

Geological Society of London

Annual Report 2007

VOLUME ONE

200 YEARS
serving science & profession





The Bicentenary field excursion 'In Darwin's Footsteps' (see page 16) provided the photographic backdrop for this *Annual Report*. The ambitious voyage around Cape Horn was organized by Prof Ian Dalziel (picture).



Prof Paul Henderson, Chair, Bicentenary Steering Committee



Sir Mark Moody-Stuart, Chair, Bicentenary Fundraising Committee



Report of the Trustees of The

President: Dr Richard Fortey
Vice Presidents: Dr Iain Bartholomew, Prof Martin Culshaw
 Prof Paul Henderson
Secretaries: Dr Nick Rogers, Mr David Shilston,
 Prof Tony Watts
Secretary, Foreign & External Affairs: Prof Edward Derbyshire
Treasurer: Prof Andrew Fleet

The Council submits its annual report and financial statements for the year ended 31 December 2007. The report of the Council incorporates the legal and administrative details on this and the following pages and the reports of the President, the Executive Secretary and the Treasurer.

Financial Review

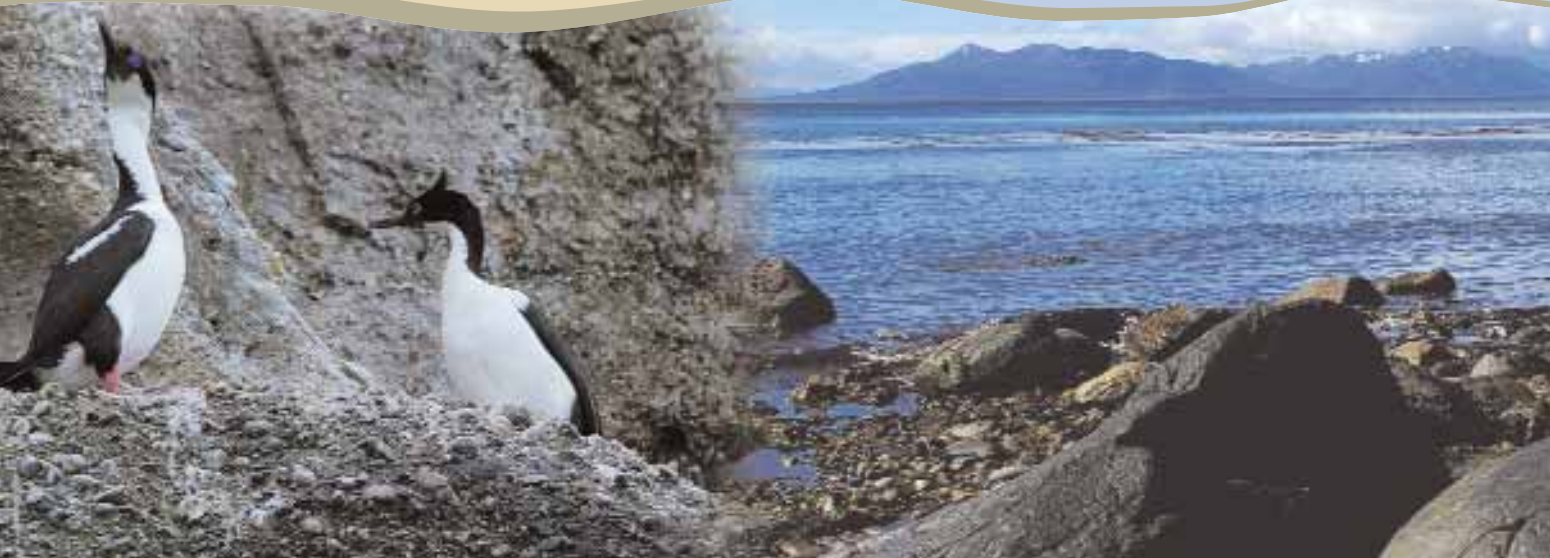
The Financial Statements and Report of the Council have been prepared in accordance with the Bye-Laws of the Society, the Statement of Recommended Practice, Accounting and Reporting by Charities and complies with applicable law. A review of the financial highlights of the year is set out in the report of the Treasurer in Volume Two.

Investment Policy and Performance

In accordance with the Bye-Laws of the Society, the Treasurer ensures the proper management of the Society's real estate, investments and funds on deposit. This is achieved through the actions of an Investment Panel, in conjunction with the Society's Investment Managers. The policies of the Investment Panel are to ensure the delivery of a budgeted level of income in each year and to continue the prudent investment policies of the Society. Further details of performance are contained within the Treasurer's Report.

Reserves Policy

To undertake the continued development and reinvestment in the Society's publishing, educational and other activities, and to hold a contingency sum in respect of the significant redecoration costs that the Society is obliged to meet, in the light of the lease with our landlord, the Department of Communities and Local Government (DCLG) at Burlington House. The Society considers its free reserve sufficiency to be in the order of £1,000,000, which would be required to meet its short term operational requirements as well as to provide some contingency in any temporary shortfalls of income. Free reserves, as defined by the Charity Commission, at 31 December 2007 stood at £1,385,569 (2006: £643,496).



Geological Society of London

Risk Management

The Trustees actively review on a regular basis the major risks which the charity faces and believe that maintaining free reserves at the levels stated above, combined with annual review of the controls over key financial systems, provide sufficient resources in the event of adverse conditions. The Trustees have also examined other operational and business risks faced and confirm that they have identified actions and established systems to mitigate the significant risks.

Charitable Objectives

The Object of the Society as set out in its Charter is “to investigate the mineral structure of the Earth”, which is interpreted to mean

- i. improving knowledge and understanding of the history, structure, constitution and dynamics of the Earth and its process;
- ii. promoting all forms of education, awareness and understanding of the Earth and their practical applications for the benefit of the public globally; and
- iii. promoting professional excellence and ethical standards in the Earth sciences for the public good.

In meeting this Object the Society provides public benefit by advancing Earth sciences education at all levels, and by promoting knowledge of the Earth and professional standards so as to advance environmental protection and improvement and human health, and to guard against natural hazards. Specifically the Society provides:

Induction into the profession through Candidate Fellowship

During 2007, by supporting 352 undergraduates to become professional geologists at low subsidised cost.

Chartered status (CGeol, CSci, Eur Geol)

During 2007, 61 Fellows were awarded CGeol status bringing the total to 2165. By encouraging continuing professional development, controlling entry standards and monitoring chartered status, the Society assures the quality of professional work in the geosciences for the public good.

Representing the science

By acting as the UK voice in representing the geosciences and their application.

Media contacts

By linking to the media and providing authoritative information and contacts.

External relations

By responding actively to requests for information or comment from government, opinion formers and the public as exemplified by the submission to CORWM (Committee on Radioactive Waste Management).

Education

By working with others to set standards to improve the quality of education in the geosciences at all levels, and by developing teaching resources. During the year the Society made progress in developing an online primer at KS3 level to be launched in May 2008; and accredited 10 undergraduate programmes bringing the number to 120, and introduced a scheme for the accreditation of taught MSc courses. The Society also funded some £15k in research grants and provided financial support for fieldwork.

Library

By maintaining a nationally important collection of geological maps, books and journals, which is open to the public at a subsidised rate; and by launching in May 2007 a complete online catalogue with a GIS interface to index level data for its map holdings.

Website

By hosting a diverse range of electronic geological content with links to other significant websites, which is free to use. A new website, launched in 2007, was built to meet international standards for disability access.

Journals and books

By publishing four of its own journals and four journals on behalf of other learned societies as well as 27 books, which are an important resource of information for geoscientists the world over, and are widely available in libraries. The recent creation of *GeoScienceWorld* (an electronic aggregate of many learned societies' journals) has allowed direct access to journals through the Web. The *Lyell Collection*, launched in May 2007, will provide an online portal to most of the books and journals ever published by the Society.



Scientific meetings

The Society subsidized the attendance of 75 students at its Bicentenary Conference held at the Queen Elizabeth II conference centre in September 2007; and with sponsorship from Shell held 10 free lectures for the general public in its lecture theatre in Burlington House.

By organising about one hundred scientific meetings annually, of which about 80% are held outside London. These meetings are open to all. The Society assists in meeting the costs of student attendees at some scientific meetings and field excursions.

Council

The members of the Council - trustees of the charity - during the year were:

Dr I D Bartholomew^{1,2,4}; ~Prof J R Cann^{1,2,4}; Mr A J Carbray³; Mr G T Cayley⁷; Prof M G Culshaw^{1,4,5}; *Prof E Derbyshire^{1,2,4}; ~Prof A G Doré⁶; Prof A J Fleet^{1,3,4,6}; Dr R A Fortey^{1,4}; *Prof C M R Fowler²; *Prof L E Frostick⁴; Prof P Henderson^{1,4}; Prof R E Holdsworth⁶; ~Prof D A C Manning^{1,4,5}; *Prof J D Marshall⁶; ~Prof N Petford^{3,6,7}; Dr M O Rivett⁵; Dr N W Rogers^{1,3,4,6}; Mr D T Shilston^{1,4,5}; Mr G Tuckwell^{3,5}; Mrs J H E Turner⁵; Prof J A Underhill²; Dr E Valsami-Jones⁷; Prof A B Watts^{1,2,7}; Prof R White^{1,2}; *Prof B M Wilson; Dr R A W Wood⁷;

* New members elected at the AGM on 2 May 2007
~ Council members who retired at the AGM on 2 May 2007.
Prof B M Wilson resigned in June 2007.

Membership of the Standing Committees

¹ Elections; ² External Relations; ³ Information Management; ⁴ Management and Finance; ⁵ Professional; ⁶ Publications; ⁷ Science.

Method of Election of Trustees

Trustees are elected by the Fellowship in Annual General Meeting by ballot of Fellows present on a list of candidates. New trustees are annually invited to an *induction day* in order to obtain an understanding of the Society's affairs and what tasks they will undertake as a member of Council. They also receive written guidance on their responsibilities as trustees.

Audit Panel

The Audit Panel reports directly to Council. Members of the Audit Panel are: Prof J C W Cope, Prof A J Fleet, Prof J D Mather, Prof D G Murchison, Mr M H Pattison, Dr R Stabbins (*Chair*).

Legal and Administrative Information

Objects of the Society

The Geological Society of London was instituted in 1807 for the purpose of investigating the mineral structure of the Earth.

Governing Instrument

The Society was incorporated by Royal Charter in 1825, amended by a Supplemental Charter in 2005. On 3 May 2000, the Fellows of the Society in General Meeting approved and adopted revised Bye-Laws to govern the future activities of the Society.

Bankers

Coutts & Co, 440 Strand, London, WC2R 0QS

Solicitors

Bristows, 3 Lincoln's Inn Fields, London WC2A 3AA

Auditors

BDO Stoy Hayward LLP, Emerald House, East Street, Epsom, Surrey, KT17 1HS

Investment Advisers

UBS Wealth Management, 1 Curzon Street, London W1J 5UB

Head Office

Burlington House, Piccadilly, London W1J 0BG

Registered Charity Number

210161

Office Hours

09.30 - 17.30 Monday to Friday

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Corporate Affiliates of the Geological Society of London

The Society extends its sincere thanks to all its Corporate Affiliates.

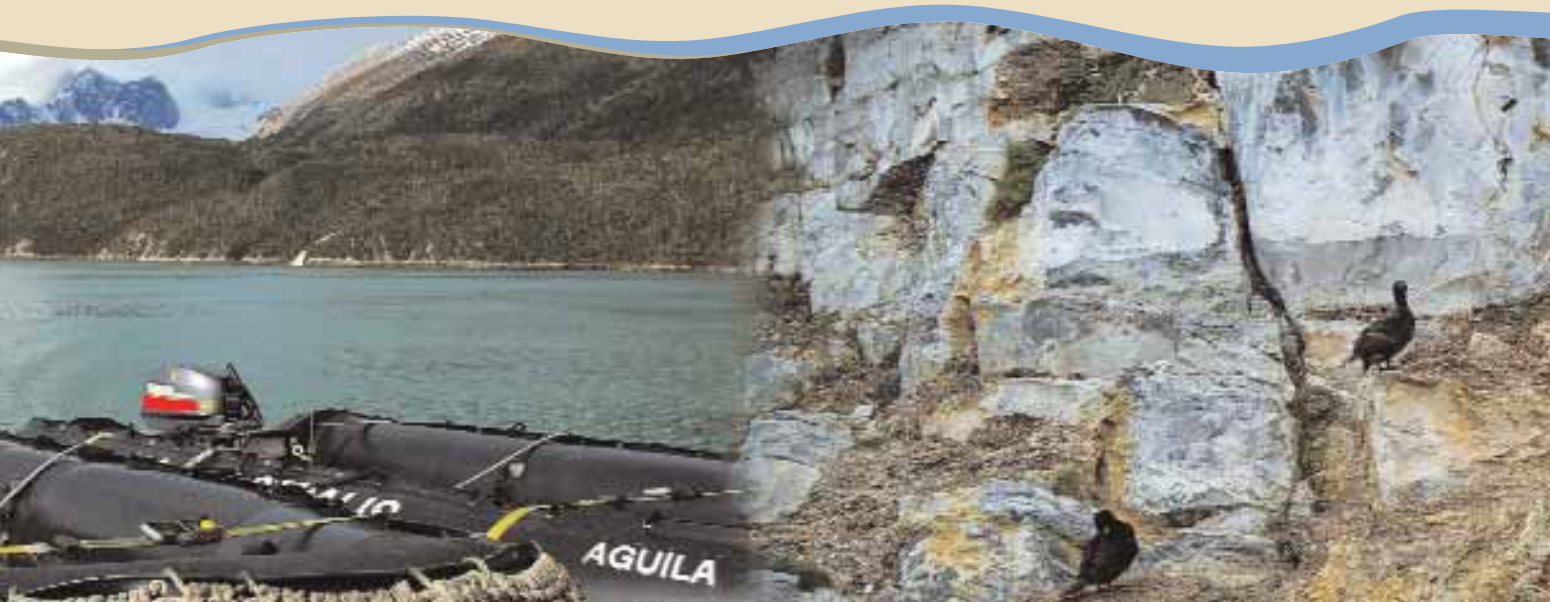
Aabar Petroleum Investments Company; Anadarko Petroleum Corporation (UK); Anglo American Plc; ATP Oil & Gas (UK) Ltd; BG Group Plc; BHP Billiton Petroleum Ltd; Bow Valley Petroleum (UK) Ltd; BP Exploration Operating Company Ltd; BP Exploration Operating Company Ltd; C & C Reservoirs Ltd; Centrica plc; CGG Veritas; Chevron; CNR International (UK) Ltd; ConocoPhillips (UK) Ltd; Desire Petroleum Plc; Dong E&P (UK) Ltd; ENI UK Ltd; EOG Resources United Kingdom Limited; EON Ruhrgas UK; Equipoise Solutions Ltd; ExxonMobil International Ltd; Fairfield Energy Ltd; Furgro Robertson Ltd; Gaffney Cline & Associates Ltd; GWP Consultants; GETECH; Hannon Westwood Associates; Hardy Oil & Gas Plc; Helix RDS Ltd; Hess Ltd; Hunt Oil Company; Ikon Science Ltd; Lafarge Aggregates Ltd; Landmark Eame Ltd; Lynx Information Systems Ltd; Maersk Oil North Sea Ltd; Marathon Oil UK Ltd; Marubeni Oil & Gas UK Ltd; MND Exploration & Production Ltd; Nautical Petroleum Plc; Neflex Petroleum Consultants; Centrica Resources Petroleum UK; Nexen Petroleum U.K. Limited; Noble Energy (Europe) Limited; NPA Group; OMV (UK) Ltd; Ophir Energy Company Limited; Paras Consulting; Petro-Canada UK Ltd; PGL; PGS Exploration Ltd; Premier Oil Plc; Ramboll Whitbybird; Rio Tinto Mining & Exploration Ltd; Rock Deformation Research Ltd; Roxar Limited; RWE Dea UK Ltd; Samson North Sea Ltd; Schlumberger Evaluation & Production Services Ltd; Shell UK Exploration & Production Ltd; Statoil (UK) Ltd; Sterling Energy UK Ltd; Talisman Energy (UK) Ltd; Total E&P UK Plc; Tullow Oil Plc; UK NIREX Ltd; Valiant Petroleum Ltd; Woodside Energy (UK) Ltd.

Acknowledgement

In addition to the companies listed here, the Society wishes to record its sincere thanks to all the companies, universities and other organisations that allowed their staff the time and resources to participate in voluntary Society activities.

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From the President

A year to remember

Richard Fortey recalls his year as Bicentenary President

The year recounted in this Annual Report was a special one, during which it was my great honour and pleasure to be your President. I think everyone is agreed that our Bicentenary was a great success; not merely because “nothing went wrong”, which is always nice of course, but because we achieved and even surpassed all our stated objectives.

We wanted to celebrate our past at the same time as looking forward to the future of our science and Society. We wanted to engage the public and the Fellowship, not only in and around London, but all over the country – and even internationally. We wanted not only to have a good time during our celebrations but also to ensure that we left something lasting and useful behind us. We did all of these things.

In this Annual Report, which I commend to you, you can read about the publication of our Bicentenary history, recounted with such aplomb in Gordon Herries Davies’s spirited and idiosyncratic account; the History of Geology Group’s wonderfully enjoyable costume evening on the night before the anniversary of our foundation, culminating in the unveiling of a plaque on the Connaught Rooms, which now occupy the site of the Freemason’s Tavern where we were founded (picture).

