E.L. Why are tropical peatland fires important? And how do we measure them? *Royal Geographical Society Singapore Branch*, online, 14 May 2020.

2019

Smith, T.E.L. Smoke and mirrors: Why are tropical biomass burning emissions important? And how do we measure them? *Imperial College London Atmospheric Physics Seminar Series,* Tuesday 20 November 2019.

Smith, T.E.L. Chasing Fire. *Royal Geographical Society Singapore Branch*, Singapore, 11 April 2019.

Smith, T.E.L. Chasing Fire. *Royal Geographical Society Monday Night Lecture Series*, London, 21 January 2019.

2016

Smith, T.E.L. Smoke and mirrors: Why are tropical biomass burning emissions important? And how do we measure them? *National University of Singapore Department of Geography Research Seminar Series*, Singapore, 22 August 2016.

Smith, T.E.L. Top-down and bottom-up estimates of agricultural fire emissions from SE Asia, *International Center for Tropical Agriculture (CIAT)*, Hanoi, Vietnam, 13 June 2016.

Smith, T.E.L. Low-cost environmental science using Arduinos, *Field Technologies: Mapping & Monitoring Party*, Royal Geographical Society, 18 March 2016.

2015

Smith, T.E.L. Smoke and Mirrors: Why biomass burning emissions are important and how to measure them, *Centre for Atmospheric Chemistry Seminar Programme*, University of Cambridge, 23 March 2015.

Smith, T.E.L. Modelling the Swinley-Crowthorne Forest Fire**,** *Wildfire Research and its Impact on Policy, Planning and Operations: The Swinley Forest Fire*, Greenwich, 20 April 2015

2014

Smith, T.E.L., Hewitt, C., Aerial sensing and simulation modelling for enhancing preparedness and prevention in Northern European landscapes *The Sill Project Wildfire 2014 Conference,* Northumberland, 22nd–23rd October 2014.

Smith, T.E.L., Kotthaus, S., Bushfires, bogs, and brickwork: Recent work with FTIR spectroscopy at KCL. *NERC FSF biennial workshop at the Remote Sensing and Photogrammetry Society Conference 2014*, Aberystwyth, 2 September 2014.

Smith, T.E.L., Quantifying Greenhouse Gas Emissions from Biomass Burning in an Indonesian Tropical Peat Swamp Forest REDD+ Project Area. *Research Centre for Climate Change Seminar Series*, Universiti Indonesia, 6 August 2014.

2013

Smith, T.E.L. Quantifying fire emissions: where bottom up meets top down, *University of Leicester, Department of Geography Seminar Series*, 27 November 2013.

Smith, T.E.L. Enhancing understanding of wildfire behaviour and suppression using Remote Sensing and Computer Simulation Modelling, *Wildfire 2013, Vale of Glamorgan,* 22-23 October 2013.

Smith, T.E.L. Quantifying fire emissions from space, *University of Wollongong, Department of Chemistry Seminar Series*, 29 May 2013.

Smith, T.E.L. Wildfire: recycled sunlight or fuel for climate change, *Asia-Europe Meeting (ASEM) on Climate Change and Biodiversity*, Universiti Brunei Darussalam, 14 May 2013.

2012

Smith, T.E.L. Smokey infrared pathways: FTIR spectroscopy for field study of biomass burning emissions, *International Consortium of Universities for the Study of Biodiversity and the Environment (iCUBE): Impact of Climate Change & Innovations for a Sustainable Future*, Universiti Brunei Darussalam, 12 January 2012.

Smith, T.E.L. Smokey infrared pathways: FTIR spectroscopy for field study of biomass burning emissions, *Department of Geography Seminar Programme*, Universiti Brunei Darussalam, 17 January 2012.

Smith, T.E.L. Smoke and Mirrors: Infrared spectroscopy and radiometry for the study of biomass burning emissions, *Atmospheric Physics Group Seminar Programme*, Imperial College London, 23 October 2012.

2011

Smith, T.E.L. Not just recycled sunlight: Biomass burning and its influence on global climate change, *Environmental Physics Day*, Institute of Physics, London, 25 May 2011.

