

Curriculum vitae: Ian Fairchild

1. BIOGRAPHY

A. PERSONAL DETAILS

Professor Ian John Fairchild, born 14th July 1953

B. EDUCATION

<i>Qualification</i>	<i>Date</i>	<i>Institution</i>
PhD	1978	University of Nottingham, Department of Geology
BSc (1 st class) in Geology	1974	University of Nottingham, Department of Geology
A-grades in A-level Physics, Maths and Chemistry	1970	Bristol Grammar School (scholarship pupil)

C. EMPLOYMENT

<i>Institution</i>	<i>Department</i>	<i>Position</i>	<i>From</i>	<i>To</i>
University of Birmingham	School of Geography, Earth and Environmental Sciences	Emeritus Professor	Aug 2016	Present
		Professor of Geosystems (originally appointed as Professor of Physical Geography)	September 2003	July 2016
Keele University	Faculty of Natural Sciences	Dean (60% time appointment)	September 2001	July 2003
Keele University	Earth Sciences, later School of Earth Sciences and Geography	Professor of Earth Surface Processes	January 1996	August 2003
University of Birmingham	Geological Sciences, then Earth Sciences	Lecturer, then Senior Lecturer in Sedimentology	June 1980	December 1995
University of Cambridge	Geology	University Demonstrator	Jan 1977	May 1980
University of Bristol	Chemistry	Research technician	January 1971	September 1971

D. HONOURS AND AWARDS

<i>Award</i>	<i>Institution</i>	<i>Date</i>
Citation classic: paper in top ten in subject area for citations over a 10-year period. Fairchild et al (<i>Earth-Science Reviews</i> , 2006): 545 citations by May 2017	Google Scholar	2017
Coke medal for <i>contributions to science and the geological community</i>	Geological Society of London	2017
Perce Allen Award for <i>a substantial body of research in sedimentology</i>	British Sedimentological Research Group	2016
Speleothem Science commended as <i>the most significant publication in cave science (2009-2013)</i>	International Union of Speleology	2013

Honorary Fellow	Chinese Academy of Geological Sciences	1996
Best paper award for 1993 (Knoll, Fairchild and Swett in <i>Palaios</i>)	SEPM	1995
Lyell Fund	Geological Society of London	1994

E. PROFESSIONAL MEMBERSHIPS

Chartered Geologist (CGeol) 2001-present
 Fellow of the Geological Society of London (FGS) 1975-present
 Fellow of the Royal Geographical Society (FRGS) 1996-2014
 Member of the American Association for the Advancement of Science (2000-2013)
 Member of the American Geophysical Union (most years in the period 2000-2015)
 Member of the British Cave Research Association (1996-present)
 Member of the British Society for Geomorphology (1994-2014)
 Member of the British Hydrological Society (1996 to 2014)
 Member of the Geochemical Society (from ca. 2000 to present)
 Member of the International Association of Hydrological Sciences (1998-2013)
 Member of the Quaternary Research Association 1990 to present
 Member of the International Association of Sedimentologists, 1975-2004, 2013-present
 Member of the Society for Sedimentary Geology, i.e. (SEPM), 1975-2003

2. TEACHING

Extensive teaching experience at four Universities in geology, geography and environmental science programmes (1977-2016).

Subjects taught at all levels up to MSc: Sedimentary and aqueous geochemistry; climate change science and atmospheric chemistry

Subjects taught up to BSc honours level: Field science at numerous locations in the UK, Ireland, France and Spain, sedimentology, global climatic change, geomorphology, sedimentary petrology, Earth history, Quaternary science, geosystems, surface environments field and laboratory techniques.

Subjects taught at introductory level: General physical geography, people and the environment; petrology, optical mineralogy, stratigraphy, palaeontology, structural geology, geocomputing.

Teaching developments include the systematic development of collections for sedimentological teaching, creation of field courses in a number of geographic areas in the UK and western Europe, pioneering use of computers and displays in practical teaching, introduction of study skills course and use of questionnaires long before such practices were widely adopted, use of novel examination techniques (e.g. student design of extended multiple-choice questions), and convening of a national meeting on teaching in sedimentology. In 2001-2, I was one of the first staff to make extensive use of Powerpoint technology in undergraduate geography teaching and in 2004-5, I starting making extensive use of the on-line learning environment WebCT. I gave an invited talk on assessment on WebCT to the annual forum at Birmingham in 2007. In 2007, I led the *Earth Systems* course team in planning a tailored course text for this flagship year 1 module taken by nearly all students in the School.

3. RESEARCH

A. RESEARCH SUPERVISION

Name	<i>Degree/ status</i>	<i>Year</i>	<i>Source of support</i>	<i>Brief title of thesis</i>
1. John Kaldi	PhD	1980	self	Sedimentology of Lower Magnesian Limestone
2. *Martin Quest	PhD	1985	NERC	Palaeosalinity & diagenesis of Portland-Purbeck.
3. Zhao Xun	Res. Fellow	1984- 1986	British Council	Devonian carbonates, south China.
4. Daniel Stedman	MSc	1986	NERC	Dalradian geology of north-central Islay
5. *Keith Gillespie	MSc	1987	NERC	Diagenesis of Triassic sandstone aquifer
6. Paul Herrington	PhD	1989	NERC	Late Proterozoic carbonates, East Greenland.
7. *Julia Grose	PhD	1990	NERC	Jurassic-Cretaceous boundary beds, SE France
8. Mohamed El-Sayed	PhD	1990	self	Calcareous duricrusts of Kuwait.
9. *Arthur Satterley	PhD	1993	NERC	Upper Triassic reef diagenesis, Austria
10. *Khaled Al-Thour	PhD	1993	British Council	Jurassic platform carbonates, Yemen
11. Lawrence Bradby	MSc/ PGRA	1991- 1993	NERC PGRA	Reactive carbonate in glacier ice and diamicts
12. Jacque Killawee	PGRA	1993- 1995	NERC PGRA	Research associate working on carbonate transformations in cryogenic environments
13. Deborah Walker	PhD	1996	NERC	Carbonates in marine polar sediments
14. Abdul El-Fiky	Ph.D.	1998	Egyptian gov't	Replacement supervisor from 1996 Carbonates in Westphalian continental facies
15. Matthew Farris	Ph.D	1999	Shell	Replacement supervisor from 1996 Triassic palynology and sedimentology
16. Yiming Huang	PDRA	1997- 1999	NERC	Karstic capture of chemical climatic signals
17. Anna Tooth	Ph.D.	2000	Keele U.	Climatic controls on karst water and stalagmite geochemistry
18. *Gareth Old	Ph.D	2000	NERC	External supervisor (Geography, Birmingham) Icelandic hydrogeochemistry
19. Zoe Robinson	Ph.D	2003	NERC	Geochemistry of groundwater in an Icelandic sandur
20. *James Baldini	Ph.D	2004	Irish government	External supervisor (UCD, Dublin) Trace elements as climatic indicators in karst
21. Emily McMillan	Ph.D	2006	Keele U.	Tests for palaeoaridity in Holocene stalagmites from SW Europe
22. Claire Smith	Ph.D	2007	NERC	Analysis of speleothem time series
23. *Lisa Fuller	Ph.D	2007	NERC	Isotopic records of palaeoclimate from speleothems