You can read about our hugely successful London Lectures to the general public, now extended under further Shell sponsorship as

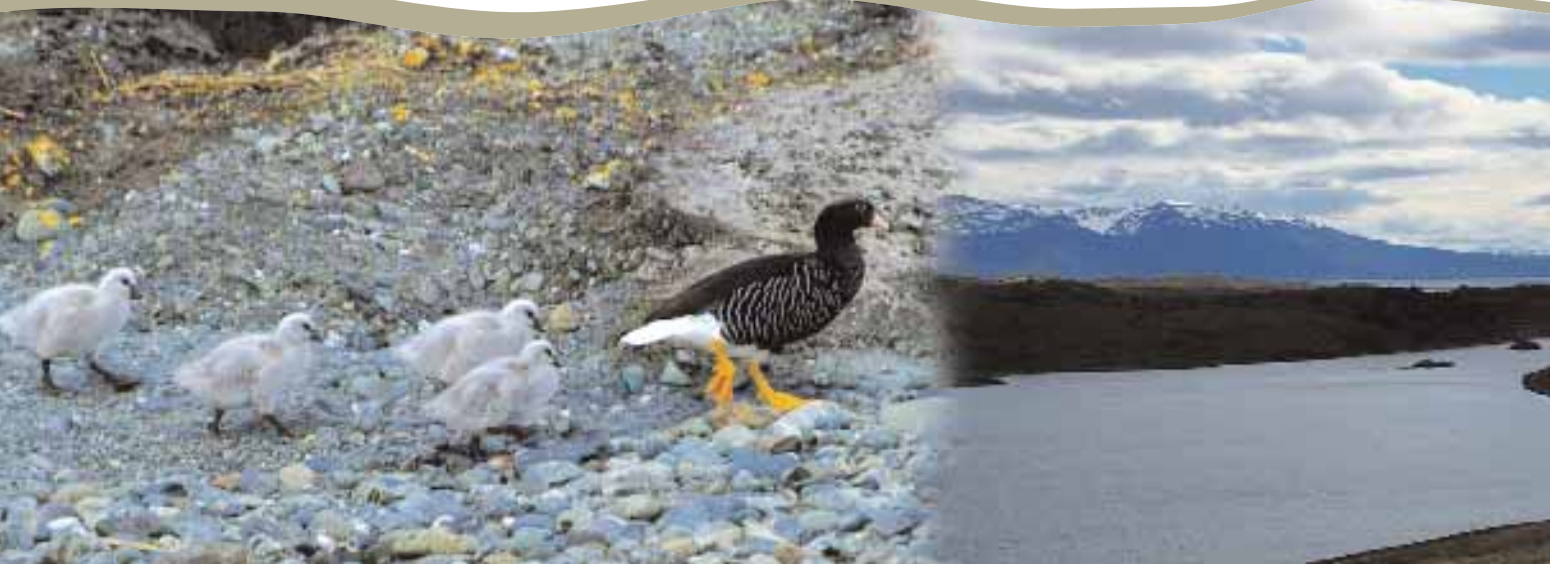
a UK contribution to the UN International Year of Planet Earth, which we also marked (with the release of 4567 balloons on 10 January), so jointly inaugurating both our Bicentenary and the triennium of activities surrounding 2008.

The London Lectures are now being made available for view on our new website, which converts them into a lasting (global) resource. That website builds upon the great success of the previous site - launched in 2000 - but which had outgrown its architecture and functionality and been overtaken by the march of time. It too was a Bicentenary legacy project.

“I hope and trust that in 50 years our successors will rise to the occasion of our 250th birthday in as magnificent a fashion”

The new site also provides the portal to our Bicentenary’s most exciting and ambitious legacy – the Lyell Collection. This digital library of all the Society’s major published material, supported by Foundation Sponsors Shell and BP supported by Schlumberger, is now available to the world - freely so to approved HE institutions in developing countries. It went live on the same night as the new website; which was also the night we opened, within the newly refurbished apartments, the Collection’s physical embodiment – the Lyell Room, off the Main Library. Here was a second hugely ambitious event to bring off; and despite (I understand!) some tense moments behind the scenes, all went perfectly.

That indeed was to be the pattern for the rest of the Year; yet not everything in our Bicentenary was organised centrally. The Local Heroes initiative (p. 13), brainchild of Prof Joe Cann, proved hugely popular and we provided grants, publicity and logistical support for regional events celebrating geologists whose scientific contributions reached far beyond the happy highways of home.





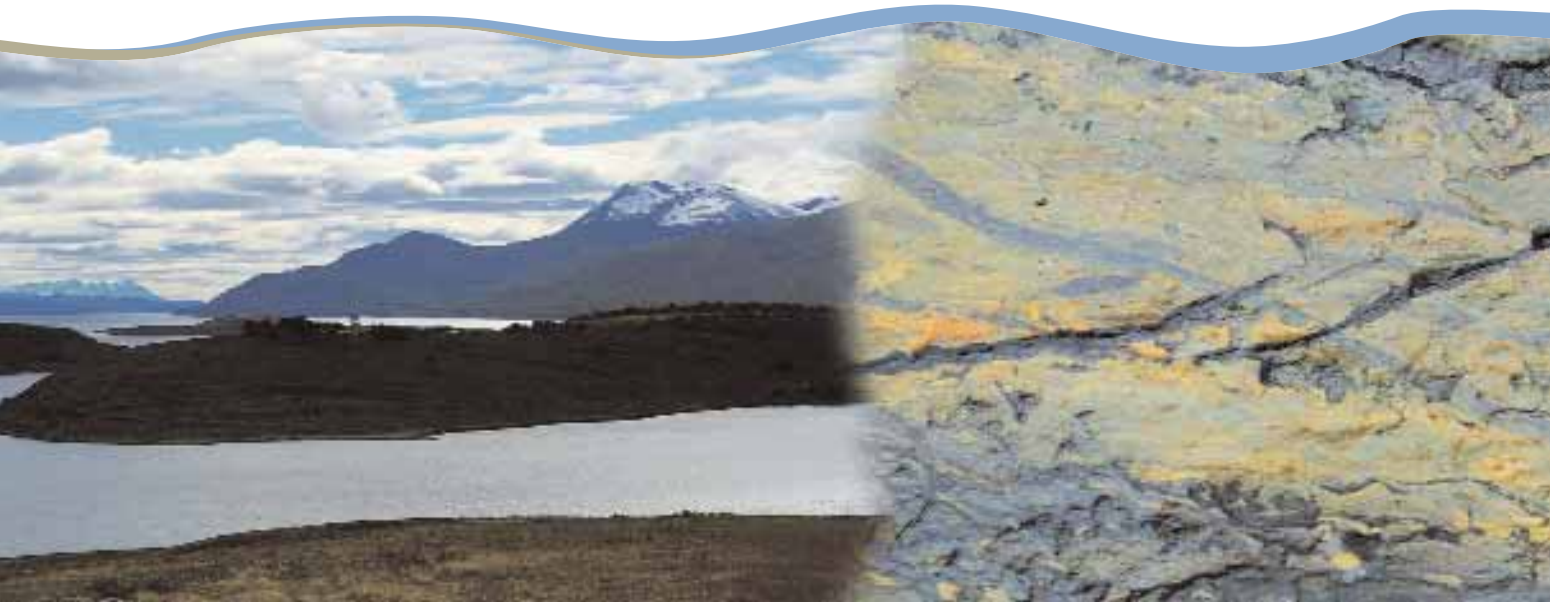
Nor did we neglect fieldwork – perhaps our most ambitious ever excursion, to South America *In Darwin's Footsteps* (p. 16), provided the photographic backdrop for this report and served to remind us that right from our foundation we have always been a truly international Society.

I haven't room to list all the Bicentenary's events and projects here – the Bicentenary Conference, the Regional University Tour, the Grand Celebratory Dinner, the Bicentenary Reviews, the redesign of *Geoscientist*, and so on. You can read more in the pages that follow. But I cannot conclude without saying that Paul Henderson, and the Steering Committee that he chaired, deserve our heartfelt thanks for the careful thought and direction they gave to the Celebrations. And none of it would have been possible without the Fundraising Committee, Chaired by former President Sir Mark Moody Stuart.

They, the many volunteers worldwide, our distinguished overseas guests, our sponsors, our Fellows - who gave unstintingly to our Appeal (p.12) - and most of all our staff who worked so far beyond the call of duty to make these events possible, I say: you have all played your part, and should feel justifiably proud of your achievements. As I hand over to my successor, Prof Lynne Frostick, I hope and trust that in 50 years our more distant successors will rise to the occasion of our 250th birthday in as magnificent a fashion as you have done.

In closing, I think of the hundreds of school students who, on the Bicentenary Conference's third day, joined us at the QE2 by for a day of careers advice, exhibitions and (of course) exciting science. It is time now for our next 200 years to begin.

Richard Fortey





From the Executive Secretary

Building the future

“Our Bicentenary balloons, rising over Piccadilly, did more than represent 4567 million years of Earth history...they represented the rising ambition of this Society to reach out to new audiences”

As the President has hinted, it is not easy to include everything in a brief introduction to our activities in 2007. I would like though to conjure up three: the balloon launch with which we began our birthday year, the restoration of the William Smith Map and its re-hanging in the refurbished apartments, and the opening of the Lyell Centre. For these three events seemed to me to encapsulate the main aspirations of 2007.

Our Bicentenary balloons, (picture) when they finally rose into the grey sky over Piccadilly, did more than represent 4567 million years of Earth history, or our relationship with the UN International Year of Planet Earth, whose triennium was timed to coincide with our birthday year. They represented the rising ambition of this Society to reach out to new and wider audiences - which we did through (among other things) our wonderfully successful London Lecture Series. The balloons also represented a reborn sense of fun and excitement, and this was embodied nowhere better than in the way we threw open our doors to the schoolchildren who helped to make the whole experience so memorable.

William Smith's 1815 map (p.10) is one of our greatest treasures and is certainly the most visited. When it was unveiled on

February 1, in the presence of Nigel Press whose company generously sponsored its restoration, we marked the beginning of the final stage of our long refit by placing this great monument to the power of the human imagination alongside Greenough's - in a place where the public at large can much more easily admire both.

Smith's map was conceived on the assumption that it can tell you where to dig, or where to build; and something akin to a geological mapping exercise also occurred, quietly, behind the Bicentenary hullabaloo. Council devised a long-term strategic vision (p.10) intended to give direction to the work we do and help us to focus our efforts on what is achievable and practical in the medium term.

We enter 2008 in the process of discovering the practical implications of these ambitions; but the strategy is an important first step in a long series of steps towards an uncertain future. We cannot know how the world will change around us; one day, probably not that distant, any strategy will need reconsideration. It is the



flexible reed that best withstands the winds of change; but while balloons lift our spirits, the strategy, and the restoration of our apartments together give us the confidence to take our sense of elation and move ahead.

It is difficult for geologists, used to reflecting upon the impermanence of things, to consider a span of decades as “long term”; but we also did things in 2007 that will live on in centuries. Day three of our Bicentennial Conference will live in the minds of some of the hundreds of young people who came to see the challenges of a career in Earth sciences, and as they progress through life, they will encounter this Society, just as we did in our time. Catering for their needs as aspirant and professional geoscientists, providing continuity through their careers, this Society will be for them the portal that gives access to unrivalled archives of geoscientific information.

The Lyell Collection will live, longer than buildings or individuals, to be a service to future generations. It will last because it will keep growing for as long as this Society exists, benefiting our Fellows and, especially, geologists in developing countries.

We can – and perhaps should – allow ourselves a moment or two of pride. The Bicentenary was, as we intended, not just about history, but our future. For that I must thank everyone who helped: our generous sponsors, the Fellows who donated and participated, the volunteers who gave their time and effort, the committees who worked so hard, and the staff in the Publishing House and Burlington House, without whom none of it would have happened.

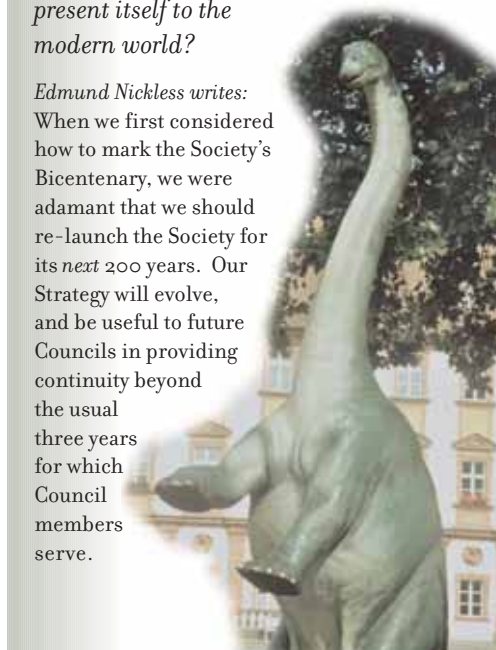
Edmund Nickless



A Geological Society for the 21st Century

*How should the Society
present itself to the
modern world?*

Edmund Nickless writes:
When we first considered how to mark the Society's Bicentenary, we were adamant that we should re-launch the Society for its *next* 200 years. Our Strategy will evolve, and be useful to future Councils in providing continuity beyond the usual three years for which Council members serve.



Staff changes

Permanent members of staff who resigned included Adam Crane (Events Co-ordinator). He was succeeded by Francesca Chapman who left after three months. Rachel Boning resigned as Fellowship Services Manager. Charlotte Skelton, who joined the Publishing House, also left after three months.

Library staff on fixed term contracts who left during the year included Nicola Best, Michael Willsher and Martina Dobrikova.

New Appointments during year were Kerri Deegan (Events Co-ordinator) and Michael McKimm (Library Assistant).



Strategy - Serving science and profession

Aims:

- ⊙ To be the respected public voice of geosciences in the UK, by:
 - proactively promoting the views of the Society and the community on matters of public policy, through papers, articles in the media (regional, national, international), and meetings/debates
 - providing high quality responses to media and government questions
 - pursuing excellence of content and accessibility of the Society's website and other online resources (e.g. the Lyell Centre)
 - organising popular lectures
- ⊙ To provide lifelong professional support to geoscientists, by:
 - promoting, endorsing and providing training, guidance and CPD (including professional development leading to Chartership)
 - bringing all aspects of training together in a single stream, through university and work
 - working with champions in university departments
 - maintaining and building a world class geoscience library and map collection
 - publishing science at the leading edge
- ⊙ To recognise and foster innovation in the geosciences, by:
 - developing and supporting new and existing Specialist Groups
 - encouraging young and energetic scientists from diverse disciplines
 - providing resource for workshops, meetings, etc
 - developing links with other scientific bodies and institutions
- ⊙ To show leadership in the geosciences community nationally and internationally, by:
 - collaborating with other geological societies and specialist bodies in the UK to pursue common aims
 - fostering and exploiting Regional Groups' local links
 - developing links with UK and overseas societies covering all aspects of the Earth System
 - taking a leadership role within international umbrella bodies (AEGS, IAEG, EFG, IUGS, etc)
- ⊙ To promote geoscience education, by:
 - working with others (ESTA, etc) to support geoscience teaching in schools
 - using the GSL imprimatur as a 'quality mark'
- providing services for geoscience educators
- inspiring interest in science, with other scientific societies and institutions
- actively engaging bodies such as CHUGD
- ensuring that degree accreditation remains relevant
- encouraging lifelong learning, working with the GA, regional societies, etc
- ⊙ To communicate geoscience research and practice, by:
 - publishing high quality geoscience literature
 - widening the Society's publishing scope to include emerging areas of science
 - maintaining best practice in the light of technological developments in publishing
 - organising leading edge science meetings in established and emerging fields
- ⊙ To assure high professional standards for the benefit of society, by:
 - promoting Fellowship and Chartership, and maintaining the relevance and fairness of validation procedures
 - revising the code of conduct and regulations to protect core professional values and ethics
 - setting the standards for qualification and registration of those providing geoscience services
 - promoting, endorsing and providing training, guidance and CPD (including professional development leading to Chartership)
- ⊙ To achieve these aims, the Society must ensure and strengthen the financial health, human resourcing and charitable status of the Society, by:
 - diversifying income streams
 - protecting and developing existing income streams
 - generating strategies to mitigate financial risk
 - maintaining and developing an expert and professional staff
 - ensuring the continuing involvement of Fellows in the running of the Society
 - growing Fellowship and promoting the Society throughout academia and industry
 - effectively and responsibly managing the resourcing of strategic objectives



Maps restored

Mr Nigel Press (left) and Dr Richard Fortey FRS (President) unveiled the restored Smith and Greenough maps at Burlington House on February 1. Nigel Press (NP Satellite Mapping) generously paid for the restoration and reframing of the Smith map, which now joins the similarly restored and reframed

Greenough 1819 map at the foot of the refurbished East staircase of Burlington House. Mr Simon Winchester, whose book *The Map that Changed the World* brought the map to the attention of the wider public, and Nigel Press, also generously supported the reception. Prof Hugh Torrens, world expert on William Smith's life and work, spoke.



MacCulloch in situ

MacCulloch's map of Scotland (*Geoscientist 17.8, p8*), reissued in facsimile by the British Geological Survey, hangs in pride of place on the Society's main staircase. The map gift formed part of the BGS's support for the Society's Bicentenary.



Desk job

*The new 1.7 tonne Reception Desk in the reinstated formal entrance from Piccadilly is a novel celebration of the Bicentenary - and much more besides, writes Eric Robinson**

Devised by conservation architects Julian Harrap, this monumental addition to the reinstated Piccadilly entrance definitely says "Rocks are us".