Conference and Workshop Presentations

2025

Graham, A.M., Spracklen, D.V., McQuaid, J.B., **Smith, T.E.L.**, Nurrahmawati, H., Ayona, D., Mulawarman, H., Adam, C., Papargyropoulou, E., Rigby, R. and Padfield, R., 2024. Updated smoke exposure estimate for Indonesian peatland fires using a network of low-cost PM2. 5 sensors and a regional air quality model. *Air Sensors International Converence Southeast Asia*. 19-22 May, 2025. Bangkok, Thailand.

2024

Graham, A. M., McQuaid, J. B., **Smith, T. E.L.**, Nurrahmawati, H., Ayona, D., Mulawarman, H., ... & Choiruzzad, S. A. (2024, April). Updated Exposure Estimate for Indonesian Peatland Fire Smoke using Network of Low-cost Purple Air PM2. 5 sensors. In *EGU General Assembly Conference Abstracts* (p. 6077).

Page, S.E., **Smith, T.E.L.** (2024) Progress on fire emission factors: Knowledge gaps and uncertainties. *Peat-Emit Workshop.* Food and Agriculture Organisation of the United Nations. 1 July 2024, Rome.

2023

Page, S.E., **Smith, T.E.L.** (2023) Opportunities for Solutions to Reduce Future Wildfire emission in Different Biomes. *Greenhouse Gas Emissions From Wildland Fire.* National Academies, Washington DC., 13-15 September 2023.

2022

Liu, F.H.M., Yian, V., Holden, J., **Smith, T.E.L.** (2022) Seasonality in the Anthropocene: On the construction of Southeast Asia's 'haze season' in the media. In. EGU22, the 24th EGU General Assembly, held 23-27 May, 2022 in Vienna, Austria and Online. Online at https://egu22.eu/, id.EGU22-13091

Clay, G., Belcher, C., Crawford, A., Doerr, S., Elliott, A., Hardiman, M., ... & **Smith, T.E.L.** (2022, October). Building the Components of a UK Fire Danger Rating System: Progress, Challenges and Future Development. In *Fire Ecology Across Boundaries: Connecting Science and Management*.

2021

Smith, T.E.L., McCarty, J., Turetsky, M. and Parrington, M., 2021, April. Geospatial analysis of Arctic fires in the MODIS era: 2003-2020. In *EGU General Assembly Conference Abstracts* (pp. EGU21-16198).

2020

Parrington, M., McCarty, J., **Smith, T.E.L.**, Turetsky, M., Di Giuseppe, F., Vitolo, C., Garrigues, S., Ades, M., Agusti-Panareda, A., Barre, J. and Engelen, R., 2021, April. Monitoring Arctic and high-latitude wildfires in 2019 and 2020. In *EGU General Assembly Conference Abstracts* (pp. EGU21-13273).

Clay, G., **Smith, T.E.L.**, et al. (2020) Toward a UK fire danger rating system: Understanding fuels, fire behaviour, and impacts. *EGU General Assembly 2020 EGU2020-19823*

Parrington, M., **Smith, T.E.L.**, et al. (2020) Wildfire weather, intensity and smoke emissions of large-scale fire events in 2019. *EGU General Assembly 2020 EGU2020-11786*

Evers, S., **Smith, T.E.L.**, et al. (2020) Millennia-old carbon fluxes from degraded tropical peatland soils. *EGU General Assembly 2020 EGU2020-21851*

Hu, Y., **Smith, T.E.L.**, et al. (2020) Temporal variability of greenhouse gas and reactive gas emission factors during a two-week-long tropical peatland experimental burn. *EGU General Assembly 2020 EGU2020-19872*

Smith, T.E.L., et al. (2020) How do tropical peatland greenhouse gas emissions respond in the immediate aftermath of a fire? *EGU General Assembly 2020 EGU2020-12567*

Akhtar, H., **Smith, T.E.L.**, et al. (2020) Impact of fire on vegetation, soil microbes and CH4 emission from a degraded tropical peatland. *EGU General Assembly 2020 EGU2020-12743*

Lupascu, M., **Smith, T.E.L.**, et al (2020) Post-fire carbon emissions from degraded tropical peat swamp forests in Brunei. *EGU General Assembly 2020 EGU2020-6337*

2019

Hu, Y., Santoso, M.A., **Smith, T.E.L.**, Nugroho, Y.S., Rein, G. (2019) Field and laboratory studies of haze emissions from peat fires. *The 16th International Congress on Combustion By-Products and Their Health Effects: July 10-12, 2019. University of Michigan, Ann Arbor, MI, USA.*

Lupascu, M., Akhtar, H., **Smith, T.E.L.**, Sukri, R.S. (2019) Post-fire fluxes and sources of carbon in tropical peatlands, Brunei. *EGU General Assembly 2019 EGU2019-6674*.