24. *Catherine Jex	Ph.D	2008	Bham Uni	Stalagmite records, NE Turkey
25. Peter Wynn	PDRA	2005-2007	NERC	Atmospheric forcing of sulphur in speleothem carbonate
26. *Catherine Muller	Ph.D	2009	Bham Uni	Rainfall events and atmospheric processes, West Midlands
27. Adam Hartland	Ph.D	2011	Bham Uni	Elemental transport by organic colloids in karstic environments
28. Anna de Momi	RA	2007-2008	NERC	Atmospheric forcing of sulphur in speleothem carbonate
29. David Domínguez-Villar	PDRA	2008-2010	EU	Proxies from cave deposits: testing their sensitivity using the current period of global change
30. *Pierre Bonnard	Ph.D	2011	OU/ Thermo	External supervisor (OU). Neoproterozoic isotope geochemistry of redox-sensitive metals
31. Simon Kettle	MPhil	2011	Self-funded	Diagenesis of carbonate turbidites
32. *Catherine Jex	PDRA	2009-2010	NERC	Last millennium palaeoclimates of Ethiopia
33. Emily McMillan	PDRA	2010-2013	NERC	The Svalbard exemplar of Neoproterozoic glaciation
34. *Edward Fleming	Ph.D	2014	NERC	The dynamics of a "Snowball Earth" glaciation deduced from magnetic and microstructural analyses of diamictites
35. Jonathan Dredge	Ph.D	2014	NERC	Aerosol contributions to speleothem chemistry
36. Rosemary Dartnall	For Ph.D	2011-	Self/ College	The Gwna melange
37. Clément Bourdin	PDRA	2014-2016	NERC	SCENT (Soil Carbon Export characterized by Novel Tracers)

Member of PhD advisory committee for overseas students:

YuShi	PhD*	2010	Chinese government	Sulphur in speleothems. Resident in UK 2009-2010; based at China University of Geosciences, Wuhan.
Clément Bourdin	PhD	2012	French government	Trace elements in speleothems External member of thesis advisory committee, LCSE Paris
Rena Karanouh	MSc	2014	American U. of Beirut	Paleo-climatic conditions of the eastern Mediterranean based on stable isotope variations from two stalagmites
Robert Kläebe	PhD	2016	Australian government	Chemistry of Neoproterozoic carbonates. University of Adelaide. External supervisor.
Pilar Aliaga	For PhD	2010-	Mexican government	Rare earth elements in speleothems External member of thesis advisory committee, National University of Mexico. Pily visited Birmingham for 4 months in 2012.

B. RESEARCH GRANTS AND CONTRACTS

<i>Grantholders</i>	<i>From-To</i>	<i>Source</i>	<i>Amount of funds</i>	<i>Title</i>
I.J. Fairchild	1978	Royal Soc.	£1.8 k	Field research: Upper Palaeozoic sedimentology of Spitsbergen
+W.B. Harland (Cambridge)	1981-83	NERC	c. £50k	IJF collaborator, Spitsbergen Precambrian project
+W.B. Harland	1984-86	NERC	c. £50k	IJF named collaborator, Precambrian, East Greenland ⁺ NERC policy did not permit research grants to be split between different institutions at that time
I.J. Fairchild	1985-96	NERC	Analyses	Several projects approved by NIGL steering committee for C/O/H/Sr isotope analyses
I.J. Fairchild	1987-90	NERC	£3.7 k	Cyanobacterial imprint on Late Proterozoic carbonates
I.J. Fairchild	1990-92	NERC	£34 k	Reactive carbonate in glacial systems
I.J. Fairchild	1993-95	NERC	£87 k	Reactive carbonate in glacial systems (extension)
I.J. Fairchild and Song Tianrui	1993-94	Royal Society	exchange visits	Scientific exchange programme: Neoproterozoic carbonate facies in North China.
I.J. Fairchild & R. Souchez	1994-96	British Council	nine exchange visits	Academic research collaboration: glaciology.
Consortium of 8 institutions	1995-96	CEC EV5V-CT94-0509	30000 ECU to IJF	Climatic reconstruction from speleothem deposits
Fairchild & Hawkesworth	1996-1997	NERC	2 weeks ion microprobe time	Climatic reconstruction from speleothem deposits: ion probe analyses
I.J. Fairchild	1997-99	NERC	£118 k	Karstic capture of chemical climatic signals. Final grades awarded: Excellent for science and excellent for use of resources
Bickle, Harris & Fairchild	1997-2000	NERC	£8 k share of £75 k	Metamorphic control on the ⁸⁷ Sr/ ⁸⁶ Sr ratio of the dissolved load of Himalayan river waters
Fairchild & Spiro	1997-99	NERC	Isotope analyses	Karstic capture of chemical climatic signals
Fairchild and Huang	1997-99	NERC	2 weeks ion-microprobe time	Cation partitioning during experimental speleothem growth
Russell, Knight and Fairchild	1998	Earthwatch International	£45k	Glacier outburst floods, glacier surges and sediment transfer implications for proglacial environments
Fairchild, Russell and Spiro	1998	NERC	Isotope analyses	Hydrochemistry and weathering fluxes in an Icelandic sandur
Fairchild et al.	1999-2000	NERC	2 weeks ion microprobe time (£6k)	Annual cycles of P and cations in speleothems
Russell, Fairchild and Tweed	2000	Earthwatch International	£30 k	Scientific studies on an Icelandic sandur
Bickle, Harris and Fairchild	2000-2003	Leverhulme Trust	£113 k	Chemical weathering yields from and relative inputs to a Himalayan river system

Fairchild and McDermott	2000-2001	NERC	2 weeks ion microprobe time (£6k)	Evaluating the response of speleothem cation ratios to selected high-amplitude climate fluctuations in the recent instrumental record and the Holocene
Russell, Fairchild and Tweed	2001	Earthwatch International	£28 k	Scientific studies on an Icelandic sandur
Fairchild et al.	2001-2003	NERC IMP178/0501	2 weeks ion microprobe time (£6k)	High-resolution trace-element palaeoclimate study of speleothems from the Austrian Alps (alpha-5 rated)
Fairchild & Spötl	2001-2003	Royal Society	£6.3 k	Joint project grant: High resolution trace-element palaeoclimate study of speleothems from the Austrian Alps
Consortium (Fairchild contractor)	2001-2	Italian government	£.25 k	Water analyses for project on climate reconstruction from speleothems (MURST)
Fairchild	2002	Nuffield Foundation	£1.3 k	Experimental weathering to simulate conditions on Snowball Earth (undergraduate bursary)
Fairchild & Spötl	2002	NERC IMP	2 weeks ion microprobe time (£6k)	Depositional geochemical signals from exceptionally preserved glacialustrine carbonates (alpha 4 rated)
Fairchild & Frisia	2002	NERC IMP199/1102	2 weeks ion microprobe time (£6k)	Patterns of late Holocene aridity from southern European speleothems (alpha 4 rated)
Fairchild (co-ordinator) of consortium of 5 Universities	2003-2006	NER/T/S/20 02/00448	£ 362 k + 2 studentships (= c. £ 474 k)	Atlantic Seaboard Climatic Reconstructions Including Bounding Errors (ASCRIE)
Fairchild, McDermott & Matthey	2003	NERC IMP	2 weeks ion microprobe time (£6k)	High-resolution stable isotope characterization of speleothem calcite (alpha 4/5 rated)
Fairchild	2004	NERC ICP-OSS/264/0504	6 days ICP-MS and 1 day ICP-AES time	Speleothem trace element standardization and sulphate pollution records (alpha 4 rated)
Fairchild	2004	NERC IMP 229/0504	One week ion microprobe time (£3 k)	Paired carbon isotope and trace element annual variability from a speleothem in a dynamically ventilated Alpine cave (alpha 5 rated)
Fairchild and McDermott	2004-2006	NERC IMP 230/0504	Two weeks ion microprobe time (£6 k)	Holocene climate change and test of solar forcing factors from trace element and isotopic analysis of speleothems from Refugio Cave, SE Spain (alpha 5 rated)
Frisia, Borsato and Fairchild	2004-2005	ESRF, beamline 21	Fifteen 8-hour shifts	High-resolution elemental variability in stalagmites: new archive of atmospheric chemistry changes. (European Synchrotron Research Facility, Grenoble)
Fairchild, Baker and Loader	2005-2009	NERC NE/C511805/1	£194 k	Atmospheric forcing of sulphate in speleothem carbonate (high alpha 4-rated)
Fairchild, Baker et al.	2005-2007	NERC Radiocarbon allocation 1096.1004	64 ¹⁴C analyses (£28 k)	Bomb carbon in modern stalagmites: using ¹⁴C dynamics to understand smoothing of palaeoenvironmental records (high alpha 4 rated)