Seventeen slabs of stone, roughly two metres long, were acquired and stacked to create the desk. All seventeen are classic British building stones which contribute

to our built heritage and fortunately, remain available. For the Society's Bicentenary, it is of interest that all would have been in production in 1807 when the Society was born. How better could the Society celebrate its Bicentenary? *Eric Robinson*

Top rock awards

The winners of the Society's Awards for 2007 were:

Wollaston Medal - Prof Andrew Knoll; Lyell Medal - Prof Philip Allen; Murchison Medal - Prof Herbert Huppert; William Smith Medal - Prof Michael Worthington;

Coke Medal - Dr Peter Maguire; Coke Medal - Prof John Murray; Prestwich Medal - Prof Frederick Vine; Bigsby Medal - Dr Philip Donoghue; Sue Tyler Friedman Medal - Mr Jack Morrell; R H Worth Prize - Mr Hugh Prudden; William Smith Fund - Dr Bryan Cronin; Murchison Fund - Dr Glenn Milne; Lyell Fund - Dr Timothy Henstock; Wollaston Fund - Dr Colin Macpherson; Distinguished Service Award - Dr Philip Christie; Distinguished Service Award - Prof Duncan Murchison; President's Award - Dr Dan Morgan & Dr Derek Kier

Annual subscriptions

Council agreed to the following subscription rates, which were agreed at the AGM.

	2007 £	2008 £
Candidate Fellows	26	30
One-off payment for undergraduate course	57	65
22-27	57	60
28-33	100	110
34-59	146	166
34-59 (Overseas)	112	128
60-69	75	84
70+	57	59
Full time postgraduate students	44	47
<i>Supplement (to payer) for Joint Fellowship</i>	42	48

Mid-year Fellowship figures, 2002-2007

Rate	2002	2003	2004	2005	2006	2007
Candidate Fellows	486	434	450	392	328	352
22-27	1054	1066	1056	1072	1016	987
28-33	1154	1140	1174	1187	1220	1194
34-59	4055	4018	3980	3976	4069	4055
34-59 (Overseas)	851	855	861	878	855	833
60-69	-	-	-	-	852	910
70 or over	-	-	-	-	321	354
60 or over	997	1043	1090	1148	-	-
Honorary Fellows	72	69	67	59	59	57
Life Fellows	30	28	25	22	21	20
Senior Fellows	204	220	230	248	257	267
Concessions	53	107	123	159	49	55
Joint Fellows (non-payers)	95	94	97	107	108	109
Postgraduate	-	-	-	-	147	161
Unemployed/Free	30	31	31	14	10	11
Total	9081	9105	9184	9262	9312	9365
Elected	768	617	650	615	581	618
Resigned/removed/deceased	611	593	571	537	531	565
Net increase	157	24	79	78	50	53
% increase	-	0.3%	0.9%	0.8%	0.5%	0.6%
Chartered Geologists	2040	2083	2134	2176	2175	2165
Elected	-	77	81	69	53	61
Resigned/removed/deceased	-	34	30	27	54	81
Net increase	-	43	51	42	-1	-10
% increase	-	2.1%	2.4%	2.0%	0.0%	-0.5%

Notes

- All Fellowship figures are measured mid-year, once those who have not paid have been removed from Fellowship, i.e. at the low point for the year. This enables meaningful comparison between years.
- The number of Fellows and Candidate Fellows elected excludes upgrades from Candidate Fellowship to Fellowship; i.e. it represents the total number of people joining the Society.

Donors to 2007

The Society records with deepest gratitude the following individuals who made personal donations to the Bicentennial Appeal Fund.

2005: Ruth Allington David Almond
Peter Anderton Alison Angus Jerry Anthony
Christine Arkwright Andrew Armour
Colin Arthur John Arthur Michael Ashley
Christopher Ashman Nick Badham
Eddie Bailey Stuart Baldwin Peter Barber
John Barnes Michael Bassett Robin Bathurst
John Bennett George Bennison Paul Binns
A Clive Bishop John Blundell David Boote
Myles Bowen Patrick Boylan James Briden
Rodney Bridle Richard Bromley
Kathryn Brookes James Brown Andrew Butler
John Callomon W Franklin G Cordey
Gorden Chambers Jeremy Chessell
Paul Chi Tak Cheung Robert Cliff Philip Close
Burt Clothier Andrew Coatsworth David Cook
Douglas Coombs Cameron Craig
Ronald Croasdale Tony Cross K J Crowle
Susan Cullum Paolo Custodi John Cutler
William Dade Jonathan Dannatt Bruno
D'Argenio Anthony Davis Geoffrey Dearn
Paul Dennis John Dickinson Margaret
Dobson Martin Dodson Peter Dolan
Harry Doust Marlan Downey Richard Downing
Tom Elder D P Ellis Charles Emeleus
Trevor Emmett John Essame Graham Evans
Alice Fairley Caroline Finch Anthony Fisher
Peter Floyd Edward Follows Peter Fookes
Stephen Foster Richard Fox Edward Francis
Peter Friend John Fuller Alastair Gardner
Chris Garland Paul Garrard Christopher
Garrett Craig Gibson Chris Gibson - Robinson
Kenneth Glennie Michael Golden Rob Gray
Gilbert Green Daniel Griffin Andrew Growcott
Michael Guilford Richard Hardman
John Hargreaves Rex Harland John Harris
Michael Harris Roy Hartley John Harwood
John Heathcote Paul Henderson
Susan Henderson Richard Herbert
Peter Hooper Philip Horner John Hutchinson
Leslie Vincent Illing Joan Insole David James
Richard PB James David Jenkins E Alan Jobbins
David Johnson Nicholas Johnson Bryan Jones
Mark Jones Warren Jones William Jones
Richard Kaser Elizabeth Keats John Kelly
Naila Khairallah Alexander Kidd Derek King
Richard King Roy King John Knight

Manfred Kosten Peter Larkin Ewan Laurie
Michael Laws Michael Le Bas Bernard Leake
George Leckie Christopher Lewis Andrew
Limbrick Timothy Liverton Jeremy Lockett
Alan Lord Bryan Lovell Peter Macalister
Hall James Macdonald Kenneth Macdonald
Duncan Macgregor Jane Mackelvie
Jutsum Andrew MacKenzie Ronald Maclean
Bruce Mair Edwin Manley Derek Mann
Barry Mapstone A J Martin Dick Martin
Joseph Mason Philip Mather Jeremy Matthews
Helen Mayfield Kenneth McCaffrey
Nick McCave John Middleton Marios Miliorizos
John Mills Dennis Mitchell Akiko Miyashiro
Vivien Morel Andrew Morris Gerald Mudd
Alan Mussett Tony Naldrett Robin Nicholson
Ronald Oxburgh Darren Page J M Paisley
Eva Paproth Philip Parpard Nicolas Parr
John Payne Christopher Pearson
Caroline Peters Darren Phillips Colin Phipps
James Pindell Michael Potter David Pyle
John Ramsay Madeleine Raven Eric Rawcliffe
W J Rea Harold Reading John Rees Keith Reeves
Neville Rhoden Mark Roberts Martin Roberts
Gordon Robson David Rogers Ken Rolston
Martin Rudwick Peter Sabine Christopher
Samson Norman Savage Eugen Seibold
Richard Selley Neil Sharp James Siddelley
Richard Sillitoe Raymond Richard Skelhorn
Isla Smail John Small Stephen Smalley
Alan Smallwood John Smallwood Diana Smith
Donald Smith Anthony Spencer Patrick Spicer
Fiona Stewart Arthur Stride Michael Tate
Robert Thomas Christopher Thompson
Sir Crispin Tickell Christopher Toland
Colin Turner Aron Vecht Joyce Velterlein
Nicolas Walton Peter Warren
Andrew Warrington David Waters
Anthony Watts Michelle Welford Richard West
Stewart Whiteley Charlotte Whitmore
Harry Whittington Darren Wilcox
Lawrence Willey Ron Williams Humfrey Willis
Matthew Willis Charles Wilson Nigel Woodcock
Bertram Woodland Christine Woodward
Peter Worsley.

2006: Sam Algar Lynn Allen Peter Allen
Jane Angus James Bain Christopher Bargman
Michael Barr Arthur John Barron Max Barton
Martyn Bayne John Bennett Martin Bott
Andrew Bowman Richard Bradley Reginald
Bradshaw Eva Brinck Geoffrey Brunstrom
Peter Cearns Gordon Chambers Paul Clasby
Philip Close Bert Clothier Darren Cole
John Colleran John Constable Neil Cooper
Patrick Corbett Paul Cort David Cox

Anthony Crosby Paolo Custodi Vin Davis
Ann Dawson Edward Derbyshire Joseph
Dowley John Driscoll Helen Edmonds
Rowland Edwards Mike Egghoro
Charles Emeleus Paul English Roger Epps
Asger Eriksen John Essame Frank Fitch
Yves Fortier Robert Foster James Foster Smith
Gerald Friedman Peter Geerlings David Gray
Gavrielle Groves-Gidney Ronald Harrison
Ian Harrison Richard Herbert Alan Heward
Peter Hill David Holmes Marlan Holness
Pete Horswill Paul Howlett Sue Hutton
Christopher Jackman Peter Jeans Marsden
Jones Warren Jones Edwin Kellock Anthony
King David King Jr Diane Knill Tako Koning
Julian Kwolek Derek Hudson Leary
Philp Linsley Albert Ludford James
MacDougall J B Mackie Derek Marriott
Adrian Marsh Tessa McRae Stephen Mills
Stephen Mills John Milsom Mark Moody-
Stuart Michael Moseley John Myres
Ivan Nixon Michael O'Hare Lord Oxburgh
Hugh Payne Martin Perkins Colin Phipps
Ewan Pringle Michael Rainbow Garth
Raybould Greiling Reninhard John Renouf
Neville Rhoden Philip Ringrose John
Rivington Peter Robson Martin Rudwick
Marcus Andy Samuel Barry Scott John Scott
Richard Sibson Carol Simpson Peter Skelton
Philip Nigel Sly Charles Smith David Smith
Rod Smith Richard Stabbins William Stanton
Michael Streetly Arthur Stride Ewan Swindells
Kevin Sylvester Peter Tallon Gordon Taylor
Brian Thomson Rudolf Trümpy Jan Van Hinte
Aron Vecht Hemmo Jan Veenstra Frederick
Vine Caroline Waller Stephen Want Peter
Webb Eric Harold Timothy Whitten Steve
Wild Ann Wilkins Brian Wilkinson Math
Williams Bernard Worssam

2007: Paul Bitcheno Martin Bott Andrew
Brewster Norman Butcher John Catt Margaret
Cliff Andrew and Susan Fleet Jonathan Fowler
Peter Gaffney Robin Gill Duncan Hawley
N Hobbs John Hull Adrian Humphreys
Marc Jones Brian King Andrew Malone
Peter Matthews Mark Moody-Stuart
Duncan Murchison Edmund Nickless
Tobore Orife Anna Pearson Howard Reading
Howard Rose Melville Sarginson Wolfgang
Schollnberger Lucy Slater Claudio Vita - Finzi
David Williams Jonathan Wonham John Xu





Reaching out

From the Secretary, Foreign & External Affairs

Since I succeeded Joe Cann as Honorary Secretary, Foreign and External Affairs (HSFEA) in May 2007, ERC has held one informal and one formal meeting (10 September and 22 October). The earlier meeting was devoted to an open discussion of Council's strategy. Two newly elected members, Prof Mary Fowler and Dr Ken Hiscock, joined the committee, and Dr Adam Edwards also joined as BGS nominee.

Discussion of the Council strategy document also took up much of the first formal meeting, where particular attention was given to defining ERC's role within it. Discussions went on to actions that might be launched to meet ERC priorities, in its capacity as UK National Committee for both the International Union of Geological Sciences (IUGS) and the International Geoscience Programme (IGCP).

Thus, "taking a leadership role in international organisations", we put forward a nomination for the office of European Sector Member of the Board of the International Year of Planet Earth (IYPE) and another for IUGS President. ERC will also engage more closely with IGCP, with a view to including at least one

UK geoscientist in its Scientific Board; seeking clarification of the current situation within the Secretariat in Paris following recent upheaval in UNESCO's management and policy for the IGCP and its effect upon that Programme's *modus operandi*; initiating a review of the current way we publicise, encourage, process and support applications for new IGCP projects; and, last, how we might best re-establish a system of monitoring progress of UK leadership, activity and publications of IGCP-related work.

Four UK names have been accepted in the IGCP's 'potential members' list and, of these, Dr Iain Stewart (Plymouth University) was elected to the IGCP Scientific Board and Chair of its *Hazards* theme for three years from 2008.

ERC has been the UK National Committee for the United Nations International Year of Planet Earth, another joint UNESCO and IUGS initiative, since January 2007. Both of its major programmes (Science and Outreach) for the past six years have depended heavily on staff and officers of the Society. The UK contribution to IYPE in 2007 was substantial, especially in the case of the Outreach Programme, led by Dr Ted Nield, which reached new heights prior to the Year's formal UNESCO launch early in 2008. I resigned as Chair of the Science Programme in order to give full attention to Society duties.

The UNESCO link adds further to the international responsibilities and opportunities of the ERC, in that I as its chair am a member of the UK Commission for UNESCO's Natural Sciences Committee and an *ex officio* member of its Working Group of the four UNESCO Intergovernmental Science Programmes (ISPs). These connections allow the Society to comment upon the content and quality of UNESCO science,

thereby bolstering the cause of Earth science within UNESCO. In attending the meetings of these committees in 2007, I have been able to keep a close eye on the interaction of the Commission with both UK government and UNESCO.

Local Heroes

Joe Cann, External Affairs Secretary until May 2007, reflects on a project that drew the regions into the Bicentenary.



One of the most interesting contributions to the Bicentenary was the *Local Heroes* initiative, which continues through 2008 as part of the 150th anniversary of the Geologists' Association. *Local Heroes* set out to celebrate UK geological pioneers and their achievements in those places most closely associated with them. Each was organised by a local group with support from the Society, which also coordinated and administered the initiative.

More than 20 *Local Heroes* events were organised by other societies, regional groups, branches of the GA, university departments, museums and others. Many of the heroes celebrated were well known (James Hutton, William Smith, Mary Anning) but others were not so prominent in wider geological memory, and it was good to be reminded of the achievements of Martin Te Punga, Bill Ramsbottom and John Cadman.

One event celebrated a fossil – *Charnia* – while others marked the achievements of groups of geologists – ensuring that the headcount of the celebrated well exceeded the number of events. Audiences varied, but several drew attendances of over



100, and the initiative as a whole reached a much wider community than is normal for the Society. For 2008, administration of events has been taken over by the GA.



Local Hero Bill Ramsbottom examining the Goniatic Bed at the top of the Caswell Bay Oolite and the junction with the overlying Caswell Bay Mudstone in Three Cliffs Bay, Gower, South Wales, 6 August 1971. The picture was taken during a visit to South Wales by the Geological Society's "Dinantian Working Group". After this visit Bill recognised that variations of water depth in the Carboniferous Limestones of Gower could be used to define a sequence of major cycles. Sequence stratigraphy was born.



Mrs Heather Gross, Mrs Margaret Geeling and Mrs Janet Sole at the opening of the exhibition in Potters Bar celebrating the work of their late father, Professor J F Kirkaldy.

In the media

In 2005 Ted Nield made an average of 1.2 media contacts per working day. The Society's total interaction with the media resulted in a minimum known 1116 column

centimetres (ccm) of geological coverage in the UK and international press.

Ted Nield said: "Birthdays are really events for friends and family. Even celebrity birthdays usually only get minor coverage. It also tends to be true that the things one does to celebrate them, while fascinating for insiders, tend to be less interesting to the outside world than one's normal activities. So, it is interesting that with a) less promising material and b) the fact that running upwards of 20 extra Bicentenary projects during the year, left little time for media relations. Hence we saw after years of steady gain, a return to levels of coverage slightly below those of 1997 when records began. This provides quantitative confirmation of the payoff the Society gets from proactive media relations."



Birthday gong

The German Geological Society awarded its highest honour, the Leopold von Buch medal, to The Geological Society of London

At its Bicentennial Conference, Society President Dr Richard Fortey received on behalf of the Society the Leopold von Buch



Left to right: Ted Nield reads the Citation for Dr Becker-Platen (pictured). The Allen Medal inscribed for Dr Becker-Platen. Jens Wiegand receives the medal on behalf of Dr Becker-Platen.

Achievement in international relations

The first Association of European Geological Societies (AEGS) Percival Allen Medal was awarded to AEGS stalwart Dr Jens-Dieter Becker-Platen at MAEGS-15, Tallinn, Estonia.

At its meeting in Tallinn, Estonia, Dr Ted Nield, GSL representative on the AEGS Executive Committee, presented the first Percival Allen Medal to German geologist Dr Jens-Dieter Becker-Platen.



Conference participants before the National Library of Estonia, Tallinn.

Local organiser Rein Raudsep tells Estonian television what it's all about.

The 15th meeting of the AEGS (MAEGS – 15) in Tallinn was a great success. AEGS unites all the geological societies of the wider Europe, and organises self-financing international meetings on topics of societal, cultural and professional relevance to Europe and the former Easter Bloc. Over 80 people attended *Georesources and public policy* from 17 countries worldwide (including Australia). Forty papers were presented and 14 posters. Two-day field excursions welcomed 38 participants.



Medal of the German Society for Geosciences (DGG). The medal is the highest honour that can be bestowed by the DGG, and has never before been presented to a Society.

Presenting the award on the occasion of the Society's Bicentenary, Dr Heinz-Gerd Roehling (Treasurer of the DGG) said the award was being given "in honour of 200 years of outstanding achievements in promoting geosciences in Great Britain and throughout the world".

Society enthuses the young

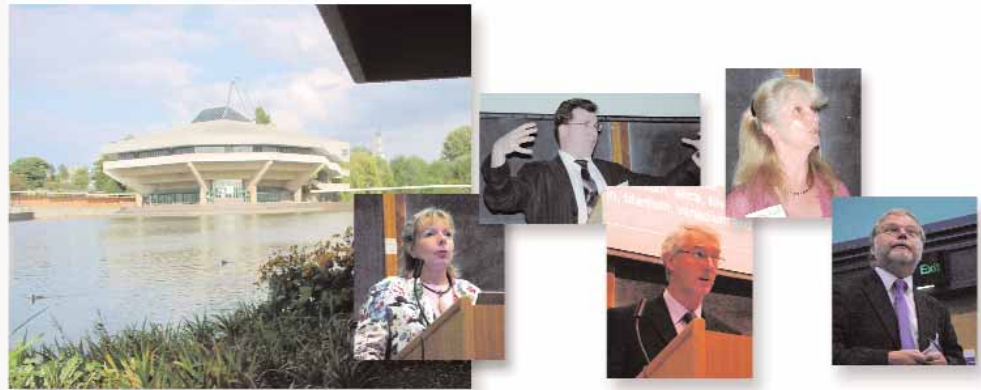


The Bicentenary Conference included a successful careers track on Day 3. While the main conference continued in plenary sessions, over 200 school students from all over the South East spent their time pestering representatives of Shell, BP, Anglo, BG Group and many more about careers in geoscience.