Akhtar, H., **Smith, T.E.L.**, Lupascu, M., Sukri, R.S. (2019) Effects of post-fire vegetation structure on CH4 emissions from a degraded tropical peatland in Brunei. *EGU General Assembly 2019 EGU2019-12694.*

2015

Kotthaus, S., **Smith, T.E.L.,** Wooster, M.J., Grimmond, C.S.B., Derivation of an urban materials spectral library through emittance and reflectance spectroscopy. 9th International Conference on Urban Climate ICUC9, 24 July 2015.

2014

Smith, T.E.L., Hewitt, C., How can aerial sensing and computer simulation modelling enhance understanding of wildfire preparedness and prevention in northern European landscapes? *Royal Meteorological Society Wildfire Workshop 2014,* Met Office, Exeter, 3rd–4th December 2014.

Hewitt, C., **Smith, T.E.L.**, Assessing trade-offs between wildfire reduction strategies and stakeholder values in the Eastern Mourne Mountains. *Royal Meteorological Society Wildfire Workshop 2014,* Met Office, Exeter, 3rd–4th December 2014.

2011

Smith, T.E.L., Allen, K., Marrs, R., Harris, M., Dold, J. and Wooster, M.J. Emissions of greenhouse gases and selected volatile organic compounds from UK moorland burning estimated using open-path FTIR spectrometry and burnt area measures. *EGU General Assembly 2011*, 4 April 2011 (poster).

2010

Smith, T.E.L., Wooster, M.J., and Tattaris, M. Quantifying gaseous emissions from biomass burning using open-path-FTIR spectroscopy. *Molecular Spectroscopy Facility Users' Meeting*, Rutherford Appleton Laboratory, Hanwell, 24 November 2010.

Smith, T.E.L., Wooster, M.J., and Tattaris, M. Open-Path FTIR spectroscopy of CO_2, CH_4 & CO: Experimental accuracy evaluation for ambient to highly polluted concentrations. *Remote Sensing and the Carbon Cycle,* Remote Sensing and Photogrammetry Society, London, 5 May 2010 (poster).

Smith, T.E.L. Ground-based remote sensing of savanna fires: Arnhem Land, July & October 2009. *Science and technical programme workshop*, Northern Australia Indigenous Land and Sea Management Alliance (NAILSMA), Darwin, Australia, 21 October 2010.

Smith, T.E.L. Ground-based remote sensing of rural fires: Northumberland, March 2010. *FIREMAN workshop*, Peak District National Park, 20 July 2010.

Smith, T.E.L., Young, D.T., Loridan, T., Grimmond, C.S.B. QuiNimbus: Cloud Statistics for Urban Micrometerology. *Adapting our cities for future climates*, Royal Meteorological Society, London, 17 Febraury 2010 (poster).

Loridan, T., Grimmond, C.S.B., Offerle, B.D., Young, D.T., **Smith, T.E.L.**, Jarvi, L., and Horn, J. LUMPS NARP an urban land surface scheme: evaluation and development of a new longwave parameterization. *Adapting our cities for future climates*, Royal Meteorological Society, London, 17 Febraury 2010 (poster).

Tattaris, M., Wooster, M.J., **Smith, T.E.L.**, and Paugam, R. Quantifying gaseous emissions from tropical savanna fires in northern Australia using UV-DOAS and FTIR remote sensing. *Remote Sensing and the Carbon Cycle,* Remote Sensing and Photogrammetry Society, London, 5 May 2010 (poster).