Fairchild	2005	NERC ICP OSS/ 282/0205	4 days ICP-AES/MS time	Karstic waters, host rocks and speleothem standardizations (alpha 4 rated)
Fairchild	2005-2006	NERC ICP OSS/ 299/0905	15 days ICP-AES/MS time	Modern speleothems, their formation waters, and bedrock and atmospheric samples. (alpha 4 rated)
Baker, Fairchild and Eastwood	2005-2006	NERC Radiocarbon allocation 1136.1005	36 ¹⁴ C analyses (£16 k)	Testing the Genty model of stalagmite carbon transfer dynamics (mid alpha 4 rated)
Mattey, Atkinson and Fairchild	2006-2009	NERC NE/D005280/1	£102 k	Fidelity of speleothem climate proxies: an inter-annual calibration against the instrumental record in Gibraltar and prospects for climate hindcasting (alpha 5 rated)
Frisia, Fairchild and others	2006	ESRF, beamline 22	5 days beamtime	Micro-crystalline grains and coprecipitates with speleothem calcite: micro-XRD and XRF investigation. (European Synchrotron Research Facility, Grenoble)
Fairchild	2006	Royal Society	£1.6 k	Travel award to present keynote lecture, Melbourne, and visit ANU, Canberra
Baker, Fairchild et al	2006-2008	Leverhulme Trust	£30 k	Stalagmite laminae network
Fairchild	2006	Nuffield Found. URB/33218	£1.2 k	Incorporation of sulphate into calcite crystals
Fairchild et al	2006-2007	NERC ICP OSS/325/0906	6 days instrument time (£8.7 k)	Archives of sulphur contained within tree rings
Fairchild et al	2006-2007	European Synchrotron Research Facility	5 days beam-time (£50k)	Sulphur distribution in two tree species: cellular, annual and long-term variability. (Grade 4.5, highest rated proposal in its section)
Baker, Fairchild et al.	2006-2007	NERC-NIGL Stable isotope allocation	£47 k	IP/932/1106. A Holocene, high resolution, seasonal rainfall reconstruction from Ethiopia.
Fairchild, Baker and Boomer	2008-2010	European Commission	169 k Euros	Marie Curie Fellowship: Proxies from cave deposits: testing their sensitivity using the current period of global change
Fairchild and Baker	2008	NERC IMP /	100 hours ion micro-probe time (£12.5 k)	Annual sulphate cycles in an Alpine speleothem: winter temperature proxy
Baker, Widmann and Fairchild	2009-2012	NERC standard grant NE/F017960/1	£315 k	Last millennium climate reconstruction in Ethiopia using multiple stalagmite parameters
Fairchild et al	2009	NERC radiocarbon allocation 1324.1008	£6.8 k	Atmospheric carbon sequestration in hyperalkaline speleothems
Fairchild, Lead and Zhang	2009-2010	NERC small grant NE/G009317/1	£32.6 k	Elemental Signals in Karst: from Soil to Speleothem
Mattey (RHUL), Atkinson and Fairchild	2009-2012	NERC standard grant NE/G007292/1	£353 k total	A calibrated climate record from Gibraltar speleothem: the instrumental era, the Holocene and the last interglacial
Fairchild	2009-2010	Leverhulme Trust Study Abroad Fellowship	£10.4 k	Activating the speleothem archives

Fairchild	2009	Nuffield u/g bursary URB37014	£1.4 k	Incorporation of Mg into 'freshwater' calcite: the role of pH
Baker, Fairchild et al.	2009-2010	NERC isotope facilities IP-1099-0509	£51 k	Early Human migration out of Ethiopia: stalagmite isotopic evidence of a climatic forcing during 130-160ka
Fairchild, Baker & Dominguez-Villar	2009-2010	NERC Radiocarbon allocation	£4.6 k (nine ¹⁴ C analyses) 1408.0409.02	Controls on temperature transmission from atmosphere to speleothems
Blyth (OU), Baker and Fairchild	2010-2012	NERC standard grant NE/G016933/1	£ 17 k share	Paleoenvironmental change and hominid migration in Australia
Wynn, Fairchild & Loader	2010-2011	NERC small grant NE/H012257/1	£40 k total	Interrogating trees as archives of environmental sulphur variability
Fairchild, Stevenson et al.	2010-2014	NERC standard grant NE/H004963/1	£795 k (£645 k to Birmingham)	Glacial Activity in Neoproterozoic Svalbard (GAINS) = the Svalbard exemplar of Neoproterozoic glaciation (5 UK and 8 overseas institutions)
Fairchild, Wynn, Spötl, Mathey & Frisa	2011	European Synchrotron Research Facility, Grenoble	c. £30 k (3 days beam time)	Speleothem Sulphur in speleothems: validation of winter climatic proxy
Fairchild & Blyth	2011	NERC U-series dating allocation IP-1224-1110	£49 k equivalent	Palaeoenvironmental change and hominid migration in Australasia: a novel multi-proxy stalagmite biomarker approach
Kennedy, Fairchild & Swart	2011-2014	ARC Discovery Grant	\$Aus 351 k	Were abrupt changes in the Precambrian global carbon cycle the trigger for animal appearance and radiation on Earth?
Fairchild et al	2012	NERC ion microprobe facility IMF443-1011	£25 k equivalent	Organogenic dolomite and Neoproterozoic Chemostratigraphy
Bartlett, Fairchild et al.	2014-2018	NERC standard grant NE/K012827/1	£552 k	Controls on Soil Carbon Export revealed by Novel Tracers on multiple timescales (SCENT)
Baker, Fairchild et al.	2013-2016	ARC linkage grant	Aus \$193 k	To what extent does fire affect karst processes? Burning questions for fire management
Wynn, Fairchild et al.	2016-17	NERC ion microprobe facility IMF582/0516	£16 k equivalent	Wynn: Speleothem records of acid sulphate deposition and organic carbon mobilisation