It's York so it must be Thursday

As the BC conference concluded in London, some hardy souls got on trains to York.

For most, the Bicentennial Conference finished on Wednesday. However, as the British Association had chosen the same week for its Science Festival (in York), to make the best of the clash the Society collaborated with the BA Geology Section, led by Dr Richard Waller (Keele University), in providing a Bicentenary-related programme of speakers. The session speakers included: Prof Peter Styles (Keele), Dr Gabi Schneider (Director,



Geological Survey, Namibia), Dr Jon Gluyas (Fairfield Energy), Dr Chris Carlon (Anglo American), Dr Richard Fortey (President), Dr Cherry Lewis (University of Bristol), Prof Bill McGuire (UCL Benfield Hazard Research Centre) and Dr John Ludden (Director, BGS).

Essay winners

To commemorate the Bicentennial of The Geological Society of London, the Society, with Principal Sponsor Shell, announced in February this year a Bicentennial Essay Competition open to all students in the UK and Eire.



The essay title was: *How will the geosciences contribute to achieving a sustainable energy supply in the 21st Century and beyond?* Three finalists were announced online in September as: Caroline Burberry (Imperial

College London) Helen Jones (Open University) Pete Rowley (Royal Holloway, University of London). The essays were made available at *Geoscientist Online* at that time, at www.geolsoc.org.uk/gsl/null/lang/en/page2915.html.

The judges were Dr Richard Fortey, President; Dr Mike Naylor, Vice President Technical, Shell Exploration & Production; Dr Ted Nield, Editor, *Geoscientist* and Chair, Association of British Science Writers. The final result was announced by guest speaker Prof Aubrey Manning (Edinburgh University) at the Bicentennial Dinner. First prize went to Caroline Burberry (picture). Pete Rowley and Helen Jones were awarded joint second prize.

In Darwin's footsteps



The Bicentenary included one very ambitious field excursion – to South America. Sophie Hancock (Atkins Global) reports

Charles Darwin's voyage on *HMS Beagle* and visit to Chile (1831–35) had a profound impact on his thinking. Later, Darwin drew the first geological map of the Andean cordillera. So, revisiting the geology of Tierra del Fuego was a fitting act during the GSL Bicentenary. We travelled by boat, zodiac, coach, 4WD and on foot – comfortable, by comparison with Darwin's exhausting horseback expeditions in searing heat.



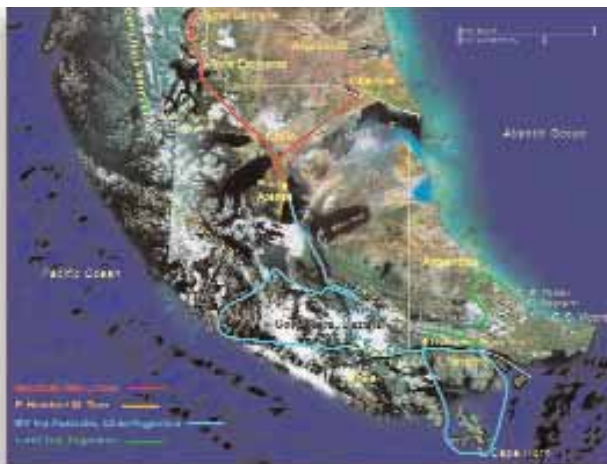
GEOSUR Fieldtrip

Torres del Paine was a trip highlight despite the 5am start – the Paine Massif is characterized by intrusion of a granite laccolith some 12 million years old. The current spectacular exposure and vertical granite walls has taken many glacial cycles and sub-aerial weathering, and now attract expert climbers to its left and central towers.



Pale Aike National Park encompasses a volcanic field of spatter cones and maars, composed of back-arc alkali plateau basalts east of the Andean arc, extruded 130 to 17ka. We saw ultramafic mantle xenoliths (within tuff rings associated with maars such as Laguna Ana) that in some cases originated 60km down and came to the surface at speeds of up to 6m/s.

We also visited the *Mylodon* Cave, where the remains of a giant sloth and evidence of human habitation over 10,000 old were unearthed in the late 19th Century. Scraps of *Mylodon* fur from



the cave are displayed at the British Museum and form the basis for Bruce Chatwin's classic travelogue *In Patagonia*. We saw fantastic exposures of basin fill from the oil-producing Magallanes foreland basin – including classic turbidites, and unforgettable *deep-water* conglomerates (Lago Sofia).

Next day we sailed up Seno Ultima Esperanza from Puerto Natales – a name given by Juan Ladrilleros, who was trying to reach the Strait of Magellan in 1557 because it was his "last hope" of finding the Strait. *The Beagle* sailed through these fjords and channels in 1830, successfully reaching the Pacific Ocean.

Punta Arenas

From Punta Arenas on the mainland side of the Magellan Strait, we set out on a 4WD experience, carefully contouring around beach hazards: streams, slippery seaweed, shrouded berms and buried tree stumps (low temperatures mean that forest debris decomposes very slowly). We walked through one such dense forest on our strenuous ascent (picture) of Monte Tarn (825m), which Darwin also climbed. Like him, we passed shelly beds at 400m and were excited to find fragments of ammonite, coral and trace fossils originally described by him. The view of the Patagonian orocline from the summit was magnificent, and all the sweeter for having it to ourselves.

Life afloat

From Punta Arenas we sailed 500 nautical miles in five days aboard the *M/V Via Australis*, to Ushuaia, the world's southernmost city; taking in sights unreachable by land, including Beagle





The Geology of Chile

Available from our online bookshop at:
www.geolsoc.org.uk/bookshop



Channel, Murray Narrows, Cape Horn, and the Darwin Cordillera's basement. The most spectacular of the many glaciers we visited was Pia Glacier north of Beagle Channel, which has carved a deep fjord through the garnetiferous, polydeformed Palaeozoic basement. Sailing along the "Avenue of the Glaciers" gave more opportunity to consider the environmental controls of geomorphological evolution.

Cape Horn is unique and inspiring. We were blessed with fair weather and landed zodiacs on Cape Horn Island, for a sunrise walk to the lighthouse at 56°S. The *Beagle* attempted to sail around the Cape for 14 days, but Captain Fitzroy had to eventually concede, sailing behind the island instead. But as the *Via Australis* rounded the Cape, only calm seas and moderate ocean swell greeted us. We sailed on, past Wollaston Island to Wullaia Bay (Navarino Island - group photo), the site of Beagle's encounter with the Yamana Indian, Jemmy Button.

Argentina

In the Tierra del Fuego National Park we examined complex basement fabrics, folded sediments and injected quartz veins, as well as the tuffaceous Tobifera Formation, at one time a gold prospecting target, with the cover sedimentary rocks of the Magallanes basin. One of Darwin's most important contributions was the vast array of new fossils he collected in Patagonia, and it was pleasing to find good examples ourselves.

On a shoreline walk from Bahia Ensenada we received our worst weather experience, convincing us that southern Patagonia really does receive seven metres' rainfall annually. Wooded sections afforded some shelter, and we saw the orange honey-combed fungi *Cytarria darwinii* - or 'Indian Bread' - growing parasitically on southern beech trees. After lunch we drove to the Paso Garibaldi and walked down the old road to Lago Fagnano, taking in more Tobifera outcrops including native sulphur deposits - although even our enthusiasm waned as the weather closed in again.

Lago Fagnano lies on the left-lateral Magallanes-Fagnano Fault Zone that marks the boundary between the Scotia microplate, moving east relative to stable South America. Seismicity on this plate boundary includes a >7 Magnitude earthquake (1949) causing vertical offsets of 0.4m and 5m horizontally. Although major quakes are infrequent, seismic hazard is still high. This was not reassuring, as for two nights we stayed at a *hosteria* rafted on a concrete slab without proper foundations, on unconsolidated till deposits at the top of a cliff. Unlike Darwin, happily, we did not witness any seismic events.

The geological part of the trip ended on the Atlantic coast of Argentina, near the San Pablo lighthouse with a superb coastal cliff section of deltaic deposits, channel forms and a vast network of injected polygonal sandstone dykes. We saw much in our three weeks: beauty and harshness, colour and sterility, glorious sunshine and bitter sleet. I found the uniformity of the Patagonian plains striking - an almost timeless landscape that also enchanted Darwin. The calibre of our party provided excellent company and helped seal an unforgettable trip. Ian Dalziel put it well when he recalled: "Geologists make excellent company (...for geologists)".

Darwin reflected that a long voyage brings to life a previously blank map, which 'sharpens, and partly allays' cravings for travel. I couldn't agree more.



Education - securing the future



Pictured: students at Guiseley School, West Yorkshire, taking part in activities provided by the Science club, under the direction of Dr Caroline Neuberg and Michelle Clarke. The Society is pleased to have been able to help with supporting the development of a set of geoscience projects at the school.

Degree course accreditation

The Panel met on three occasions (23 January, 27 September and 11 December 2007 - 15th, 16th and 17th meetings). Submissions for accreditation and reaccreditation from five departments were considered and 30 programmes approved. In addition, the Panel received and approved the first submission for accreditation of a taught MSc programme. Those accredited and reaccredited over this period were as follows.

Institution	Accredited/ Reaccredited from	until	Programmes
University of Aberdeen, School of Geosciences	October 2007	October 2013	BSc (Hons) Geology & Petroleum Geology BSc (Hons) Geoscience BSc (Joint Hons) Geography & Geoscience
University of Bristol, Department of Earth Sciences	December 2007	December 2013	BSc (Hons) Geology MSci (Hons) Geology MSci (Hons) Geology with yr in North America/Europe BSc (Hons) Environmental Geoscience M Sci (Hons) Environmental Geoscience MSci (Hons) Environmental Geoscience with yr in North America/Europe
Keele University, School of Physical & Geographical Sciences	November 2007	November 2013	BSc (Hons) Geology M Geoscience BSc (Dual Hons) Geology (with Applied Environmental Science, Astrophysics, Biology, Chemistry, Computer Science, Forensic Science, Physical Geography, Physics)
University of Leeds, School of Earth & Environment	February 2007	February 2013	BSc Geological Sciences BSc Geological Sciences (with Industrial Placement) MGeol Geological Sciences (International/Europe) BSc Environmental Geology BSc Environmental Geology (with Industrial Placement) MGeol Environmental Geology (International/Europe) BSc Geophysical Sciences BSc Geophysical Sciences (with Industrial Placement) MGeophys Geophysical Sciences (International/Europe) BSc Geography/Geology (Route C)
University of Liverpool, Department of Earth & Ocean Sciences	February 2007	February 2013	MESci Geology (North America)
<i>MSc programme</i> University of Manchester, School of Earth, Atmospheric & Environmental Sciences	June 2007	June 2012	MSc Petroleum Geoscience (full time/part time)

The Society now accredits 132 first degree programmes from 23 departments. In addition, an application from overseas for the accreditation of first degree programmes is currently under consideration.

The Panel and the Accreditation Officer would like to record their thanks to those preparing submissions on behalf of schools and departments. We are encouraged by the willingness of applicants to undertake modifications to their geoscience programmes to meet accreditation requirements. Fees for accredited programmes had remained stable since 2002; so to bring the scheme closer to being cost-neutral we have had to raise fees in two stages for this and the next academic year.

The Panel continues to hold a watching brief on the status of integrated Masters degrees (MSci and MGeol) in the light of the Bologna initiative. The Panel has also discussed items relevant to its work in the Earth Science Action Plan (published late 2006) as well as guidelines for accrediting academic programmes at Masters level, published by The Science Council for the information of licensed bodies (of which the Society is one).

Until now there has been no specified period of service for members of the Panel pool. This has now been rectified and new members are initially appointed for a period of five years, which can be extended as appropriate. This should ensure a more regular turnover in the composition of the pool.

The major new initiative in 2007 has been a thorough revision of the application process. With the accumulation of a considerable database on accredited programmes, the Panel considered it appropriate to move to a more proactive approach by setting out details of essential skills and minimum requirements that programmes will need to meet in order to be eligible for accreditation. It is intended that this initiative should not be overly prescriptive, and we hope it will assist schools and departments to tailor their programmes to meet the requirements of accreditation before submission. The initial version of the documentation will be ready by the time this report is published and will be widely disseminated. The requirements will be updated as and when required and institutions will be kept fully informed of any changes.

JW Gaskarth (Chairman)

CT Scrutton (Accreditation Officer)

Panel pool

Ruth Allington (industry), Jim Andrews (academic), Colin Brown (industry), Annette Cutler (industry), Chris Elders (academic) Bill Gaskarth (academic, Chair), Malcolm Hart (academic), Kip Jeffrey (academic), Gilbert Kelling (academic), Dave Manning (academic), Andrew Parker (academic), Denis Peach (BGS) John Powell (BGS), Andy Rankin (academic), Nigel Robinson (industry) Hazel Rymer (academic), Helen Scholes (industry), Graham Stuart (academic), Peter Styles (academic), Gordon Walkden (academic), Nigel Woodcock (academic), Bruce Yardley (academic).

Current accredited programmes

(as at 31 December 2007)

University of Aberdeen, School of Geosciences

Date Reaccreditation (begins - expires):
October 2007 – October 2013

Programmes:
BSc (Hons) Geology & Petroleum Geology
BSc (Hons) Geoscience
BSc (Joint Hons) Geography & Geoscience

University of Birmingham, School of Geography, Earth & Environmental Sciences

Date Accreditation (begins - expires):
November 2003 – November 2009

Programmes:
BSc Geology
MSci Geology
MSci Geology (International Study)
BSc Resource & Applied Geology
MSci Resource & Applied Geology
MSci Resource & Applied Geology (International Study)
BSc Environmental Geoscience
MSci Environmental Geoscience
MSci Environmental Geoscience (International Study)
BSc Geology with Biology

Date Accreditation (begins - expires):
December 2003 – December 2009

Programme:
BSc Geology & Geography

University of Brighton, School of the Environment

Date Accreditation (begins - expires):
February 2006 – February 2012

Programmes:
BSc (Hons) Geology
BSc (Hons) Geography & Geology (Accredited pathway)

University of Bristol, Department of Earth Sciences

Date Reaccreditation (begins - expires):
December 2007 – December 2013

Programmes:
BSc (Hons) Geology
MSci (Hons) Geology
BSc (Hons) Environmental Geoscience

Date Accreditation (begins - expires):
December 2007 – December 2013

MSci (Hons) Geology with year in North America/Europe
MSci (Hons) Environmental Geoscience
MSci (Hons) Environmental Geoscience with year in North America/Europe

University of Cambridge, Department of Earth Sciences

Date Accreditation (begins - expires):

April 2004 – April 2010

Programmes:
BA Geological Sciences
MSci Geological Sciences

Cardiff University, Department of Earth Sciences

Date Reaccreditation (begins - expires):
March 2006 – March 2012

Programmes:

BSc Geology
MSci Geology
BSc Exploration and Resource Geology
BSc Exploration and Resource Geology (with placement year)

Date Reaccreditation (begins - expires): April 2006 – April 2012

Programmes:

MSci Exploration and Resource Geology
BSc Environmental Geoscience
BSc Environmental Geoscience (with placement year)
MSci Environmental Geoscience
MSci Earth Sciences

Durham University, Department of Earth Sciences

Date Reaccreditation (begins - expires):
December 2003 – December 2009

Programmes:

BSc (Hons) Geology (Accredited pathway)
BSc (Hons) Environmental Geosciences (Accredited pathway)
BSc (Hons) Geophysics with Geology (Accredited pathway)
MSci (Hons) Geoscience (Accredited pathway)
BSc (Joint Hons in Natural Sciences) Earth Sciences and *¹ (Geological Sciences route) (Accredited pathway)
BSc (Joint Hons in Natural Sciences) Earth Sciences with *² (Geological Sciences route) (Accredited pathway)

¹ – Biology

^{1,2} – Chemistry, Geography, Mathematics, Philosophy, Physics

University of Edinburgh, School of GeoSciences

Date Accreditation (begins - expires): June 2002 – June 2008

Programmes:

BSc (Hons) Geology
BSc (Hons) Geophysics (Geology route)
BSc (Hons) Geology & Physical Geography

Keele University, School of Physical & Geographical Sciences

Date Reaccreditation (begins - expires):
November 2007 – November 2013

Programmes:

BSc (Hons) Geology
MGeoscience
BSc (Dual Hons) Geology (with Applied Environmental Science, Astrophysics, Biology, Chemistry, Computer Science, Forensic Science, Physical Geography, Physics)

Kingston University, School of Geological Sciences

Date Reaccreditation (begins - expires): June 2006 – June 2012

Programmes:

BSc (Hons) Geology
BSc (Hons) Applied & Environmental Geology

University of Leeds, School of Earth & Environment

Date Reaccreditation (begins - expires):

February 2007 – February 2013

Programmes:

BSc Geological Sciences
BSc Geological Sciences (with Industrial Placement)
MGeol Geological Sciences (International/Europe)
BSc Environmental Geology
BSc Environmental Geology (with Industrial Placement)
MGeol Environmental Geology (International/Europe)
BSc Geophysical Sciences
BSc Geophysical Sciences (with Industrial Placement)
MGeophys Geophysical Sciences (International/Europe)
BSc Geography/Geology (Route C)