2009

Smith, T.E.L., and Wooster, M.J. Emissivity Measurements with a Portable FTIR Spectrometer. *Exploration Remote Sensing - The 20th Annual Meeting of the Geological Remote Sensing Group (GRSG),* The Geological Society of London, 17 December 2009.

Service and Outreach

Academic Service

2019 – Present	LSE Department of Geography & Environment Departmental Tutor
2018 – Present	LSE BSc Environmental Policy with Economics Programme Director
2018 – Present	LSE BSc Environment and Development Programme Director
2018 – Present	LSE Department of Geography & Environment Teaching Committee
2017	KCL Department of Geography Internationalisation Lead
2016 – 2017	KCL Department of Geography Postgraduate Research Deputy-Chair
2016 – 2017	KCL MSc Programme Director: *MSc Climate Change: Environment, Science & Policy*
2015 – 2017	KCL Department of Geography Marketing and Communications Committee Member
2015 – 2017	KCL SSPP Faculty Outreach Champion
2013 – 2015	International Consortium of Universities for the Study of Biodiversity and the Environment (iCUBE) Research Committee Member
2013 – 2017	KCL Department of Geography Departmental Outreach Officer
2013 – 2015	KCL Department of Geography Research Committee Member
2012 – 2013	KCL Department of Geography Research Committee Postgraduate Representative
2009 – 2011	Principle co-ordinator of the Environmental Monitoring and Modelling Group seminar programme
2008 – 2009	KCL Department of Geography staff-student committee (EMM group PhD representative)
2007 – 2008	KCL Department of Geography staff-student committee (MSc EMMM representative)

Community and Public

2020 – Present	Regular contributor to media articles in national newspapers, television, radio, and online content. Including BBC Newsnight, BBC Countryfile, BBC News, ITV News, Sky News, The Independent, New Scientist, Scientific American, The New York Times, and many other outlets.
2019 – Present	Early-Career Researcher Officer for COST Action 18135 Fire in the Earth System: Science & Society [CORE group].
2019 – Present	UK representative to the Management Committee of COST Action 18135 Fire in the Earth System: Science & Society.
May 2018	*Pint of Science 2018* talk on '*The hazy shad of palm oil*'
May 2017	*Pint of Science 2017* talk on *'Low-cost environmental sensing'*

May	2016	*Pint of Science 2016* talk on '*They breathe what we buy*'
Apr	2016	Instructor on *Geo-technology in the Field: GIS, GPS, and remote sensing for fieldwork Workshop*, Royal Geographical Society, 25–26 April 2016.
Sep	2015	Television interview for TRT World *The Newsmakers* (Palm Oil and Haze in SE Asia)
Aug	2014–16	Instructor on *Sutton Trust Summer School*, Department of Geography, KCL.
May	2014	*Pint of Science 2014* talk on 'Wildfire: recycled sunlight or fuel for climate change?'
May	2014	*Fighting Fire with Fire* photo essay published in *Documentary Photo Review*
Jul	2011	Fieldwork in Dorset featured on CBBC Newsround (including thermal infrared footage from KCL's camera), features were also included on ITN and BBC local news.
Dec	2010	Letter featured in the *New Scientist* book (p.182) *'Why Can't Elephants Jump?: and 113 more science questions answered'*: '*Apple Melt*'.
Oct	2009	Fieldwork featured on ABC Television programme *Catalyst*: '*In the line of fire*', broadcasted on 29 October 2009.
Sep	2009	Fieldwork featured on ABC News television programme *Landline*: '*Fighting fire with fire'*, broadcasted on 28 September 2009.
Aug	2009	Letter featured in *New Scientist* 8 August 2009 (p.65): *'The last word: Apple melt'*.
Jul	2009	Radio interview for ABC Radio *Country Hour*: '*Ghostbusting in Arnhem Land'*, broadcasted on 20 July 2009.
Jul	2009	Presentation to explain the purpose of fire fieldwork to village elders and West Arnhem Land Fire Abatement stake holders, 31 July 2009.