C. EXTERNAL INVITATIONS RECEIVED AND OTHER CONFERENCE AND MEDIA PARTICIPATIONS

<i>Location</i>	<i>Date</i>	<i>Purpose</i>
Durham U.	1975	Lecture (BSRG Meeting)
Cambridge U.	1977	Invited lecture
Cambridge U.	1978	Invited lecture
Liverpool U.	1978	Lecture (International carbonate conference)
Leeds U.	1978	Lecture (BSRG meeting)
Cambridge U.	1979	Two invited lectures
Cambridge Natural History Society	1980	Presidential Lecture
British Antarctic Survey	1980	Invited lecture
Edinburgh U.	1980	Lecture (CL workshop)
Nottingham U.	1980-81	Invited guest lecturer in sedimentology (90 hrs. teaching)
Keele U.	1981	Invited lecture
Liverpool U.	1982	Lecture (BSRG meeting)
Edinburgh U.	1983	Lecture at conference on Conditions of Dalradian Metamorphism
U. Birmingham	1983	Conference organizer and poster presentation (BSRG annual meeting)
Liverpool U.	1984	Poster presentation
Reading U.	1984	Invited lecture
Bedford College, London U.	1985	Invited lecture
Scotland	1985	Invited leader of field visit for IGCP Project 179
Keele U.	1986	Invited lecture
Manchester U.	1986	Invited lecture
Southampton U.	1986	Invited lecture
Canberra, Australia	1986	Lecture at International Sedimentological Congress with conference grant from Royal Society
Liverpool U.	1986	Lecture at International diagenesis conference
Aston U.	1986	Invited lecture
Birmingham U.	1987	Lecture at teaching conference
Cardiff U.	1987	Lecture at International Algal Symposium
Liverpool U.	1987	Lecture at International carbonate conference
Cardiff U.	1987	Lecture at Symposium on Scandinavian Caledonides
Bristol U.	1987	Invited lecture
Montpellier U., France	1988	Invited lecture; collaborative research
Cambridge U.	1988	Invited lecture
Liverpool U.	1988	Invited lecture
British Antarctic Survey	1988	Invited lecture
Leicester U.	1988	Invited lecture
Nouakchott, Mauritania	1988	Invited participant in workshop for IGCP Project 261
Liverpool U.	1989	Invited lecture
London	1989	Lecture at Meeting on Glacimarine Sedimentation
Strasbourg, France	1989	Invited lecture at EUG Symposium on the Earth's Early Biosphere
Washington D.C., USA	1989	Two lectures at International Geological Congress with support from Royal Society
Birmingham U.	1989	Lecture at Stromatolite workshop
Leeds U.	1989	Lecture at BSRG conference.
Harvard U.	1990	Invited lecture
U. East Anglia	1990	Invited lecture
Nottingham U.	1990	Two lectures at International Sedimentological Congress
Scotland	1990	Invited co-leader of field trip by IGCP Project 260
Derbyshire CHE	1991	Invited lecture
Ortisei, Italy	1991	Lecture at the Dolomieu Symposium and invited chair of session on "Dolomite Petrology and geochemistry"
U. Cambridge	1991	Invited lecture (with A. Knoll)
University College, London	1992	Invited lecture
U. Liverpool	1992	Lecture at International Carbonate Conference

U. Wales, Cardiff	1992	Invited lecture
London	1992	Invited lecture at conference on Microbial Processes
U. Southampton	1992	Lecture at BSRG Conference
Imperial College, London	1993	Invited lecture at the De La Beche Symposium
Chinese Academy of Geological Sciences, Beijing	1993	Invited lecture
Chinese University of Geosciences, Beijing	1993	Invited lecture
NASA workshop on stromatolites, Boston, USA	1993	Invited participant
GSA meeting, Boston, USA	1993	Lecture at new directions in Quaternary Geology section with support from the Royal Society
BSRG meeting, Manchester	1993	Lecture and poster display
U. Birmingham	1993	Invited lecture in School of Geography
U. Manchester	1993	Invited lecture in Geography Department
U. Manchester	1993	Lecture at British Sedimentological Research Group annual meeting
U. Cambridge	1994	Invited lecture
U. Edinburgh	1994	Lecture at International Glaciological Society, British Section, Annual Meeting
U. Oxford	1995	Invited lecture
Strasbourg	1995	Presentation at European Union of Geosciences meeting
U. London	1995	Presentation at International carbonate conference
U. Alberta, Canada	1995	Invited lecture
U. Cambridge	1996	Invited lecture
Open University	1996	Invited lecture
Staffordshire University	1996	Lecture at Cave symposium
Keele University	1996	Lecture at basal ice conference
Radio 4	1996	Interview on Science Now programme (13th/16th July)
Ilkley	1996	Two presentations at International Geochemical Conference
Beijing, China	1996	Two lectures at International Geological Congress and invited chair of two scientific symposia with £1700 support from the Royal Society conference fund
Guilin, China	1996	Invited lecture at Karst Institute
University of Gothenburg, Sweden	1996	Invited lecture
University of Leicester	1996	Invited lecture
University of Exeter	1997	Invited lecture
University of Keele	1997	Inaugural lecture: Climate change: causes and capture
Salt Lake City, USA	1997	Lecture at "Isotopes in Earth Surface Processes" symposium at Geological Society of America meeting.
University of Leeds	1997	Invited lecture
University of Liverpool	1997	Invited lecture
University of Reading	1997	Invited lecture
University of Leeds	1998	Lecture at "Glacial debris transport and deposition" conference
University of Keele	1998	Lecture at Geoscience 98 (international geoscience conference) symposium on "Ultra-rapid climatic changes in the geological record"
Wedgwood Memorial College	1998	Invited seminar on climate change to visually impaired group
Wadia Institute of Himalayan Geology, Dehra Dun, India	1998	Invited lecture
University College, Dublin	1998	Invited lecture
University of Wales, Aberystwyth	1998	Two invited lectures
University of Cambridge	1999	Lecture at the international Bathurst conference
University of Reykjavik	1999	Two presentations at the Fifth International Symposium on the Geochemistry of the Earth's Surface (GES-5) supported by conference grant from the Royal Society
University of Oxford	2000	Lecture at the Goldschmidt Conference of the Geochemical Society
University of Bristol	2000	Invited lecture
National Museum of Wales, Cardiff	2001	Lecture at the annual Quaternary Research Association meeting
Newcastle-U-Lyme	2001	Invited Bladen-Wells lecture of the North Staffordshire Field Club
Edinburgh	2001	Co-organizer, plenary chair, session co-chair and paper presenter at <i>Earth System Processes</i>

London	2001	Invited lecture at the inaugural meeting of the Gaia: earth Systems Processes special interest group of the Geological Society of London
University of Birmingham	2001	Invited lecture to the Lapworth Society
Keele University	2001	Invited lecture to North Staffordshire Group of the Geologists Association
Belfast, Dublin and Galway	2001	Invited lectures to the Irish Geological Association
Open University	2002	Invited lecture
University of Brighton	2002	Lecture to British Geomorphological Research Group Meeting
University of Innsbruck	2002	Invited lecture
Assembly rooms, Bath	2002	Invited (Jubilee) lecture to the Bath Geological Society
Durham University	2002	Invited lecture to levels 2/3 Open University Summer School
Davos, Switzerland	2002	Lecture at the Goldschmidt conference of the Geochemical Society
Malaga, Spain	2002	Lecture at the second Nerja cave symposium
London	2002	Invited lecture to the Town Meeting of NERC's QUEST programme
University of East Anglia	2002	Lecture to the British Sedimentological Research Group meeting
Montpellier, France	2003	Two lectures and session chair at the conference "Climate changes: the Karst Record III"
British Geomorphological Research Group meeting, University of Oxford	2003	Invited lecture at Chemical Sediments symposium
University of Manchester	2003	Invited lecture
University of Wales, Bangor	2004	Invited keynote lecture at the Quaternary Research Association's annual discussion meeting
University of Cambridge	2004	Invited lecture
University of Leicester	2004	Lecture to the British Geomorphological Research Group meeting
BBC TV and Commercial radio	2004	Several TV and radio interviews in connection with the Shotton Archives of the D-Day landings
Baltimore conference centre, USA	2004	Joint presentation at CLIVAR (Climate Variability) conference
International Geographical Congress, Glasgow	2004	Lecture at Karst Commission symposium
Lamont-Doherty Earth Observatory of Columbia University, New York	2004	Invited lecture at Speleothems miniconference (funded by Lamont in association with the National Science Foundation)
Leicester University	2004	Invited lecture to the Literary and Philosophical Society
Cardiff University	2004	Invited research seminar
ISOPAL2 – Isotopes in Palaeoclimate studies, NIGL, Keyworth	2004	Invited review lecture on isotopes in speleothems
Graduate colloquium, University of Heidelberg, Germany	2005	Invited lecture on Neoproterozoic Palaeoclimatology
PAGES second open Science Meeting, Beijing, China	2005	Poster presentation (and co-author of three other presentations)
Chinese Academy of Sciences, Beijing	2005	Invited lecture to group of speleothem workers from various Chinese institutions
RGS-IBG Annual Meeting, London	2005	Lecture to the Climate Group of the Royal Geographical Society
International Geomorphological Conference, Zaragoza Spain	2005	Lecture in karst session
University of Edinburgh	2005	Invited lecture to the Edinburgh Geological Society
University of Oxford	2005	Invited lecture
American Geophysical Union Fall Meeting, San Francisco	2005	Lecture and joint poster
Quaternary Research Association, Glasgow University	2006	Lecture to the Annual Meeting: "Isotopes in the Quaternary"
University of Wales, Aberystwyth	2006	Invited lecture
Open University	2006	Invited lecture
Malaga, Spain	2006	Invited keynote lecture at AQUAinMED 2006 symposium on Mediterranean water resources
University of Southampton	2006	Invited lecture in School of Geography
Baile Herculane, Romania	2006	Keynote speaker, at Climate Change: The Karst Record IV conference
Goldschmidt Symposium, Melbourne, Australia	2006	Keynote speaker, High-Resolution Climate Proxies session and an additional lecture