University of Leicester, Department of Geology

Date Reaccreditation (begins - expires): March 2005 – March 2011

Programmes:

BSc Geology
MGeol Geology
BSc Applied & Environmental Geology
MGeol Applied & Environmental Geology
BSc Geology with Geophysics
MGeol Geology with Geophysics
BSc Geology with Palaeobiology
MGeol Geology with Palaeobiology
BSc Geography & Geology

University of Liverpool, Department of Earth & Ocean Sciences

Date Reaccreditation (begins - expires):

December 2005 – December 2011

Programmes:

MSci Geology
MSci Geology & Geophysics
MSci Geophysics North America
BSc (Hons) Geology
BSc (Hons) Geophysics with Geology
BSc (Hons) Geology with Physical Geography

Date Accreditation (begins - expires): February 2007 – February 2013

Programme:

MSci Geology (North America)



University of London, Birkbeck College, School of Earth Sciences

Date Reaccreditation (begins - expires):

December 2003 – December 2009

Programme:

BSc (Hons) Geology

University of London, Imperial College, Department of Earth Science & Engineering

Date Accreditation (begins - expires): June 2006 – June 2012

Programmes:

BSc Geology

MSci Geology

MSci Geology with year abroad

MSci Geology & Geophysics

MSci Geology & Geophysics with year abroad

MSci Environmental Geoscience

MSci Geophysics with year abroad

University of London, Royal Holloway, Department of Geology

Date Reaccreditation (begins - expires): March 2005 – March 2011

Programmes:

BSc Geology

MSci Geoscience

MSci Geoscience w. International Year

BSc Environmental Geology

MSci Environmental Geoscience

BSc (JH) Physical Geography & Geology

BSc (JH) Geology & Astrophysics

BSc (CH) Science Communication (Geology)

University of Manchester, School of Earth, Atmospheric and Environmental Sciences

Date Reaccreditation (begins - expires):

September 2003 – September 2009

Programmes:

BSc (Hons) Geology

BSc(Hons) Environmental & Resource Geology

BSc (Hons) Geochemistry

Date Accreditation (begins - expires):

November 2003 – November 2009

Programme:

MEarthSci

University of Oxford, Department of Earth Sciences

Date Accreditation (begins - expires): June 2006 – June 2012

Programmes:

BA Geology,

MESC Earth Sciences

University of Plymouth, School of Earth, Ocean & Environmental Sciences

Date Accreditation (begins - expires): March 2006 – March 2012

Programmes:

BSc (Hons) Geology

MGeol Geology

BSc (Hons) Geology major (with Ocean Science, Computing)

BSc (Hons) Geology major with Geography (Accredited pathway)

Date Accreditation (begins - expires): April 2006 – April 2012

Programmes:

BSc (Hons) Applied Geology

BSc (Hons) Physical Geography and Geology

University of Portsmouth, School of Earth, Environmental and Physical Sciences

Date Accreditation (begins - expires): June 2002 – June 2008

Programme:

BSc (Hons) Palaeobiology & Evolution

Date Accreditation (begins - expires): July 2002 – July 2008

Programmes:

BSc (Hons) Geology

BSc (Hons) Geological Hazards

BEng (Hons) Engineering Geology & Geotechnics

University of St Andrews, School of Geography & Geoscience

Date Accreditation (begins - expires):

December 2003 – December 2009

Programme:

BSc (Hons) Geoscience

University of Southampton, School of Ocean & Earth Science

Date Reaccreditation (begins - expires): March 2006 – March 2012

Programmes:

MGeol

MGeol with yr in North America

BSc Geology

BSc Geology with Marine Biology

BSc Geology with Oceanography

BSc Geology with Physical Geography

MGeophys

MGeophys with yr in North America

BSc Geophysical Sciences

University of the West Indies, Petroleum Geoscience Unit, Department of Chemical Engineering

Date Accreditation (begins - expires): February 2004 – February 2010

Programme:

BSc Petroleum Geoscience





*“Fantastic day,
good talks,
good exhibits,
a job offer and
free beer.
Improve it?
You can’t...”*

Careers Day 2007

Careers Day, held at the British Geological Survey (BGS) Keyworth on 7 November 2007 was attended by over 400 students from a number of UK universities. The main programme was as popular as ever with students reporting that they found the variety of industry-focused and more academic talks (spanning the major geological sub-disciplines) helpful. The exhibition was a sell-out, and as always, BGS proved a popular venue that students found stimulating.

Exhibitors included: Aggregate Industries Ltd, Anglo American, Arcadis, ArKeX, Atkins, BG Group, Birmingham University, BP, British Geological Survey, CGG Veritas, Cambridge University, Cardiff University, Derby University, Durham University, Edinburgh University, Environment Agency, Exeter University, ExxonMobil, Fugro Robertson Ltd, Gardline Marine Services, Geological Society of London, Halliburton, Hess, Ikon Science, Leeds University, Leicester University, Liverpool University, Manchester University, MJCA, Neftex, Open University, Portsmouth University, Plymouth University, Rio Tinto, Royal Holloway University, Sheffield University, Shell, Soil Mechanics, Southampton University, StatoilHydro, University College London

Speakers included: Mark Bell, Ramboll Whithy Bird; Chris Carlon, Anglo American; Sarah Davies, University of Leicester; Charles Harris, Cardiff University; Richard Herrington, Natural History Museum; Denis Peach, Chief Scientist, British Geological Survey; Bryan Ritchie, BP; Hazel Schroder, White Young Green; David Shilston, Atkins & Professional Secretary of The Geological Society; Emily Vallance, GWP Consultants; Gary Walker, Mott MacDonald; Sally Watson, Atkins.

Outstanding pupils and teachers

The Society’s annual book prize, awarded to the highest scoring candidate in each exam board offering geology A level/Scottish Higher, was awarded to Charlotte Vie, Fiona Bell, and Christopher Jones, who were the top scorers under the Oxford and Cambridge/RSA Examinations (OCR), Scottish Qualifications Authority (SQA), and the Welsh Joint Education Committee (WJEC) respectively. Winners received either *The Geology of England and Wales* or *The Geology of Scotland*. The volumes, inscribed by the President, were also awarded to South Wilts Grammar School for Girls/Bishop Wordsworth’s School (Salisbury), Cumnock Academy (Ayrshire), and Gorseinon College, Swansea. The winning pupils’ teachers (Mrs Frances Stratton/Dr S Smallwood, Mr Roy Lee, and Dr Chris Walley) were awarded a year’s free Fellowship of the Society.

The Society wishes all winners its heartiest congratulations.

Mine of information A quiet revolution

*The Chair of the Information Management Committee
hails a year of achievement.*



The *Annual Report 2006* anticipated an exciting programme of activities and projects to mark the Society’s Bicentenary. We can now look back at some considerable achievements, and forward to the equally challenging task of building on them.

Nowhere were our bicentennial plans more ambitious than in the area of library and information services. The creation of the Lyell Collection – a highly functional online archive of 230,000 pages published

by the Society since 1845 – was a major undertaking in its own right, and you will gather from the Publications Secretary’s report (p. 33), how central a role it already plays in making our books and journals available to Fellows and the global Earth science community – even as we look to develop it further.

But the Lyell Collection is just one of the innovations in information services that the Society has been able to achieve during 2007, with the generous support of our Bicentennial Sponsors BP and Shell. Over coming years, the Lyell Centre – the Geological Society’s virtual library – will transform the ways in which we are able to support, inform and educate geoscientists and others with an interest in our subject. In addition to the Lyell Collection, it already includes a complete online catalogue of the Society’s book, journal and map library holdings, and an innovative visual tool for browsing the index data associated with map series via a Geographic Information System (GIS), both of which are open to Fellows and others. From January 2008, Fellows are also able to access 35 of Elsevier’s Earth science journals from their own PCs, at work or at home – the first time we have been able to deliver publications to which the Society subscribes in this way.

All these services are available via a new website, launched in 2007. In replacing our previous site, a high priority was to meet high standards of accessibility so that it (and the services we deliver through it) can be enjoyed as fully as possible by those with visual, motor and other physical impairments. We have also added to its content and functionality, and further developments (due in 2008) are already underway.

At the heart of this quiet revolution is the physical library collection. Along with our publications, it constitutes an invaluable resource without which none of these new initiatives would be possible. The Society remains committed to stewardship of this unique collection, and to maintaining its relevance to the Fellowship’s needs. The most visible sign of change here has been the opening of the Lyell Room, a magnificent new working space located in the former Library reception area and the first physical manifestation

of the Lyell Centre. Here Fellows can use our growing range of electronic services via their laptops and a high capacity wireless internet connection, alongside our physical books, journals and maps. Visitors now enter the Upper Library directly from the first floor landing of the recently refurbished main staircase – reflecting the importance the Society attaches to this treasured resource.

The Lyell Centre and Lyell Collection are valuable additions to our library and our publishing activity, and allow us to be ambitious in our plans to provide high quality science content and information services.

George Tuckwell



The library

From the Chief Librarian

Work on the GIS project came to an end in September with the completion of the data entry for all the major map series held by the Library. All of the indexes are now in

GIS format. At the end of the project the Map Librarian took over responsibility for keeping the GIS/online map indexes up to date as new sheets/series are received. The retrospective cataloguing project was completed on time at the end of March and we were able to retain one of the cataloguers for a further three months to work on some of the series that had not been included in the project.

The Library was closed until 30 May for major refurbishment involving the creation of the Lyell Room and a new office for Library staff opposite. Reader services were maintained throughout the closure by lending, answering enquiries and providing photocopies and literature searches on request. The creation of a new entrance necessitated alterations to the layout and additional bespoke furniture, specially created to complement the existing oak furniture and bookshelves. A new enquiry desk was installed, which has involved a change in staff working practices to cover two service points both at the desk and in the office. The Library was featured in a case study on furniture and design in *Library & Information Gazette* which was published in early December, and a photograph appeared on the front cover.

The Assistant Librarian responded to 180 archive enquiries while the Archivist's post remained unfilled. During the year one of William Smith's sections was lent to the Society of Antiquaries' Tercentenary exhibition (Royal Academy). A small exhibition of books and archive material archives was displayed for the HOGG bicentenary meeting *In the Footsteps of the Founding Fathers*.

The papers of Prof Robert Shackleton, deposited by his family, have been catalogued by the National Cataloguing Unit for the Archives of Contemporary Scientists. The papers were removed to the University of Bath for this purpose in the summer and

returned in December. A printed catalogue was issued and can be purchased from NCUACS or consulted in the Library.

The Society's modern records were returned to storage in the basement during August. Some of the boxes contained papers that had been restored after damage by flooding. The rest had been stored offsite while refurbishment work was carried out.

A total of 4412 records were added to the library's online database of books, maps, serials and audio-visual materials, bringing the total records of all types of material in the online catalogue to almost 39,000.

New books acquired by the Library during 2007 (by purchase, gift and exchange) totalled 241. The Library continued to benefit from the Fermor Fund, and £7181 was used to purchase material in the subject areas of Precambrian geology and ore deposits. The Library Committee approved a subscription to a new journal title, *Geo.Alp.* published by the *Universität Innsbrück Institut für Geologie und Palaontologie* and the *Naturmuseum Südtirol*.

Although the Library was closed for the first five months the Map Librarian dealt with more than 640 enquiries, loaned 774 maps, and more than 280 maps, texts and CD-ROMs were added to the collection. Once again the most popular countries were the home nations. There has been a greatly increased demand for maps of Africa, particularly East Africa. There has also been interest in Central Asia, notably Kazakhstan. New maps have been received through exchange agreements, including several sheets from Japan.

The new GIS service, launched in May as part of our bicentennial legacy, is proving popular with users and helpful within the library. It is being further refined and developed this year. The Map Librarian is continuing to catalogue our historic collections retrospectively and create indexes for the GIS. Unfortunately some maps were damaged and misplaced by users this year. To prevent further losses, some maps have been made "reference only", including all our holdings for Kazakhstan and the UAE.

The Library successfully negotiated remote access to 35 of Elsevier's Earth science journals to enable Fellows to have access to full text articles from their own PCs. The new service, launched in January 2008, provides access to the last five years' content of journals to which the Library currently subscribes.

During the year library staff made training visits to the libraries of the British Geological Survey, the Natural History Museum, RIBA, the Royal Society of Medicine and the Wellcome Library. The Library hosted a number of visits from the librarians of other organisations during the course of the year, including staff from the Natural History Museum, and our Corporate Affiliates, Anardarko and GETECH. We also welcomed librarians from the Information for Energy Group (IFEG) to see the newly renovated Library. It is gratifying that so many Fellows have also appreciated the new facilities in the refurbished Upper Library.

Sheila Meredith

Down your way – the Society in the regions

The Society extends beyond its London headquarters through its Regional Groups. There are 13 groups in England, Scotland and Wales, each organising activities that foster its members' technical and professional interests. Here are some examples of their activities in 2007.

Central Scotland Regional Group

The Central Scotland Regional Group (CSRG) held six evening lectures in 2007 as well as hosting a Poster Presentation Competition and a Geoscience Careers Day in Edinburgh.

Evening lectures covered a variety of Scottish geoscientific issues, from the decay of building stones and geothermal energy to the slightly more light-hearted topics of the hydrogeology of whisky and beer. The location of our evening lectures was deliberately balanced between the west and the east of our region, with three lectures in Glasgow and three in Edinburgh.

In 2007, the group again worked closely with the other professional organisations in the region (such as the Scottish Geotechnical Group (SGG)). The group held a Careers Day in Edinburgh, to cater for undergraduate and postgraduate students studying at universities distant from the Geological Society's usual Keyworth venue (p. 22). Ten speakers covered the full range of geological professions, and 17 organisations participated; manning stands, answering questions and giving advice.

Members of the wider group have been taking a greater interest in its running - with a further four members volunteering to join the committee. This is most welcome, as the burden of organising events and evening lectures can be spread over a greater number. As I often point out, we are all volunteers with the same commitments as everyone else. I would like to thank everyone for their attendance and support.

John W Brown

East Anglian Regional Group

The Group held four meetings, with presentations on topics spanning the Early Pleistocene of Cromer to the fiery landscape of present-day Montserrat.

The January meeting heard Victor Bense (School of Environmental Sciences, UEA) explain the hydrogeology of fault zones in unconsolidated sedimentary aquifer systems in the Lower Rhine Embayment area. The February meeting was presented by Nick Russil (Terradat UK) who demonstrated ground investigation techniques using shallow high-resolution geophysical methods, and illustrated his account with a local case study in the salt marshes at Holme-next-the-Sea.

We then had a change of venue to the Assembly House, Norwich. This resulted in additional advertising on the Assembly House Meetings website and an increase in attendees, including members of the public. A very popular lecture was given by Jonathan Lee (BGS) who offered a stratigraphic approach to unravelling the Quaternary of East Anglia.

The final lecture of 2007 coincided with the AGM. Richard Herd (School of Environmental Sciences, UEA) gave an illustrated account of the Soufrière Hills, explaining the spectacular mixture of volcanic activity on this Caribbean Island and the continued uncertainty that hampers recovery efforts and investment.

Kevin Hiscock

Hong Kong Regional Group

Over the last year the HKRG has hosted a number of evening technical talks which shifted the focus away from Hong Kong to the catastrophic *Leyte Landslide in the Philippines* (Rick Guthrie), the *March 2007 lahar on Mount Ruapehu in New Zealand* (Chris Massey), the *Scottish Road Network Landslide Study* (Mike Winter), and *New Zealand Gold: Geology, Production and Exploration* (Tony Christie). Bringing things closer to home, David Jonas also gave an interesting presentation on the first application of Airborne Laser Scanning (LiDAR) within the territory. Our thanks go to all of these visiting speakers, who gave time during their short stays in Hong Kong to speak to us.

The pinnacle of the year's events came in November when the HKRG hosted its own Bicentenary celebration: a one-day conference on *Engineering Geology in Geotechnical Risk Management*. This was attended by over 100 people and included a series of informative and well delivered presentations from both local and international speakers, including keynote presentations from Fred Baynes and Mark Lee.

Stuart Millis



North West Regional Group

The North West Regional Group Committee was determined make Bicentenary year one to remember, and succeeded. Our meetings and events reflect clearly how the geological sciences are integrated into all aspects of our society when managing resources, from energy and water to waste.

The year began successfully, welcoming back Prof David Manning (former NWRG Chairman) to explain the successful Eastgate geothermal project. This was followed by a visit and meeting to look at the stabilisation of the Northwich salt mines for waste disposal. Following on from this was a presentation by Keith Seymour of the Environment Agency (EA) undertaken by the EA and BGS to look at the groundwater resources in the Mersey Basin, where after a century of over-abstraction, groundwater is on the rebound.

The highlights of the year included a bicentennial dinner dance at the prestigious Manchester Town Hall. This was a great success and was sponsored by companies employing geologists in our area, part of the NW Regional geological community. The rest of the year was taken up by events on gas risk and Euro code 7; though in usual style it all came to an end with an AGM, a quiz and much merriment.

Mark A Parkin

Northern Regional Group

The Northern Regional Group organised a successful program in the Geological Society's bicentennial year, focusing on lecture evenings in Newcastle, with other one-off activities and joint meetings through the year.

February 20th: Laurance Donnelly (Halcrow Group) – *Forensic Geology*. This meeting also included the Group AGM.
 May 22nd: Fred Worrall (University of Durham) – *Deckchairs on the Titanic?* The fate of the UK's largest store of carbon Geoff Parkin (University of Newcastle) – *West Bank aquifers*.
 September 18th: John Lamont-Black Chris Danilewicz (Halcrow Group) A66(T) *Surtees Bridge Replacement*;
 November 20th: Shaun Salmon (Entec) – *Regional hydrogeological investigations and modelling of the Anglian Chalk* Paul Dougan (University of Sunderland) – *What you need to know to keep it legal*.
 April 18th: Sir Kingsley Dunham Memorial lecture for PROBUS – Talk by Prof Richard Davies (University of Durham) on *Subterranean Imaging of the Earth*
 May 26th-27th: Minerals weekend held in St. Johns Chapel

Town Hall, in association with the Friends of Killhope Lead Mining Museum and the British Geological Survey, including "open house" displays, and a talk by Prof Martin Bott (Durham University) on Sir Kingsley Dunham and the North Pennines. (Part of North Pennines AONB Northern Rocks Festival).