Journals

Regular reviewer for *Atmospheric Environment*, *Global Biogeochemical Cycles, Geophysical Research Letters, Remote Sensing, International Journal of Wildland Fire, Atmospheric Chemistry and Physics, Atmospheric Measurement Techniques, and Journal of Geophysical Research.*

Field and Laboratory Experience

Date	Location	Project
9/25	Philippines	GHG emissions research in Mindanao
1/25	Indonesia	Environmental and Social science research in Central Kalimantan
7/23	Indonesia	Environmental and Social science research in Central Kalimantan
7/22	Malaysia	Ditch GHG emissions fieldwork in N Selangor
7/21	Malaysia	RGS fieldwork in N Selangor, Malaysia, fire and peat sampling
9/19 – 1/20	Malaysia	RGS funded fieldwork in N Selangor
8/18	Indonesia	Gambut experimental burning project (with Imperial College)
6/17 – 4/18	Brunei	Permanent Sampling Plots for CO_2/CH_4 flux measurements
1/17	Malaysia	Lab burning project
7/16 – 8/16	Malaysia	Field campaign to N Selangor to measure plantation/peat fires
7/15 – 8/15	Malaysia	Field campaign to SE Pahang to measure peatland fire smoke
10/14 – 4/15	Northumberland, UK	Aerial remote sensing of experimental heathland fires
12/14	Tranent, Edinburgh	White cell FTIR measurements for CEH biomass burning project
7/14	Brunei	Peat sampling for laboratory burning project
7/13	Brunei	Peat sampling for laboratory burning project
3/13	Catalonia, Spain	Tactical burn course, Institut de Seguretat Publica de Catalunya
7/11	Dorset, UK	UK Rural Fire Research Project (UKFRP) experimental fires
5/11	NERC MSF	Solar occultation FTIR accuracy assessment (lab work)
3/11	Northumberland, UK	UK Rural Fire Research Project (UKFRP) experimental fires
7/11 – 10/11	Darwin, Australia	Late dry-season wildfire measurements (PhD fieldwork)
5/10	London, UK	Ground truth spectroscopy for airborne remote sensing imagery
3/10	Norhumberland, UK	UK Rural Fire Research Project (UKFRP) experimental fires
9/09 – 10/09	Arnhem Land, Australia	West Arnhem Land Fire Abatement (WALFA) late dry season fires
6/09 – 7/09	Arnhem Land, Australia	WALFA early dry season fires
6/09	NERC MSF	Open-path FTIR accuracy assessment (lab work)
6/09	Alberta, Canada	Parks Canada Sustainable Resource Development (SRD) prescribed fires
10/08 – Present	King's College London	Urban micrometeorology measurements (UMET@KCL)
5/08 – 9/08	King's College London	Field and laboratory measurements of the emissivity of natural and human-made surfaces for MSc thesis

Consultancy

2024 Expert witness for a wildfire-related civil trial.
2023 Education programme development for the Chartered Institute of Financial Advisors
2012 Consulted for ForestRe Ltd. (insurance and reinsurance products for forestry and tree crops worldwide) producing a burnt area database for Chinese provinces.
2012 Consulted for the Natural Environment Research Council writing impact case study statements for various projects undertaken at the Department of Geography, King's College London.
2011 Consulted for the Department of Archaeology, University of Durham, measuring spectral emissivity at an archaeological site in Cirencester, UK.

Fellowships and Memberships

2015–Pres. Member of the Tropical Catchment Research Initiative (Trocari)
2014–Pres. Member of the UK Tropical Peat Working Group
2014–Pres. Fellow of the Higher Education Authority (FHEA)
2013–Pres. Fellow of the Royal Geographical Society (FRGS)
2011–Pres. Member of the European Geosciences Union (EGU)

Other qualifications, achievements and interests

- ITC Certificate in Outdoor First Aid at SCQF Level 6 (valid until October 2020)
- ITC Certificate in Emergency First Aid at Work at SCQF Level 6 (valid until October 2020)
- Fire-fighting qualification: '*Tactical Use of Fire*' (Generalitat de Catalunya, Barcelona, 2013)
- Grade 8 with distinction in singing (ABRSM, London, 2004)
- Published amateur photographer
- Qualified football referee, level 7 (Football Association, 2002)
- Occasional winger for Leighton Buzzard's fourth XV rugby team
- Currently learning Bahasa Indonesia and Bahasa Melayu.
- Languages: English (mother tongue); French (basic); Spanish (basic)
- Full UK driving license