Australian National University, Canberra	2006	Invited lecture
Manchester Metropolitan University	2006	Invited lecture
DAPHNE speleothem workshop, Innsbruck	2006	Three lectures and session chair
Bathurst international carbonate meeting, Norwich	2007	Invited keynote lecture
OU Geological Society, Cumbria	2007	Invited lecture for annual conference
Geological Society Bicentenary Conference, London	2007	Invited keynote poster
Hull University	2007	Invited lecture
American Geophysical Union Fall Meeting, San Francisco	2007	Lecture
University of California, Riverside	2007	Two invited lectures
University of Birmingham	2008	Invited lecture, Darwin Day
University College, Dublin	2008	The Irish Geological Association Guest Lecturer at the 51st annual Irish Geological Research Meeting
Vienna	2008	Session co-convenor and poster presentation at the European Geosciences Union annual meeting
University of Durham	2008	Invited lecture
Hull University	2008	Lecture at international workshop on stromatolites, tufas and speleothems
University of Worcester	2008	Invited lecture to Worcestershire Partnership on climate change science in relation to adaptation strategies
Soplao cave Spain	2008	Invited cave assessment funded by Spanish Geological Survey and Cantabrian Government
International Geological Congress, Oslo	2008	Invited keynote lecture and session convenor
Cape Leeuwin National Park, Western Australia	2008	Invited collaborative research funded by Australian Government (Australian Nuclear Science and Technology Organization, ANSTO)
Geological Society, London	2008	Invited lecture to the Geologists Association
Royal Holloway, University of London	2008	Invited lecture
University of Manchester	2008	Invited lecture to the Manchester Geologists Association
University of Nottingham	2008	Invited lecture on Academic careers as part of Geological Society of London Careers Day
GONHS, Gibraltar	2009	Invited session organizer, International Workshop on Cave Monitoring
SOLEIL synchrotron, Paris	2009	Invited review lecture of the applications of synchrotron radiation to palaeo-studies
Goldschmidt geochemistry meeting, Davos	2009	Invited keynote lecture
University of Heidelberg	2009	Invited lecture
Open University	2009	Invited research seminar
USA	2009	Invited lectures: University of Texas, Austin; Louisiana State University, Baton Rouge; University of Minnesota, Minneapolis; University of California, Riverside
New Zealand	2009	Invited lecture at School of Environment, University of Auckland
Australia	2009	Invited lectures at Macquarie University, ANSTO (during one-week visit) and University of Newcastle (during two-month visit)
Keele University	2010	Invited lecture
Shrewsbury	2010	Invited lecture to Shropshire Geological Society
Gibraltar	2010	Invited lecture to field workshop and television interview
University of Bristol	2010	Lecture at British Cave Research Association annual meeting
Creswell Crags SSSI	2010	Invited lecture to AHRC Upland Network
Buxton, Derbyshire	2010	Invited lecture at British Cave Research Association field meeting
University of Oviedo	2010	Invited presenter at European Mineralogical Union short course on trace element partitioning
University of Innsbruck	2010	Lecture at DAPHNE speleothem workshop
University of Melbourne, Monash University, and University of Adelaide, Australia	2010	Tour of invited lectures
Science Museum London	2010-2015	Contribution of stalagmite and panels of information about my work to atmosphere exhibition on climate change
University of Liverpool	2010	Invited lecture to mark opening of new isotope laboratory, LIFER.
University of Manchester	2011	Invited lecture
University of Leicester	2011	Invited lecture to the Leicester Literary and Philosophical Society
Geological Society, London	2011	Invited lecture at meeting on Co-Evolution of Earth and Life

University of Cambridge	2011	Invited lecture
Royal Holloway, University of London	2011	Invited London Quaternary Lecture
Beaulieu, Hants	2012	Lecture to Quaternary Research Association annual discussion meeting
University of Heidelberg	2012	Invited keynote lecture to the Daphne speleothem symposium
Dudley Museum	2012	Invited lecture to the Black Country Geological Society
University of Sheffield	2012	Invited seminar in Department of Geography
Harvard University	2012	Invited lecture
University of Heidelberg	2013	Invited keynote speaker in Summer School on Speleothem Science
University of Manchester	2013	Invited speaker and session co-convenor at International Association of Sedimentologists meeting
Argyll, Scotland	2013	Co-leader of international field workshop of the Cryogenian sub-commission of the International Commission on Stratigraphy
Gibraltar Museum	2013	Invited keynote speaker, Calpe Symposium
University of Aberystwyth	2013	Invited lecture to C3W climate series
University of Cambridge	2013	Invited lecture
University of Adelaide	2013	Invited lecture
British Geological Survey	2014	Invited participant, International Continental Drilling Programme, Neoproterozoic workshop
Dudley Museum	2014	Invited lecture to the Black Country Geological Society
Pooles Cavern, Buxton	2014	Invited lecture to the Buxton Civic Association
Trinity College, Dublin	2014	Invited lecture to oxygenation symposium
University of Melbourne	2014	Lecture and poster presentations to KR (Karst Record) 7 conference
University of Adelaide	2014	Invited lecture
University of Birmingham	2014	Presentation at British Cave Research Association Annual Meeting
Geological Society, London	2014	Invited keynote lecture to Conference on Co-Evolution of Life and the Planet
Martley, Worcestershire	2015	Invited lecture to Teme Valley Geological Society
University of Tartu, Estonia	2015	Invited lecturer for postgraduate symposium on Methods and Applications in Palaeoclimate Research
Oxford	2015	Invited lecture to the Oxford Geology Group
University of Edinburgh	2015	Two presentations and session convenor at the Bathurst symposium
University of Oxford	2015	Invited field trip leader and lecturer at S4: Speleothem Science Summer School
University of Innsbruck	2015	Invited lecture
University of Granada	2015	Invited workshop and lecture
University College Dublin	2015	Invited lecture
McDonald Institute, University of Cambridge	2015	Invited talk and Anthropocene workshop participant
San Francisco	2015	Invited lecture at AGU meeting session on speleothem studies in water-limited environments
Worcestershire	2016	Invited lectures to U3A Malvern and Teme Valley Geological Society
University of Portsmouth	2016	Invited lecture
Hereford	2016	Invited lecture to Astronomical Society
Oslo	2016	Presentation and discussant at Anthropocene Working Group meeting
Geological Society, London	2016	Lecture at William Smith Meeting on Glaciated Margins
Royal Cambrian Academy, Conwy	2016	Lecture to GeoScience Wales
Drama Department, University of Birmingham	2016	Performance of the scripted work: "Introducing the Anthropocene" for the conference <i>Environment, Economy and Climate Change: Stages in Transition</i>
University of Glasgow	2016	Lecture to Glasgow Geological Society
Kenilworth	2016	Lecture to Warwickshire Geological Conservation Group
Worcester	2016	Lecture to Building Stones Colloquium
Cardiff	2016	Lecture to Geologists Association, S Wales Group
Herefordshire and Worcestershire	2017	Invited lectures to U3A Malvern, Woolhope Club, Teme Valley Geological Society and U3A Leominster
Wuhan University of Geosciences, China	2017	Two invited lectures
Guiyang, China	2017	Keynote lecture to 11th International Symposium of the Geochemistry of the Earth's Surface
Beijing, Academy of Geological Sciences	2017	Invited lecture
Burgos, Spain (CENIEH)	2017	Two invited lectures to S4: Speleothem Science Summer School
National Museum of Wales, Cardiff	2017	Invited lecture to Geologists' Association Annual Meeting