October 23rd Careers afternoon, Durham University, Hild-Bede College. November 8th Bicentennial lecture, Newcastle. Prof Bernie Wood (Oxford University) talked on the *Earliest history of the Solar System and the formation of the Earth*. This lecture formed part of Newcastle University's highly popular Public Lecture Series. December 4th Joint meeting with the Northern Geotechnical Group (NGG). Wilf Wrigley presented a talk on key geotechnical issues.

Mark Allen

Southern Wales Regional Group

The Southern Wales Group continues to be an active conduit between the academic geological community (based mainly at the School of Earth & Ocean Sciences Cardiff University but also Glamorgan and Swansea) and the applied geoscientists working in South Wales. The group talks also attract a regular minibus group from Cowbridge Comprehensive School, which has a very active and enthusiastic A-Level geology course.

At the start of the academic year the chairman gave a presentation to all new MSc applied geology and hydrogeology students (~33 in all). The talk outlined the role of the Society, its educational facilities and the importance of Chartered Geologist in their longer career path.

The group meets at regular intervals at evening talks at Cardiff University usually between September and May within the academic year. Talks, usually of applied or topical local interest, are followed by an informal cheese and wine session that allows for networking between MSc students and professional geologists. We notice it is increasingly difficult to get undergraduate students to come to evening seminars, despite details being emailed to all Cardiff Earth science undergraduates. This reflects the current culture of part-time evening work and concentration on mark-earning coursework.

Peter Brabham



South East Regional Group

The South East Regional Group regained momentum during 2007 after a fallow period. A new chairman has been appointed and several new members have joined the committee. Two successful meetings were held, the first on the *Sustainable Redevelopment of Gasworks*, attracted 24 and more than 30 people attended a talk at Brighton University on the *Geology of Hindhead Tunnel*.

With this strong support our core objective for 2008 is to establish a programme of at least five meetings at differing venues across the region. The contact network in the main employer organisations is being extended, but the website update has yet to be completed. Thus the first tentative steps have been taken to re-establish the South East group on a sound basis; but significant challenges remain.

Ron Williams

South West Regional Group

South West Regional Group events were again well supported by members from across the region. The first was held during Science Week, on 13 March. Prof Mike Benton (Bristol University) spoke on *The biggest mass extinction of all time* to over 100 people at Plymouth University. Later in the month, Dr Dave Williams gave a talk at a mining site near Camborne, Cornwall, about geological maps, which was attended by Regional Group members OU students. The same weekend also saw one of our previous Regional Group Chairs, Prof Malcolm Hart, give a popular lecture entitled *Conversation with the Earth* at Torquay Museum.

Dr Richard Twitchett (University of Plymouth) spoke on the Permian-Triassic extinction event on 31 March at the Devonshire Association in Exeter. The Regional Group's annual one-day seminar, *ProGeo*, was this year held on 6 July at Fingle Glen Golf Club. The new venue proved popular, and the event – this year with the theme *Implications of Climate Change* – was attended by approximately 55 people.

The keynote address was delivered by Bob Sargent, (President, CIWEM) with thought-provoking overview of the science of climate change. This was followed by Mike Stephenson's (BGS) insights into climate change through geological time (*The stone tape: deep time climate change and its relevance to our changing planet*). Other speakers included Richard Horrocks (Environment Agency); Derrick Ryall (Meteorological Office) and Neil Whiter (South West Water).

We were very pleased to welcome Dr Richard Scrivener to the Tremough Campus (University of Exeter) on 22 November. His talk on *Low-temperature mineralisation in the rocks of South-west England* was attended by 20 people, including students from Camborne School of Mines.

John Evans

West Midlands Regional Group

Bicentennial Year was celebrated in the West Midlands by numerous events and field visits provided by museum services and local conservation groups. Many of these activities were aimed at the 'grassroots level', to enthuse the next generation of Earth scientists. These events were coordinated by a printed *Bicentennial Brochure*.

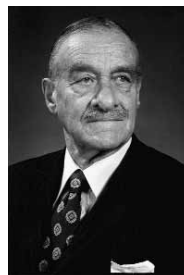
The highlight of the year was the *Marches Festival of Geology* (13 September), organised by Mike Rosenbaum with support from the Shropshire Geological Society and other local groups. On the day, a well-attended meeting in the Ludlow Assembly Rooms provided a forum for both professional and amateur geologists to hear presentations on a classic area of UK geology. The amazing 3D images of fossils, presented by David Siveter, will long remain in our minds.

Adrian Collings

Western Regional Group

A small group of Fellows in the Bristol area has expressed an interest in restarting the currently inactive Western Regional Group. A meeting to bring this about will take place in early 2008. *Martin Culshaw (Regional Groups Coordinating Committee)*

Thames Valley Regional Group



During 2007 the TVRG held two Bicentenary events. The first was a one-day Conference on *The Engineering Geology of the London Clay*, the second a "Local Hero" presentation on *The Life and Work of Ralph Bagnold* (picture).

The first event was well-attended, while the second had a disappointing attendance, especially by Society members. This fact illustrates the problems facing regional groups. The Conference was, for many attending, work-related. It was held on a weekday – a paid day off! The second dealt with the life of an interesting person, who undertook intrepid exploration and did important field and research work. Less immediately relevant, certainly – and held on a Sunday.

Should the group therefore limit its programme to work-related subjects? The Committee believes not, and will continue to provide annual programmes that are as varied and interesting as possible. However, this also requires those Society members within the TVRG region to make an effort to appreciate and attend talks on more diverse subjects; to be inquisitive about their broader subject. This is a symbiotic relationship. The Committee will endeavour to maintain varied and interesting programmes of events (and whenever possible, the added inducement of refreshments!). But the membership must be willing to make that extra effort. If both sides are willing to put in, both will take more out.

Alex Carbray

Yorkshire Regional Group

In 2007 we held six successful evening meetings. In January a talk by Colin Reader on the geological issues surrounding the Great Sphinx in Egypt was held at the Adelphi Hotel Leeds, which 25-30 fellows attended. The program continued in March with a very well attended joint meeting with the Yorkshire Geotechnical Group, at the University of Leeds. The speaker was Prof Eddie Bromhead, who talked about slope stability - illustrated by examples from Professor Bromhead's experience of 'fixing other peoples cock-ups'. Over 125 people attended.

The April meeting (Sheffield University), held jointly with the Engineering Group, was a day seminar on the planning and reclamation of hard rock and limestone quarries. The programme continued in September with another joint meeting with YGG. Alasdair Henderson and John Whitfield talked about their work on the Dounreay shaft isolation project. Of the 54 attending, 25 were FGS. The October meeting at the University of Leeds heard Chris Danilewicz talk about the Surtees bridge project, which 30 fellows attended.

In December we had our traditional AGM & Christmas Quiz. The winning team were from Joynes Pike Associates. Richard Deakin stepped down as the Chair due to overseas work commitments. The new Chair, Tom Berry, was proposed by Richard Deakin and seconded by Bill Murphy (University of Leeds). He thanked Richard for his many years of hard work on the committee. Richard will remain as a committee member.

Tom Berry

Serving the science

Meetings of minds

from the Science Secretary



“Our new structure for meeting proposals has bedded in well and has resulted in a steady stream of well thought-out ideas.”

Science Committee focuses mainly on the Society's programme of scientific meetings, whether organised through the Conference Office or Specialist Groups. Part of our function is to comment on and approve proposals from the scientific community, but the Committee also plays an important (though less tangible) role in stimulating ideas for interdisciplinary meetings and workshops. Our new structure for meeting proposals has bedded in well and seems to have resulted in a steady stream of well thought-out ideas.

The past year brought a range of very high profile international speakers into Burlington House, including our own medallists at President's Day. No William Smith or Lyell 'flagship' meetings were scheduled because of the Bicentennial Celebrations. There was, however, a very successful series of public lectures sponsored by Shell, about which more below.

In recent years, Science Committee has been involved in meetings that touch on the more long-term strategic interests of Fellows. One in 2005 addressed energy issues and another following year considered radioactive waste management. During the past year we have had discussions on two possible future topics: the controls on Holocene sea-level change, and another on carbon sequestration. Other topics under discussion have lain close to the boundaries of the subject, such as palaeobotany and its environmental implications.

The Bicentennial Celebrations are now winding down. Science Committee was involved in organising the shell London Lecture Series for the general public. The overall aim of these lectures was to bring modern Earth sciences and their relevance to the attention of the public. The President gave the first lecture in January. Entitled *The History of Life*, it played to a packed auditorium. It was clear from the questions that followed that the audience found it both enjoyable and stimulating. We plan for the lectures to continue throughout the year at approximately monthly intervals (except during July and August) when they will focus on other topics of current public interest, including earthquakes and volcanoes, climate change, and water and oil and gas resources.

The Science Committee is the meeting place for all the Society's specialist groups, and I am extremely grateful to all whose attendance makes them so interesting. The work of the Science Committee is dependent on the expertise and dedication of the Conference Office team, and it is a pleasure to acknowledge here the help provided us by Georgina Worrall.

Tony Watts

British Society for Geomorphology

Following its reconstitution as the British Society for Geomorphology (incorporating the BGRG) in 2006, the Society has been in a state of flux, formulating the structures and agenda to meet the needs of its membership. Its journal *Earth Surface Processes and Landforms* (ESP&L) has gone from strength. It is also a time of change, with Mike Kirkby stepping down as Editor after 30 years' distinguished service, for which the BSG extends considerable gratitude.

The BSG has also (co-)sponsored a series of other conferences including: a session at the European Geosciences Union Congress 2007 in Vienna; the January Discussion Meeting of the QRA, *The Quaternary of the British Isles and adjoining seas*; and the 4th International Palaeoflood Workshop, Crete. BSG has continued to support postgraduates, awarding travel grants to various conferences. The Annual Conference was held at the University of Birmingham, 4-6 July, under the banner *Geomorphology - a 2020 vision*.

Prof Des Walling (University of Exeter) was awarded the Linton Award. The Warwick Award went to Dr Niels Hovius, (University

of Cambridge). The Wiley Award for best ESPL paper 2006 went to Rob Westaway for *Investigation of coupling between surface processes and induced flow in the lower continental crust as a cause of intraplate seismicity*. The Marjorie Sweeting Award went to undergraduates Richard Doughty (Keble College, Oxford) and Cécile Menard (Sussex University) for the best undergraduate dissertation.

In 2007 BSG created the annual Dick Chorley Award for the most significant original published contribution to geomorphology by a postgraduate student within two years of graduation. The first went to Keith Richardson for *The hydraulics of a straight bedrock channel: insights from solute dispersion studies*.

Prof Robert Allison (Chair)

Dr Richard Chiverrell (Honorary Secretary)

Earth System Science Group

The Group's chair, Sir Crispin Tickell, gave the inaugural T H Huxley lecture entitled *Earth system science: Gaia and the human impact*, to mark the Centenary of Imperial College. That Sir Crispin is Huxley's great grandson made him a particularly appropriate speaker. Huxley was among the first to assess correctly the importance of living organisms in the character and functioning of the global environment, since carried forward into Gaia theory. In the last 10,000 years (and increasingly from the advent of the industrial revolution) our species has had unprecedented effects on the Earth system and no part of the natural world is unaffected.

Prof Tim Lenton was lead researcher on an international team studying tipping points in the Earth's climate system, which found that a variety of tipping elements could reach critical points within this century. The greatest threats come from the Arctic sea-ice and the Greenland ice sheet, while at least five other elements could surprise us by exhibiting a nearby tipping point.

Also of interest this year was the launch of a book called *Earthy Realism: the meaning of Gaia*. Taking as its premise the view that the Earth and the life on it form an active, self-maintaining whole, this book seeks to link Earth System Science with current global issues and our perception of the planet. Meanwhile in Spain, one of our members organised 10 top Catalan academics to support the inclusion of Earth System Science at all levels of the Catalan educational system. This has so far resulted in one Catalan university teaching the discipline for the first time (in 2008-09), while another is setting up a dedicated Masters course.

Susan Canney

Environmental and Industrial Geophysics Group

Much committee activity took place in 2007 to launch a new multi-disciplinary era - as well as new joint academia-industry *Postgraduate Symposium*. A new dedicated website has been launched (www.eigg.org) by Dr Jamie Pringle (Keele University), our new publicity officer.

The Geological Society's Bicentennial conference in September was an exciting highlight. Five distinguished international speakers from Europe and USA (Prof Alan Green, ETH, Zürich; Prof Peter Styles, Keele University; Dr. Rick Miller, Kansas Geological Survey; Prof Rosemary Knight, Stanford University, and Prof Mark Everett, Texas A&M) presented stimulating overviews of the current state of the art in particularly pertinent areas of near-surface geophysics. EIGG would like to thank all speakers for contributing such inspiring discussions. The talks were augmented by 10 posters highlighting near-surface geophysics in a diverse range of disciplines. These demonstrated that near-surface geophysics is a very active and exciting field in the UK.

Under a new Chair, Dr Bernd Kulesa (Swansea University), EIGG activities will emphasise integration with other disciplines through a range of conferences planned for 2008 and 2009. Future EIGG activities will also emphasize the role of early-career researchers and practitioners, facilitated by a new *Postgraduate Symposium in Near-Surface Geophysics* at the British Geological Survey in August 2008.

Much footwork has been completed behind the scenes that we are confident will lead to exciting new developments and considerable expansion of interest in, and activities of EIGG in coming years.

Bernd Kulesa

Forensic Geoscience Group

The Forensic Geoscience Group (FGG) became firmly established in 2007, following its inaugural meeting in December 2006. Committee members for 2007 were: Dr Laurance Donnelly (Chair), Dr Barry Rawlings (Vice-chair), Dr Duncan Pirrie (Secretary), Prof Kym Jarvis (Treasurer), Dr Alastair Ruffell (co-opted) and Dr Jamie Pringle (co-opted).

Best-selling crime author Ian Rankin finds something nasty in the undergrowth at the Soil Forensics Conference



FGG were key participants in a successful high-profile Soil Forensic conference, organised by the Macaulay Institute and Cranfield University, (30 October - 1 November), at Edinburgh Conference Centre. A wide range of participants attended from over 15 nations: including >75 researchers, >40 police or forensic practitioners, and 20 students. The geoforensics session, held on 31 October, was organised and chaired by FGG committee members. The conference focused on current and novel approaches in soil forensic analysis and their application to casework.

In October 2007, FGG committee members participated in the Geological Society of America (GSA) Annual Meeting and Exposition, *Earth Science for Society*, in Denver, Colorado. FGG committee members were also invited to meet Denver Police and to inspect their forensic crime laboratories. A presentation provided opportunities to discuss and debate the role of geology in certain types of investigation.

FGG committee members provided advice and support to UK police officers in at least five counties in England, Wales, Scotland and Northern Ireland. Geoscience support was also provided to police investigations and searches in USA, Europe and Australia. Collaboration continues with UK-based forensic geoscientists and an expanding network of geoforensic academic and practitioners in USA, Colombia, The Netherlands, Germany, Italy, Sicily, Australia and Japan.

Laurance J Donnelly

Geological Remote Sensing Group

GRSG held two international conferences: the first, *Remote Sensing Applications for Mountainous Terrain and Geohazards*, was organised jointly with the Geology SIG of the European Association of Remote Sensing Laboratories (EARSel) in June at Bolzano, Italy. GRSG's Annual Conference was held at Burlington House on 18-19 December and focused on developing countries.

GRSG's digital quarterly Newsletter continues to go from strength to strength. Unfortunately there were some temporary problems with its distribution as a pdf from GRSG website. The year also saw the publication of *Mapping hazardous terrain using remote sensing* (GSL Special Publication No.283).

Membership of the GRSG is holding steady at c.175. We held an email student recruitment drive during the year. Student Members are eligible for the NPA Student Award (up to £250), supporting students presenting their research at international conferences (won this year by Susan Conway (OU) and Naomi Morris (Portsmouth University)) and the GRSG Student Fieldwork

Award (up to £500), initiated in 2007 thanks to generous sponsorship from Anglo American plc. More details at www.grsg.org.

Shell and the German Geological Survey (BGR) generously provided posters and flyers advertising GRSG activities during 2007; but thanks must also go to the Corporate Members and Sponsors AngloAmerican plc, Arup, Analytical Spectral Devices Inc, Barrick, GeoSense, Infoterra Ltd, ITC (Netherlands International Institute for Geo-Information Science and Earth Observation), ITT Visual Information Solutions/ENVI, Leica/ER Mapper, NPA Group, Shell Exploration & Production and the British Geological Survey.

History of Geology Group

HOGG's year culminated in our current celebration of the Geological Society's bicentenary. Transient excitements of our recent field trip to the Isle of Wight, excellent lectures and

splendid supper are marked in permanent form by HOGG's plaque outside the New Connaught Rooms, commemorating the Society's foundation (pictures).



Last November, there was the chance to explore the caverns of Dudley during Cynthia Burek's meeting on the *History of Geoconservation*. In April we congregated in Weymouth for Dick Moody's meeting on the history of hydrocarbon and petroleum exploitation, and had a sunny day for our fieldtrip on the coast. Beris Cox produced a splendid poster, which you may have seen during this bicentenary meeting, to display at the Geological Society's Bicentennial Conference.

The Oral History Project is progressing well under Nic Bilham's supervision. You will soon be able to hear clips of audio material via HOGG's website and listen to memories of geologists working in decades past. HOGG's electronic newsletter, produced by Peter Tandy and Dick Moody, is a new development this year and has been praised by members. (Hard copies are still available for those who want them.)