Sedgwick Museum, Cambridge	2017	Invited lecture to the Friends of the Sedgwick Museum
British Geological Survey, Keyworth	2017	Invited lecture to the Open University Geological Society

4. CONFERENCE/SYMPOSIA ORGANIZATION

<i>Society</i>	<i>Conference</i>	<i>Date/Place</i>	<i>Function</i>
British Sedimentological Research Group	Annual Meeting; 2 days talks, 1 day field trips; 375 registrants	1983, Birmingham	Organizer/convenor
British Sedimentological Research Group	Meeting on practical teaching of sedimentology	1987, Birmingham	Organizer
UK group of International Geological Correlation Programme 261	Workshop	1989, Birmingham	Organizer
British Cave Research Group	Annual Science Meeting	1998, Keele	Convenor
Geological Society of America-Geological Society of London (their first major joint conference)	Earth System Processes	2001, Edinburgh	Co-chair of scientific programme committee
British Society for Geomorphology	Annual Meeting. Geomorphology: a 20:20 vision	2007, Birmingham	Co-convenor
Conference attended by 160 delegates from 27 countries	Climate Change-The Karst Record 6 (KR6)	2011, Birmingham	Lead Convenor
Geological Society of London. 130 delegates, many from USA	Fermor meeting on the Neoproterozoic	2012, London and Midlands field trip	Lead Convenor
British Cave Research Group	Annual Science Meeting	2014, Birmingham	Convenor
Karst Commissions 120 delegates from 22 countries	KG@B Karst Groundwater at Birmingham	June 2015, Birmingham	Co-convenor

5. JOURNAL WORK

<i>Journal</i>	<i>Position</i>	<i>Dates</i>
Journal of the Geological Society	Subject Editor	1989-1995
Journal of the Geological Society	Chief Editor	1995-2000
Sedimentary Geology	Guest Editor	1998 theme issue
Acta Geologica Sinica	Editorial Board	2001-2008
Reviews of Geophysics	Editor	2005-2010
Proceeding of the Geologists Association	Editorial Board	2009-present

Earth Surface Processes and Landforms	Guest Editor	2008-2010 (theme issue)
Sedimentology	Editor, theme issue	2014-15 (February 2016 issue)

Also reviewer for many hundreds(!) of articles in 34 journals: American Journal of Science, Applied Geochemistry, Archaeometry, Basin Research, Cave and Karst Science, Chemical Geology, Earth and Planetary Science Letters, Earth Surface Processes and Landforms, Geochimica et Cosmochimica Acta, Geofisker Annaler, Geofluids, Geological Journal, Geological Magazine, Geophysical Research Letters, Historical Biology, The Holocene, Hydrological Processes, Journal (and Special Publications) of the Geological Society of London, Journal of Archaeological Science, Journal of the Geological Society of India, Journal of Glaciology, Journal of Hydrology, Journal of Quaternary Science, Journal of Sedimentary Geology/Petrology, Nature, Nature Geoscience, PNAS, Precambrian Research, Proceedings of the Yorkshire Geological Society, Quaternary Science Reviews, Sedimentology, Sedimentary Geology, Terra Antartica (sic), Terra Nova and Water Resources Research.

Also regular reviewing work for major funding agencies internationally and previously was registered expert in climate and water issues with the CEC.

6. ADMINISTRATIVE AND OTHER CONTRIBUTIONS

<i>Organization</i>	<i>Role</i>	<i>From</i>	<i>To</i>
A. Departmental/School			
Department of Geology, U. Cambridge	Examiner, Part IA and Part II	1977	1980
	Supervisor of rock-cutting workshop	1977	1980
Department of Geological Sciences/School of Earth Sciences, University of Birmingham	Overall responsibility for practical exams.	1981	1983
	Supervision of rock-cutting workshop and technician Paul Hands	1981	1988
	Supervision of general technician, Kay West	1985	1988
	Co-ordinator of term-time field courses	1983	1989
	Member of Museum committee	1984	1988
	Undergraduate admissions tutor for Geological Sciences	1984	1989
	Member of undergraduate committee	1988	1995
	Fieldwork officer	1989	1991
	Member, Budget & Policy committee	1990	1991
	Library representative	1989	1992
	Tutor (later course organiser) for Joint Honours degree in Geology and Geography	1991	1995
	Postgraduate admissions tutor (Ph.D.) and member of research committee	1993	1995
Department of Earth Sciences, Keele University	Chairman of postgraduate committee/postgraduate tutor.	1996	1998
	Organization of research seminar programme		
	Leader of Earth Surface Processes Research Group	1996	2003
	Head of Department and ex-officio member of Senate	1998	1999

School of Earth Sciences and Geography, Keele University	Head of School and <i>ex-officio</i> member of Senate	1999	2001
School of Geography, Earth and Environmental Sciences, University of Birmingham	Director of Physical Geography	2003	2008
	RAE lead both for Geography and Environmental Studies and for Earth Systems and Environmental Sciences	2004	2007
	IT committee chair	2005	2007
	Director of stable isotope laboratory	2006	present
	Director of Research	2007	2011
	Head of Geosystems research group	2009	2011
	REF lead for Earth Systems & Environmental Sciences	2011	2011
	Head of School Including leadership of School's quinquennial review (2012), and successful bids in 2013 for a NERC doctoral training partnership (CENTA) and an Athena Swan bronze award for the School.	1/2012	12/2013

B. University

Cambridge Natural History Society	President, geology section	1978	1980
University of Birmingham	Member of the Faculty Board of Science and Engineering	1981	1983
Keele University	Ex-officio member of Senate	1998	2001
Keele University	Dean of Natural Sciences and ex-officio member of Senate, Council and the University senior management team	2001	2003
University of Birmingham, College of Life and Environmental Sciences (CoLES)	Research committee (also promotions committee in 2008-9)	2008	2011
University of Birmingham	College representative on <i>Ad hoc</i> committee to recommend new processes to replace Staff Development Review	2011	2012
CoLES	ex-officio, member of College Board	2012	2013
University of Birmingham	Member of Senate	2012	2013
University of Birmingham	Birmingham Brief group	2012	2012

C. External

various	Consultant on sedimentary petrology and suitability of sedimentary materials as aggregates	occasional	
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International Geological Correlation Programme (IGCP)	Project 179 (Proterozoic): member and field leader	1982	1986
British Sedimentological Research Group	Secretary, Chairman and Convenor of Annual Meeting	1983	1984
U. Oxford	External examiner (PhD)	1985	
International Geological Correlation Programme (IGCP)	Project 261(stromatolites): originator, member	1987	1991
U. London	External examiner (PhD)	1987	
U. Bristol	External examiner (M.Sc.)	1987	
International Geological Correlation Programme (IGCP)	Project 260 (glacial sediments): member, co-leader of sub-project, co-editor of final volume	1988	1992
U. Liverpool	External examiner (PhD)	1990	
U. Durham	External examiner (PhD)	1990	
Natural Environment Research Council	Member, Geological Sciences Research Grants and Training Awards Committee	1990	1993
International Geological Correlation Programme (IGCP)	Project 320 (Neoproterozoic events): UK National Correspondent	1991	1995
UEA	External examiner (PhD)	1991	
U. Cambridge	External examiner (PhD)	1992	
Liverpool John Moores University	External member of BSc validation committee	1993	
Royal Society	Member, Earth Resources Committee	1994	1997
University of East Anglia	External examiner (PhD)	1995	
University of Aberdeen	External examiner (PhD)	1995	
University of Manchester	External examiner (PhD)	1996	
International Union of Geological Sciences	Subcommission on the terminal Proterozoic system, voting member	1996	2004
University of Reading	External examiner (M.Sc. courses in Sedimentology)	1996	1999
Natural Environment Research Council	Ion Microprobe (and sometime Experimental Petrology) Steering Committee (Chairman from 1997)	1996	2000
Natural Environment Research Council	Member, Services Review Group	1997	
University of Reading	External examiner (PhD)	1997	
University of Bristol	External examiner (Ph.D.)	1997	
University of Reading	External examiner (DSc)	1997	
University College Dublin	External examiner (BSc)	1998	2001
University College London	External examiner (BSc and MSci.)	1998	2002
University of Wales, Aberystwyth	External examiner (MSc by research)	1999 and	2001
Geological Society of London	Member of Science Committee and Publications Management Committee	1999	2002
University of Edinburgh	External examiner (PhD)	2000	

University of Leicester	External reviewer of Department of Geology	2000	
University of Cairo	External examiner (PhD)	2000 and	2001
University of Wales, Aberystwyth	External examiner (BSc)	2001	2004
Trinity College, Dublin	External examiner (PhD)	2001	
Staffordshire University	Examiner (PhD)	2002	
UNESCO	Member of a working group helping to plan the International Year of Planet Earth	2002	
NERC	Member of ad hoc steering group for QUEST and presenter at Town Meeting in London	2002	
Open University	External examiner (PhD)	2002	
Australian National University	External examiner (PhD)	2003	
NERC	Member of Peer Review College and member of peer review committees for grants and fellowships	2003	2007
Kingston University	Member of course review panel	2003	
NERC	Chair of Climate and Meteorology peer review committee, Nov-Dec	2003	
Keele University	External examiner (DSc)	2004	
Geological Society of London	Member of Awards Committee	2004	2008
University of East Anglia	External examiner in environmental sciences (BSc)	2004	2007
University of Huddersfield	External Examiner (PhD)	2004	
University of Bristol	External Examiner (PhD)	2004	
NERC	Chair of Geosciences peer review committee, Nov-Dec	2004	
University of Cambridge	External Examiner (PhD)	2004	
University of East Anglia	Quinquennial course review	2004	
University of Newcastle (NSW, Australia)	External Examiner (PhD)	2005	
University of Huddersfield	External Examiner (PhD)	2005	
NERC	Chair of “History of the Earth” peer review committee, Nov	2005	
NERC	Member of Services Review Group	2006	
NERC	Member of Strategy Development sub-panel on <i>Earth System Science</i>	2006	
University of East Anglia	External panel member for Professorial appointment	2006	
University of Leeds	External panel member for Departmental Review	2006	
University of East Anglia	External panel member for RCUK Fellowship appointment	2006	
University of Aberdeen	External adviser for Chair appointment	2007	
University of East Anglia	External Examiner (PhD)	2007	
Open University	External adviser, Geosciences Awards Committee	2007	2009

University of Nottingham	External Examiner (PhD)	2007	
NERC	Member, consultative committee on palaeodata archiving	2007	
HEFCE	Expert adviser on geochemistry and sedimentology for RAE2008 (sub-panels 17 and 22)	2008	
NERC	Peer Review College Member	2008	2011
NERC	Chair, Moderating Panel F (standard grants)	2008	
University of Cambridge	Part II Natural Sciences external examiner	2008	2011
University of Waikato	External Examiner (PhD)	2008	
Geological Society of London	Validated Scrutineer	2009	ongoing
International Research Center on Karst (UNESCO) Guilin, China	Member, Scientific Committee	2009	ongoing
SOLEIL Synchrotron, Paris	External Member, PUMA beamline committee	2010	2014
University of East Anglia	External examiner, MSc in Climate Change	2010	2013
Research Excellence Framework 2014	Panel member, sub-panel 7, Earth Systems & Environmental Sciences	2011	2014
European Synchrotron Research Facility, Grenoble, France	Member, Review Committee in Environmental and Cultural Heritage	2011	2012
University of Melbourne	External Examiner (PhD)	2011	
European Synchrotron Research Facility, Grenoble, France	Member, quinquennial review panel for spectroscopic beamline ID21	2011	
University of Leeds	External panel member for chair appointment	2012	
European Synchrotron Research Facility, Grenoble, France	Beamtime Allocation Panel Chair (C07, beamlines I13, I16, I21, I22)	2012	2014
International Commission on Stratigraphy, IUGS	Voting member of the Cryogenian Subcommittee of the International Commission on Stratigraphy	2012	ongoing
University of St. Andrews	External adviser for chair appointment	2012	
University of East Anglia	External examiner (PhD)	2012	
University of St. Andrews	External reviewer, teaching quality audit, School of Geography and Geosciences	2013	
Geological Society of London	Member, research grants committee	2013	2016
Open University	Science Programme Adviser	2013	2015
University of Cambridge	External examiner (PhD)	2013	
International Commission on Stratigraphy	Member of Anthropocene Working Group	2013	Ongoing
Royal Holloway, UL	External examiner (PhD)	2014	

Natural England	Modern tufa occurrences: recommendations for Geological Conservation Review	2014	2015
Earth Heritage Trust	Local Geological Sites Designation Panel	2015	
University of Glasgow	External assessor, UoA7 REF performance review	2015	
University of East Anglia	External assessor, research review of the School of Environmental Sciences	2015	
Hereford & Worcester Earth Heritage Trust	Trustee	2015	Ongoing
University of Innsbruck	External examiner (PhD)	2015	
University of Stockholm	PhD opponent	2015	
Keele University	External examiner (MSc Geoscience Research)	2015	2019
NERC	NERC Isotope Geoscience Facilities (NIGF) Steering Committee chair	2016	2019/20
University of Melbourne	External examiner (PhD)	2016	
University of Glasgow	External assessor, research review	2017	
Various UK Universities	Consultancy on REF 2020	2016	ongoing
University of Glasgow	External assessor, research review	2017	
University of Innsbruck	External examiner (PhD)	2017	

7. PUBLICATIONS

Publications that have been subjected to normal scientific refereeing procedures are shown in 12 point type. Invited review/conference publications with refereeing mainly of presentation rather than content are shown in 11 point type. *Book/conference reviews shown in 10 point italic type.* Short conference abstracts are not listed.

h-index (Google Scholar): 52 (December 2017)

Submitted

- Jiménez de Cisneros, C., Sequero, C., González Ramón, A., Andreo-Navarro, B. and Fairchild, I. Stable isotope evidence supporting the use of petrographic fabrics as a proxy to constrain paleoclimatic reconstructions from speleothems. Submitted to *Journal of Iberian Geology*, November 2017
- Wynn, P.M., Fairchild, I.J., Borsato, A., Spötl, C., Hartland, A., Baker, A., Frisia, S. and Baldini, J. Sulphate partitioning into calcite: Experimental verification of pH control and application to seasonality in speleothems. *Geochimica Cosmochimica Acta*,