The Society's Special Publications Series has produced a volume based on HOGG's meeting on *The Role of Women in Geology*. Papers given at the Dudley meeting on the *History of Geoconservation* will



form the core of another volume, to be published shortly. The *Founding Fathers* meeting will generate yet another valuable volume in 2009.

Anne O'Connor

Hydrogeological Group

The year's highlight was the Group's participation in the *Environment* session of the Bicentennial Conference. A gathering from the full range of hydrogeological specialisms considered recent advances and future challenges, with speakers including Doug Mackay (University of California at Davis), Bernie Keuper (Queen's University, Canada), Tony Appelo (Amsterdam), Ghislain de Marsily (Université Pierre et Marie Curie, Paris), Paul Younger (Newcastle University), Neil Chapman (ITC, Switzerland), David Lerner (Sheffield University), Mike Edmunds (Oxford University) and Stephen Foster (World Bank).

The Group also convened a display of 54 posters presented as six themes: *Groundwater investigation methods*; *Groundwater: climate change implications*; *Groundwater, international development and poverty reduction*; *Groundwater quality*; *DNAPLs: a persistent groundwater challenge*; and *Advances in modelling flow and transport in the subsurface*. This was a memorable meeting, truly a "1 in 200" event!

The 2007 Whitaker Medal was awarded to Bob Harris, late of the Environment Agency and currently Visiting Professor at the University of Sheffield, in recognition of his long commitment to developing methodologies of risk assessment in relation to contaminated land and to supporting risk-based policy initiatives. The medal was awarded during our highly successful meeting on *Nitrate in Groundwater: Past Trends and Future Challenges*, one of five meetings held during the year. The high quality of the year's activities is testament to the energetic leadership of our outgoing Chair, Mike Rivett and Secretary, Ruth Davison, along with others from the Committee.

William Burgess

Mineral Deposits Studies Group

The Group began its year with the Annual General Meeting (University of Brighton), which attracted over 100 delegates from as far afield as Australia. Keynote talks were given by Jim Saunders (Auburn University, USA), Charles Butt (CSIRO, Australia) and Paul Younger (Newcastle University). The Rio Tinto Prize for best student presentation was won by Ian Cope (Imperial College, London) and the Anglo American Prize for best student poster was awarded to Robin Bernau (University of Southampton). The MDSG Prize for the best undergraduate project was awarded to Shonny Jackson-Hicks (University of Leicester) and the Helio Resources Prize for hand specimen identification by students was won by a group also from Leicester University.

The meeting benefited from generous sponsorship by Rio Tinto, Anglo American, SRK Consulting, Golder Associates, Goldfields, Minesite.com, New Boliden and the Applied Mineralogy Group. This helped support attendance by a large (and increasing) number of undergraduate students. Activities during the

bicentennial included co-sponsoring the *Rocks 'n' Beasts* interdisciplinary conference on vent systems (University of Leeds, June). At the Bicentennial Conference the group co-convened the *Resources* theme and convened poster sessions on *Exploration, extraction, environment* and *Mineral deposits: ancient systems, modern analogues*.

Gawen RT Jenkin

Stratigraphy Commission

Stratigraphy over the past few decades has evolved from the parochial (tabulation of stratal successions and their fossils) to the global (now comprising the framework for palaeoclimate analysis, for instance) and beyond (the stratigraphy of Mars seems almost within reach). Palaeoclimate research comprises the deep-time context of contemporary climate change, and is essentially founded on studies of deep ocean cores.

However, modernised as the discipline has become, the fundamental relations between strata (and their topology) and time remain frustratingly resistant to universally acceptable resolution. Members of the Commission weighed in with another contribution on this issue, proposing that this relation was in practice scale-dependent (the arrow of time becoming blunted in bioturbated sediments, for instance); it remains to be seen how this proposal will be viewed more widely.

The tabulation of stratal units, parochial or not, remains fundamental to having an ordered stratigraphy to work with. To help celebrate the Bicentennial Year, the Commission supported the preparation (by BGS) of a pair of Stratigraphic Charts, that place in geographical and temporal context every rock formation in the UK. These were first displayed at the Bicentennial Meeting. It may well be another couple of centuries before a further such compilation is attempted.

Jan Zalasiewicz

Tectonic Studies Group

Our primary meeting is the *TSG Annual Meeting* which, was held in January in Glasgow and was organised by Zoe Shipton and Clare Bond. The meeting was attended by ~120 delegates. The Ramsay Medal was presented to Dr Elisabetta Mariani (Manchester University) for *Experimental deformation of muscovite shear zones at high temperatures under hydrothermal conditions and the strength of phyllosilicate-bearing faults in nature* (*J. Struct. Geol.* 28, 1569-1587). The Dave Johnston Mapping Prize for best undergraduate dissertation was awarded to Sean Smith (Birmingham University). The Mike Coward Award for best post-graduate talk was presented to Caroline Graham (Edinburgh University) for her work on acoustic emission source parameters. The best postgraduate poster award went to Louise Rogers (Leeds). The Shell Prize for overall best presentation went to Caroline Graham. A plenary lecture on *Anatomy of an ancient earthquake from an exhumed fault* was presented by Dr Guilo Di Toro (Padua).

TSG members organised a number of meetings at home and abroad, including *Continental Tectonics & Mountain Building: celebrating the centenary of the 1907 NW Highlands Geological*

Memoir; Mechanics of Variscan Orogeny: a modern view on orogenic research; Deformation, Rheology and Tectonics - and sessions at larger conferences (Bicentennial Conference, GSA Annual Meeting, AGU and EGU Annual Meetings).

TSG continued to provide student bursaries – this year allowing Robert Evans (Cardiff) and Aisling Soden (Glasgow) to present their research at EGU in Vienna. Caroline Graham chose to use the Shell Prize bursary to fund her participation at the EGU meeting.

Dan Faulkner

Volcanic and Magmatic Studies Group

A highlight of the VMSG's year was the *Golden Rum* field meeting, (Rum and Skye, May 2007), as part of the bicentennial celebrations. The meeting was organised and led by Dougal Jerram, Val Troll, Henry Emeleus and Kathryn Goodenough. Thirty-one attended, including undergraduate and postgraduate students, amateur geologists, geopark representatives, and academics. The meeting celebrated some 200 years of geological study in the North Atlantic Igneous Province, dating back to the work of John MacCulloch; also 50 years of Rum as a National Nature Reserve. Participants enjoyed three days of fieldwork on Rum in stunning weather, and two days in the field on Skye – plus a day of talks in the Aros Centre, Portree. Generous sponsorship from the Geological Society was greatly appreciated, and enabled a number of students to attend the meeting.

The VMSG Annual Meeting, convened by Dave Pyle and Tamsin Mather (Oxford, January) was very successful and attracted over 100. Other meetings to which VMSG contributed included the Mineralogical Society's *Frontiers in Mineral Sciences* meeting; the 1st Joannes Rasmussen Conference (Faroe Islands); an ODP meeting on Large Igneous Provinces; and of course the Geological Society's Bicentennial Conference. A number of students were also sponsored to attend a range of international conferences.

Kathryn Goodenough

Serving the Profession



*from the Secretary,
Professional Matters*

This past year has seen significant developments in the Geological Society's professional activities. These will (I hope) benefit all Fellows as their careers progress – from recent graduates setting out on the road to Chartership, to

more senior members of our profession responsible for staff training and mentoring.

In Chartership we are undertaking a major review of the Regulations and the administrative processes that flow from them. The review began with a broad investigation by Dr Bob Chaplow. It then moved on to detailed examinations of the Regulations and scrutineering process, by working groups led by David Norbury and Rachel Boning. Our recommendations called for some small

changes to the CGeol criteria (the eight 'pillars of wisdom') and more radical changes to the way that we scrutinise and interview applicants. The recommendations also recognised that we need to give more guidance to applicants and scrutineers. Council responded to the recommendations enthusiastically and has instructed us to "*get on with it*" – which is what the Professional Committee is now doing.

Our Accreditation Panel has recently reviewed the core skills that geologists/ geoscientists need to acquire during their first degree courses. The resulting list of skills has been passed to universities and will now form part of the Panel's accreditation criteria. We feel sure that the list will also be helpful to employers, who can sometimes be confused by the range of geology/geoscience degrees on offer at HE institutions.

Training, and other aspects of continuing professional development (CPD) in its broadest sense, continue to be an important part of the Society's work. I am pleased to report that our scheme for endorsing CPD training and courses continues to grow. This year we endorsed the first two company training schemes – each being designed by individual companies to assist their staff develop their careers and achieve Chartership. Both are impressive in scope and we are keen to encourage other organisations to develop similar schemes. We hope that the revised training guide for engineering geologists, produced by the Society's Engineering Group, will help them do so.

Council has recognised that the development and maintenance of a wide variety of links within the profession is vital for our well-being. Our Regional Groups Committee has been a catalyst for growth in a number of regions and, importantly, is starting to re-invigorate our day-to-day links with university departments. A recent proposal to establish a group for Fellows working towards Chartership is being actively encouraged – a wonderful example of a grass-roots initiative that I hope will prove successful and meet a demand that meshes nicely with our revised Chartership procedures.

Careers Day, held once again at BGS Keyworth, was a great success (see p. 22). The BGS's hospitality over many years has been very welcome, but the event has now outgrown the facilities at Keyworth. We have therefore taken the bold decision to move the event to a conference centre in the Midlands. Details will be announced soon.

I am now at the end of my three years' tenure as Professional Secretary. This year, in particular, I feel that we have made real progress on key areas that are important to our Fellows' professional activities and careers. Many people have contributed to our activities, and I thank them all. Perhaps my biggest thank-you needs to go to Rachel Boning, who until recently led the administrative efforts that are vital for the Professional Committee's work. She was the power behind the throne and an enormous help to me personally. My second big thank-you is to Prof David Manning, who has agreed to be my successor. I know he will receive enthusiastic support from the Professional Committee and its various sub-committees and panels.

David Shilston

Corporate Affiliates Committee



I am pleased to report that the re-launch of the Group, which began in 2006, has blossomed during bicentennial year, with the number of Corporate Affiliate companies over 20% up and now standing at 70.

On 15 February a reception was held at the House of Lords (pictures) to celebrate the Society's Bicentennial

and launch a campaign to increase the number of Affiliates. Lord Oxburgh kindly hosted the evening, which heard brief addresses from Richard Fortey, Lord Oxburgh and Richard Hardman. Over 100 attended, many representing potential new recruits.



The main message of the evening was that the Society is keen to build a truly symbiotic relationship with companies whose work depends on geological information. It was also stressed that the Society wishes to broaden the Affiliate portfolio, build better bridges with more consumers of geological knowledge, helping them become better informed about forefront scientific developments vital to their businesses.

The recruitment effort continued throughout the year, with special attention being paid to financial institutions, legal and insurance firms, environmental and engineering companies. No other formal Corporate Affiliate events were held (due to the large number of Bicentennial events on the calendar). The Bicentennial Conference was of particular relevance to Affiliate companies and was well attended.

Iain Bartholomew

Engineering Group

EGGS has identified six areas where it is able to continue to serve the profession:

- Further international developments following on from the extremely successful IAEG Congress in September 2006
- Supporting the Geological Society at their Bicentennial Celebrations in September 2007
- Working closely with fellow learned and professional societies, in particular through the Ground Forum, to enhance the status of ground engineering professionals
- Production of the training manual for the engineering geologists both working towards chartership and maintaining their personal programme of Continuing Professional Development (CPD)
- Setting standards in the profession through Working Parties
- Setting up a series of talks aimed at schools to encourage young people into the profession.

Work continues on the *Register of Ground Engineering Professionals* in conjunction with Ground Forum, The Institution of Civil Engineers and the Institute of Materials, Minerals and Mining. The Engineering Group continued its programme of joint technical meetings with the Regional Groups and other professional ground engineering bodies.

The importance of the Chartered Geologist designation and CPD in maintaining standards among practising engineering geologists has been recognised by the production of a new training manual. Two years in preparation, this will provide the basis for engineering geologists to set up training and professional development programmes with employers. Our Working Parties produce state-of-the-art reports published in *QJEGH* or as Society books, setting standards in the profession. Working parties are underway on *Geohazards* and *Engineering Geology in Hot Deserts*.

The book of the proceedings of the 10th Congress of the International Association for Engineering Geology and the Environment will be published by the Society in 2008. As a direct result, members of EGGS are now involved with *Commission 22*, set up by IAEG to investigate landscape evolution and engineering geology. In addition to a wide range of half-day, evening and fieldtrip meetings, in conjunction with the other applied geology specialist groups in Geophysics and Hydrogeology, EGGS led the two-day *Environment* session at the Bicentennial Conference.

In November 2007 EGGS held its second *Engineering Geology Forum*. This successful one-day event on the engineering geology



of weak rocks and was attended by 160 delegates from a number of countries. We intend this forum to become a regular biannual meeting of the Engineering Group.

James S Griffiths

Petroleum Group

Another successful year for the Group saw seven major conferences, with registrations of >100 for *Southern Gas Basins* and *Emerging Plays in Australasia*. Yet again, the *Petroleum Geoscience Collaboration* conference attracted a mixed audience from industry and academia and gave students an excellent opportunity to share their research. The award for best presentation went to Jennifer Moss with “highly commended” going to Ian Watkinson and Victoria Catterall.

A total of 550 attended last year’s Group Dinner, held at the Natural History Museum on 29 March. Tony Doré (Statoil) was awarded the Silver Medal and Kristan Reimann (Woodside) the Young Explorer Award. Surplus funds from previous conferences used for further improvements to the Lecture Theatre.

The Group was active in convening the *Resources* session at the Bicentennial Conference. An excellent series of papers covered all aspects of our hydrocarbon and mineral resource base. Four contributions relating to *Peak Oil* will be reprised at a Group-sponsored evening event at Burlington House on 15 April 2008.

The year also saw the continuation of planning for the 7th ‘Barbican’ conference (QEII Conference Centre, 30 March - 2 April 2009). Key sessions will address basins in Europe, Arctic, North Africa and Middle East. Key themes will cover *Passive Margins*, *Geocontroversies*, *Virtual field trips* and *3D imaging*.

Bernie Vining stood down as Chair after six years’ excellent service on the committee. Graham Goffey has taken over. The Group agreed to set up a regular Exploration Managers’ lunch at Burlington House, providing managers an opportunity to network amid the splendour of the refurbished apartments.

Alastair Fraser

Into the e-age

from the Publications Secretary



In Bicentenary Year the Publishing House continued on its successful path towards electronic delivery of its published content - the highlight undoubtedly being the successful launch of the Lyell Collection. However, that monumental achievement should not overshadow the equally important

success of conventional sales, with 28 new titles published and all journals produced on schedule. The pressure on staff has been considerable and the Society owes a great debt of thanks to Neal Marriott and his colleagues in Bath for continuing to keep in line with, and sometimes ahead of, best practice in scientific publishing.



The Lyell Collection has been well received by library and academic communities, and by the

end of January 2008 we had sold a total of 33 Lyell Collection Complete subscriptions - well ahead of the business plan. We are now in the process of identifying how we can grow the Lyell Collection both with our own publications and archives and those of organisations who wish to co-operate with us in the future. Sales of *GeoScienceWorld* also continue to grow and the latest figures reveal 242 subscriptions worldwide.

Book highlights of the year include a new history of the Society, *Whatever is under the Earth* by Gordon Herries Davies, published in Bicentenary Year - undoubtedly 2007’s best seller and a rattling good read. Further good reading can be enjoyed in the form of 17 *Bicentennial Reviews* published in the *Journal of the Geological Society*. These were specially commissioned by the Editorial Board to celebrate topical issues in the Earth sciences and Rob Strachan and the Board are to be congratulated on attracting such high quality papers from internationally recognised scientists.

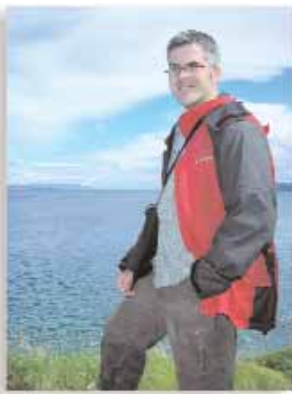
A significant commercial development has been the consolidation of a successful sales arrangement with the Princeton Selling Group in North America. This has generated sales in North



America totalling \$238k, showing real growth in this market and greatly in excess of those achieved with AAPG, our original North American sales partner. We look forward to further developments in this and other international markets.

Our overall surplus in 2007 was £385k, ~ £155k ahead of budget, achieved through sales of books and journals well ahead of budget, combined with savings in overheads, journal production costs and the sales of old stock. The future of scientific publishing remains uncertain but with the establishment of the Lyell Collection and the consolidation of GSW, the Society is well placed to sustain its reputation as a high quality geoscience publisher and possesses a solid financial base from which to grow its business in the ever-changing world of electronic delivery.

Nick Rogers



Young author announced

The *JGS* Young Author of the Year Award for 2007 has been won by Carl Stevenson, of Birmingham University, for: Stevenson, C T E, Owens, W H, Hutton, D H W, Hood, D N & Meighan, D N *Laccoliths, as opposed to cauldron subsidence, emplacement of the Eastern Mourne pluton, N. Ireland: evidence from anisotropy of magnetic susceptibility*, 164/1, p. 99.

The prize was two years' Fellowship of the Society and a Special Publication of his choice. More information on the Award, including eligibility criteria and a list of previous winners, can be found at: www.geolsoc.org.uk/jgs_authorinfo.

Hail and farewell

In this section we welcome new members who joined in 2001 and say adieu to the fallen.