In press

Published

204. Waters, C.N., Zalasiewicz, J., Summerhayes, C., Fairchild, I.J., Rose, N.L., Loader, N.J., Shotyk, W., Cearreta, A., Head, M.J., Syvitski, J., Williams, M., Wagnreich, M., Barnosky, A.D., Zhisheng, A., Leinfelder, R., Jeandel, C., Galuszcza, A., Iva do Sul, J.A., Gradstein, F., Steffen, W., McNeill, J.R., Wing, S., Poirier, C. & Edgeworth, M.A. 2018 Global Stratotype Section and Point (GSSP) for the Anthropocene Series: Where and how to look for potential candidates. *Earth-Science Reviews*, Doi: 10.1016/j.earscirev.2017.12.016.
203. Klæbe, R.M., Smith, M.P., Fairchild, I.J., Fleming, E.J. and Kennedy, M.J. 2018 Facies-dependent $\delta^{13}\text{C}$ variation and diagenetic overprinting at the onset of Sturtian glaciation in North-East Greenland. *Precambrian Research*. <https://doi.org/10.1016/j.precamres.2017.12.008>
202. Ali, D.O., Spencer, A.M., Fairchild, I.J., Chew, K.J., Anderton, R., Levell, B.K., Hambrey, M.J., Dove, D., Le Heron, D.P. 2018. Indicators of relative completeness of the glacial record of the Port Askaig

- Formation, Garvellach Islands, Scotland. *Precambrian Research*. Doi: 10.1016/j.precamres.2017.12.005.
201. Fairchild, I.J. 2018 Geochemical records in Speleothems. In: DellaSala, D.A. and Goldstein, M.I. (eds.) *Encyclopedia of the Anthropocene, Volume 1: Geologic History and Energy*, Elsevier Reference Modules, p 205-212.
200. Fairchild, I.J., Spencer, A.M., Ali, D.O., Anderson, R.P., Anderton, R., Boomer, I., Dove, D., Evans, J.D., Hambrey, M.J., Howe, J., Sawaki, Y., Wang, Z., Shields, G., Skelton, A. Tucker, M.E. and Zhou, Y. 2017 Tonian-Cryogenian boundary sections of Argyll, Scotland. *Precambrian Research*. doi: 10.1016/j.precamres.2017.09.020.
199. Liao, J., Hu, C., Wang, M., Li, X., Ruan, J., Zhu, Y., Fairchild, I.J. and Hartland, A. 2018 Assessing acid rain and climate effects on the temporal variation of dissolved organic matter in the unsaturated zone of a karstic system from southern China. *Journal of Hydrology*, 556, 475-487.
198. Hoffman, P.F., Abbot, D.S., Ashkenazy, Y., Benn, D.I., Cohen, P.A., Cox, G.M., Creveling, J.R., Donnadiou, Y., Erwin, D.H., Fairchild, I.J., Ferreira, D., Goodman, J.C., Halverson, G.P., Jansen, M.F., Le Hir, G., Love, G.D., Macdonald, F.A., Maloof, A.C., Ramstein, G., Rose, B.E.J., Rose, C.V., Tziperman, E., Voigt, A. and Warren, S.G. 2017. Climate dynamics of Snowball Earth and Cryogenian geology–geobiology. *Science Advances*, 3, e1600983
197. Zalasiewicz, J. Waters, C.N., Summerhayes, C.P., Wolfe, A.P., Barnosky, A.D., Cearreta, A., Ellis, E., Fairchild, I.J., Gałuszka, A., Haff, P., Hajdas, I., Head, M.J., Ivar do Sul, J.A., Jeandel, C., Leinfelder, R., McNeill, J.R., Neal, C., Odada, E., Oreskes, N., Steffen, W., Syvitski, J., Vidas, D., Wapreisch, M. & Williams, M. 2017. The Working Group on the Anthropocene: Summary of evidence and interim recommendations. *Anthropocene*, 19, 55-60.
196. Domínguez-Villar, D., Vázquez-Navarro, J.A., Krklec, K., Lojen, S. and Fairchild, I.J.. 2017 Laminated tufa sediments formed from overflow karst springs: controls on their deposition and carbon-oxygen isotope records. *Sedimentology*, 64, 1274-1288.
195. Zalasiewicz, J., Waters, C.N., Wolfe, A.P. Barnosky, A.D., Cearreta, A., Edgeworth, M., Ellis, E.C., Fairchild, I.J., Gradstein, F.M., Grinevald, J., Haff, P., Head, M.J., Jeandel, C., Leinfelder, R., McNeill, J.R., Oreskes, N., Poirier, C., Revkin, A., Richter, D deB., Steffen, W., Summerhayes, C., Syvitski, J.P.M., Vidas, D., Wapreisch, M., Wing, S. and Williams, M. 2017 Making the case for a formal Anthropocene: a constructive discussion of ongoing critiques. *Newsletters on Stratigraphy* 50, 205-226.
194. Domínguez-Villar, D., Krklec, K., Pelicon, P., Fairchild, I.J., Cheng, H. and Edwards, L.R. 2017 Geochemistry of speleothems affected by aragonite to calcite recrystallization — potential inheritance from the precursor mineral. *Geochimica Cosmochimica Acta* 200, 310-329.
193. Tadros, C.V., Treble, P., Baker, A., Fairchild, I., Hankin, S., Roach, R., Markowska, M. and McDonald, J. 2016 ENSO - cave dripwater hydrochemical relationship: a 7-year dataset from SE Australia. *Hydrology and Earth System Science*, 20, 4625-4640.
192. Steffen, W., Leinfelder, R., Zalasiewicz, J., Water, C.N., Williams, M., Summerhayes, C., Barnosky, A.D., Cearreta, A., Crutzen, P., Edgeworth M., Ellis, E.C., Fairchild, I.J., Gałuszka, A., Grinevald, J., Haywood, A., Ivar do Sul, J., Jeandel, C., McNeill, J.R., Odada, E., Oreskes, N., Revkin, A., Richter, D. de B., Syvitski, J., Wapreisch, M., Wing, S.L., Wolfe, A.P. and Schnellhuber, H.J. 2016 Stratigraphic and Earth System Approaches to Defining the Anthropocene. *Earth's Future* 4, doi:10.1002/2016EF000379.
191. Nagra, G., Treble, P.C., Andersen, M.S., Fairchild, I.J., Coleborn, K. and Baker, A. 2016 A post-wildfire response in cave dripwater chemistry. *Hydrology and Earth System Sciences*, 20, 2745-2758.
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8. Other Professional Development

1979, September. Teaching and learning in Higher Education, a week's training course led by Lewis Elton et al. at the University of Surrey

1993 Two-day first-aid training course

1998 Two-day first-aid training course

1999 Keele University training courses in Finance for non-financial people

2000 Keele University training courses in:

- a) Improving Communication in your department
- b) How to deal with difficult people
- c) Team building
- d) Delegating Effectively and Keeping Control

2002 Keele University training courses in:

- a) Equal opportunities in recruitment: guide for chairs and members of selection panels
- b) Special Educational Needs and Disability Act

c) Occupational Health and stress issues

d) Research governance issues

2002-3

a) Induction for Heads: financial management and support staff relations

b) Senior management training programme:

i) leadership and people management (1.5 days)

ii) action learning (1 day)

iii) management of change (1 day)

2004 Training courses on e-learning

a. Generic issues (course provided by LSTN-GEES)

b. Set of 5 sessions on Web-CT run by University of Birmingham e-learning team

2004 (August) Attendance at 3-day conference on analytical quality in isotope hydrology conference at the International Atomic Energy Authority in Vienna

2004 (November) 1-day media training course at University of Birmingham

2005 (September) E-learning update: WebCT Vista, University of Birmingham

2006 (May) Code of practice for postgraduate supervision, University of Birmingham

2007 (November) Change management workshop, University of Birmingham

2009 (March) Scrutineers' Day, Geological Society of London

2010 (March) 2-day certificated outdoor/expeditions first aid training

2012 (March) 1.5 days Reviewer training: Personal Best/Performance Development Review

2015 (May) 2-day certificated outdoor/expeditions first aid training

2017 Radiation safety training for use of hand-held X-ray fluorescence spectrometer