Fellows

ABLARD Peter; **AGBO** Monso Christopher; **AGG** James Paul; **AGYEMANG** Freduah; **AL-DHUBAIB** Abdullah; **ALDRED** Jenny Louise; **ALDRIDGE** Julian John; **AL-HASHEMI** Jalal; **ALLEN** Michael (Micky) Christopher; **ALLEN** Lydia Ann Elizabeth; **ALQAHTANI** Faisal A; **ANDERSON** Ruth Victoria; **ANTON** Greg David; **AUJLA** Paul; **AUSTIN** Claire; **AUSTIN** Edward Charles; **AYKROYD** Jonathan Lee; **AYRES** Michael William; **AZE** Tracy Louise; **BACON** Charles Guy David; **BAILEY** David Geoffrey; **BAILEY** Matthew Thomas; **BAKER** Kieran Martin; **BALDWIN** Alexander; **BAND** Philip Spencer; **BANNERMAN** Alexander James Forbes; **BARDSLEY** Elizabeth Charlotte; **BARNARD** Adam; **BARTON** Harry; **BATES** Gemma Susan; **BAXTER** Cheryl Suzanne; **BECK** Rachel Noel; **BECKETT** Nicholas David; **BELIKOVA** Nelli Vladimirovna; **BELL** Charlotte Patience; **BELOPOLSKY** Andrei; **BELTON** Jane; **BEVERIDGE** Andrew Henry; **BHATTACHARYYA** Sumon Kumar; **BIMPSON** Lailla Jayne; **BINGEN** Bernard; **BISHOP** Samuel Nelson; **BLAKE** Christopher Lewis; **BLAKE** Ross Elliot; **BLAND** Darren Michael; **BLYTH** James; **BOLANOS** John Efrain; **BOND** Clare Elizabeth; **BONEHAM** Marcus John; **BOWLER** Andrew Timothy; **BOWTELL** Ashley John; **BOWYER** Hannah Mary; **BOYER** Steven David; **BOYLE** Richard Anthony; **BRADY** Hannah Elizabeth; **BRAMELD** Frances Claire; **BRANSON** Adam John; **BREWER** Ian Edward Kenneth; **BRIERLEY** Philip Edward; **BRISCOE** Sarah Helen; **BROOKS** Andrew Lewis; **BROWN** Lee Alder; **BROWN** Helen Louise; **BRYANT** Kathleen; **BUCHANAN** Colin; **BUER** Adrian; **BURFORD** Lucie Rachel; **BUSH** Lucas James Isaac; **BUTLER** Siobhan; **CAGE** David Jonathan; **CAINE** Richard James; **CALDER** Richard James; **CAMPBELL** Gemma; **CAMPBELL** Holly Elizabeth; **CANBY** Vetrees McNeil (Mac); **CAREY** Jonathan Martin; **CARIM** Akintunde Abidoye; **CARR-BROWN** Barry; **CARTER** Amy Elizabeth; **CARTY** Sarah; **CASTON** David; **CASWELL** Bryony Amber; **CHAMBERLAIN** Matthew David; **CHAPMAN** Gemma Claire; **CHARBONNIER** Sylvain; **CHEN** Mengfang; **CHEN** Quing Qian; **CHURCHILL** Mark; **CLARK** Helen Louise; **CLARK** Thomas William; **CLARK** Alastair; **CLARK** Lloyd Paul Simon; **CLARKE** Beresford Armana; **CLARKSON** Maria Helen; **CLAYDEN** Paul Anthony; **CLEWETT** Madeline; **CLIFFORD** Thomas; **CLIFFORD** Timothy; **COCUCCIO** André Vittorio; **COGHLIN** Andrew; **COMBER** Christopher John; **CONNOLLY** Paul James; **CONSIDINE** Ciara Frances; **CONWAY**

Susan Jane; **CONWAY** Zana Kate; **COOK** Graham Peter; **COOKE** Penelope Jane; **COOPER** Ashley Laurence; **COOPER** Daniel Peter; **COOPER** Simon; **COOPER** Frances Jacqueline; **CORBETT** Graham; **CORRADINI** Pier Luigi; **COTTERILL** Leigh Richard; **COULBECK** Anna Jayne; **COULSTON** Benjamin; **COUTTS** Tim William; **COVERDALE** Andrew; **COWLYN** Benjamin John; **COX** Roger Daniel; **CROFT** Nicola Elizabeth; **CROSS** David Robert; **CROSSLEY** Sharon; **CUEVAS LINERA** Graciela; **CUNNINGHAM** Fiona Margaret; **CUTLAC** Nicoleta Oana; **DAILY** Paul John Joseph; **DALEY** Gary William; **DANIEL** John Charles; **DANIELSON** Antje Margarete Friederike; **DAVIDSON** Nigel Charles; **DAVIS** Marcus Edward Court; **DAVIS** Brendon James; **DAVISON** Samuel Thomas; **DAWES** Jennifer Elizabeth; **DICKINSON** Jade Louise; **DODGE** Duncan Paul; **DOIG** Kathleen Anne; **DOMINGUEZ** Ruben; **DONOVAN** Katherine Helen Mary; **DRAGE** Matthew George; **DUFFIN** Adam Charles; **EATON** Robert Guest; **EDDLESTON** Michael; **EDMONDS** Samuel Trevor; **EDWARDS** Katharine A E; **EDWARDS** Sarah Alice; **EKANEM** Eyo Aloysius; **EL IDRYSY** El Holieyne; **ELLIS** Joanna; **ETON** Godwin Effiong; **EVANGELINARA** Paraskevi; **EVANS** Ruth Frances; **FAGAN** Andrew Jeffery; **FALL** David Alan; **FARNELL** Richard; **FARNSWORTH** James Robert; **FARRER** Gregg Matthew; **FATIGUN** Titilayo Wuraola; **FELLOWS** Nicholas Christy; **FERGUSON** Bryan; **FERNYHOUGHT** Michael Christopher; **FIELD** Lorraine Patricia; **FISHER** John Ashton; **FITZSIMONS** Paul Francis John; **FLOOD** Raymond Edward; **FOLARIN** Ademadola Samuel; **FORREST** Barry William; **FOTHERGILL** Katie Jane; **FOURNIADIS** Ioannis; **FRAYNE** David Oliver; **FRENCH** Choloe Honor; **FRY** Richard Geoffrey; **FYVIE** Richard Michael; **GABRIELLE** Peter Michael; **GAHAN** Cathal Sean; **GALANES-AVAREZ** Hugo; **GALLAGHER** Elizabeth; **GAMMAGE** Zoe Michelle; **GAUNT** Matthew James; **GEGGIE** Sarah Elizabeth; **GELDARD** Robin; **GENNARINI** Antonio; **GENNARO** Michael Neil; **GEORGE** Zoe Ann; **GEORGE** Camilla; **GERDES** Keith Dennis; **GIBB** Sophie; **GILL** Leah Carolin; **GILLINGS** Patrick James; **GINÉS** Jorge; **GOATMAN** Christopher David; **GOFF** Paul; **GOLDING** Alan; **GOLDSMITH** Jerry; **GOLER** Seth Imran; **GORDON** Paul; **GREENE** Francesca Jasmin; **GREIG** Gavin James; **GRIFFITHS** Richard Matthew; **GRIMA** Victoria Marie; **GUDEK** Przemyslaw; **HALEY** Katherine Rose; **HANDS** Neil Adamson; **HANLEY** David Ian; **HANNAM** David Anthony; **HARPER** Emma Louise; **HARPER** Robert Jack; **HARTLEY** Matthew Thomas; **HASLAR** Rachel; **HASSALL** Simon; **HAWKINS** Charlotte Elizabeth; **HAWLEY** Leon; **HAYDON** Ian Andrew; **HAYTER** Oliver Thomas; **HEASMAN** Thomas Steven; **HENRY** Aled Morgan; **HICKMAN** James David;

HICKSON Thomas; **HIGHET** Karen; **HILL** Stephen John; **HILL** Alexander John James; **HINKINS** Simon Alec; **HODGSON** Robert Maurice; **HOGG** Andrew James; **HOLLINGHURST** Paul James; **HOLT** John Matthews; **HOOLIHAN** Jane; **HOSKINS** Andrew Clive; **HOUGH** Gayle; **HOWARD** Matthew; **HOWELL** Stacey Marie; **HUDSON** Jason Robert; **HUMPHREYS** Michelle; **HUMPHREYS** Richard Malcolm; **HUPPERT** Herbert Eric; **HURLEY** Colm; **HUSBAND** Claire; **ILONGO** Fritz Ngali; **ISHERWOOD** Catherine; **ISLIP** Lauren Olivia; **IVANOV** Gennady; **JAHAN** Hosne; **JAMES** Andrew Richard; **JENKINS** Gareth David; **JERRETT** Rhodri Mathieu; **JIAGGE** Robert; **JIMENEZ RODRIGUEZ** Rafael; **JOHN** Unyime Edet; **JOHNSON** Hannah; **JONES** Gareth; **JONES** Rhiannon Elizabeth; **JONES** Deborah Margaret; **JONES** Stephen Peers; **JONES** Rebecca Louise; **JONES** Gareth Meirion; **KAHRAMAN**(Now **ARDEN**) Hakan; **KARELSE** Robert; **KAVANAGH** Kathryn Patricia; **KEARSEY** Timothy; **KEITH** Rory Thomas F; **KELLERMAN** Nicholas Louis; **KELLY** Darryl Joseph; **KHAN** Mohammed Nadeem Akabar; **KIDD** Tomos William; **KING** James William; **KING** William Peter Wilfred; **KING** Rosalind Clare; **KINGSNORTH** Adrian Ashley; **KITSON** David Christopher; **KORNITSKIY** Anton; **KRAM** Andrew; **KUDAY** Seda; **LANCASTER** Oliver Sam; **LANGE** Leo Stanley; **LARGE** David John LARKIN Matthew James; **LAVER** Daniel Mark; **LAWRENCE** James Anthony; **LEMMON** Paul; **LEWIS** Steven Walter; **LEWIS** Richard; **LEWIS** Wayne Gareth; **LINEHAN** Katie Marie; **LLOYD** April Isadora; **LOCKE** Frederick R M; **LOGAN** Karen Rosemary; **LONG** Ryan David; **LONG** Rachel Louise; **LONGLEY** Ian Murray; **LUO** Kaiyang; **LUTLEY** Catherine Julia; **MACKINNON** Fiona; **MACNAUGHTON** Mairi Elizabeth; **MACPHIE** Donald Neil; **MAKARUK** Timothy; **MAKOUBI** Kiket Jean Seraphin Koffi; **MALCOLM** Alanna Louise; **MANDER** Luke; **MANNING** Christina Jane; **MANTZOS** Petrus; **MARKONICZ** Urszula; **MARTIN** Nial; **MARTIN** Norline Annette; **MARTINELLI** Giorgio Luigi; **MASON** Emma; **MASON** Andrew David; **MATTHEWS** Sarah Rachel; **MAYNE** Rachel Jane; **MCCOUBREY** John Garnett; **MCELLIGOTT** Ross; **McERLEAN** Paul Gerrard; **MCEWAN** Paul Terence; **MCFARLANE** James Andrew Stuart; **MCGRATH** Darren; **MCINTYRE** Philip James; **MCLEAN** Thomas Iain; **MEATS** Alan David; **MEDIAVILLA** Francis; **MEEHAN** Sinead; **MELVILLE** Janet; **METCALFE** Steven Thomas; **MIHALACHE** Angela; **MIKHAIL** Sami; **MILDON** Martine Louise; **MILES** Gareth David; **MILLARD** Alana Clare; **MILLER** Catherine Marianne; **MILLER** Max Lawrence Austen; **MILLIKEN** Michael; **MILLMORE** Alan; **MITCHELL** Timothy James; **MITCHELL** Adam James; **MOORE** Gavin Robert Newton; **MOORE** Hayley Jane; **MORAN** Naomi Louise; **MORLEY** Julia Patricia; **MUIR** Clive David; **MURPHY** Liam Stephen; **NECREWS** Phillip; **NEWMAN** Edward George Mansel; **NEWTON** Louise; **NIELSEN** Jan Kresten; **NORGATE** Sophie Anne Michelle; **O'DONNELL** Catherine; **O'DONNELL** Kirsten Elizabeth; **O'TOOLE** Orna Mary; **OFFER** David James; **ORR** Mark Allen; **OVERAL** Stuart Andrew; **PAGE** Felicity Jayne; **PAINTER** Andrew John; **PARDOE** David Michael; **PARKES** Daniel; **PARMASSAR** Kevin; **PARNELL-TURNER** Ross Ernest; **PATEL** Birva; **PATTERSON** Aine Elizabeth; **PAUL** Meganne; **PEDDER** Joanne Amanda Elizabeth; **PENKETH** Stuart Phillip; **PEREIRA** Ryan Anthony Frederick; **PERKINS** Beth Marie; **PERKS** Matthew James; **PERKS** Adam; **PERRY** Rexine Julie; **PETERSEN** Jon; **PETTY** Alexander; **PHILIP** Lucinda; **PHILLIPS** Richard; **PHILLIPS** Karen Marie; **PICKETT** Elizabeth Anne; **PILKINGTON** Jennifer Martina; **PLIMMER** Bridget Ruth; **PLUMB** Anthony; **POWELL** Rhodri Garrett Price; **POWELL** Hugh; **PRICE** Naomi Ruth; **PRICE** Philip William; **PRIOR** William John; **PSAIRA** David Edgar; **QUEENAN** Darran; **QUINN** David John; **QUINTON** Rosemary Jane; **RAHMAN** Md Arifur; **RAMSEY** Lucy Ann; **RAYNOR** Daniel Paul; **READ** Marissa Nell; **REDDAWAY** Jenny Margaret; **REDGRAVE** Justin Charles; **REES** Gareth Stuart; **REES** Michael William; **REHMAN** Habib Ur; **REID** Louise Ann; **RENNER** Axel; **RENSHAW** Matthew Thomas; **RICHMOND** Andrew William; **RIDDELL** Carla; **RINGROSE** Claire Louise; **ROBERTS** Jonathan Henry; **ROBEZNIKS** Steven; **ROBINSON** Gary John; **ROSS** Ewan Alexander; **ROUGE** Mathew Owain; **ROWLEY** Peter James; **ROY** Susie Samita; **RUDD** Christopher Mark; **RUSSELL**

Edward John Frederick; **RUSSELL** Sally Victoria; **RYMILL** Joseph John; **SANDERS** Duncan James; **SANTAMARIA BLANCO** Agustin Vicente; **SARGENT** Heather Alison; **SAUNDERS** Mark Andrew; **SAVILLE** Richard James; **SCAMMELL** Ross Alexandre; **SELWAY** Josef Anthony; **SERGEANT** John Harvey; **SHAW** Gareth Richard Francis; **SHAWLEY** Gary Neil; **SIDES** Edmund John; **SICKA** Prashet; **SIME** Neil Graham; **SIMMONDS** Elizabeth Jane; **SIMMONS** Robert; **SIMPSON** David; **SIMPSON** Bryan James; **SINGLETON** John Phillip; **SINGLETON** Nigel John; **SMILES** Alexander Edmund; **SMITH** Andrew Martin; **SMITH** Andrew Philip; **SMITH** Verity Georgina; **SMITH** Andrew Peter; **SMITH** Stephen; **SOOKLALL** Athena Victoria **SOSTRE** Marta; **SPARK** Caroline Susan; **SPENCER** Emily; **STANTON** Clare Aine; **STANCAMPIANO** Rosanna Isabella; **STANDISH** Paul Alan; **STANFORD** Chris; **STANMORE** Elizabeth; **STARKEY** Natalie Adele; **STEPTOE** Emma; **STEVENS** Thomas; **STOKES** Daniel James; **STREETER** Jonathan Robert; **STUBLEY** Nathan; **SUCKLING** Tony Peter; **SUDDABY** Emma Jae; **SULLIVAN** Matthew; **SUMMERELL** Paul; **SUTTON** Richard Mark; **SWORD-DANIELS** Victoria; **SYKES** Emma Louise; **SYMIS** Andrew John; **SYNEK** Dwyane Pio; **SZEBOR** Nicholas Hunter; **TAIT** Andrew Timothy; **TALBOT** Rebecca Marie; **TAYLOR** Richard John Mark; **TAYLOR** Neil Alexander; **TAYLOR** Erica; **TAYLOR** Mathew David; **TEBATT** June Elizabeth; **THOMAS** Kris David; **THOMAS** Emma Jean; **THOMAS** Robert David Henry; **THORPE** William James; **THROWER** Andrew Thomas; **TODD** Fiona Kerryn; **TOMLINSON** Niall; **TONKIN** Samuel David; **TONKINS** Matthew; **TRIFFITT** Alexander Alan; **TRUSS** Steven William; **TURNER** Jacqueline; **TURNER** David Robert; **TWIGG** Helen Clare; **TYSON** Rosa Jane; **UJJAN** Initiaz Ali; **UMANA** Ubong Mbot; **VALENTINE** Anthony Michael; **VALENTINE** Sarah Jane; **VAN KAL** Shaun Michael; **VAN KESTEREN** Wessel Pim; **VAN MANEN** Saskia Marjoleine; **VAN NOORDEN** Michael Jasper; **VENN** Adam Robert; **VINCENT** Thomas Leslie; **VINCENT** Oliver William; **VON CHRISTIERSON** Birgitte; **VRY** Victoria Helen; **WACEY** David; **WAHEED** Abdul; **WALKDEN** Gordon Mark; **WALKER** Emily Caroline; **WALKER** Ian Michael; **WALLACE** Rebecca Louise Elizabeth; **WARBURTON** Sarah Louise; **WEAVER** Lara Jane; **WEBSTER** Thomas Robert; **WEBSTER** Kevin; **WEINBERG** Robert; **WELLS** Natalie Claire; **WHITE** Thomas Martin; **WIGGINS** Helen; **WILKINS** Aaron; **WILKINSON** Stephen Phillip; **WILLIAMS** Rebecca; **WILLIAMS** Lloyd Robert; **WILLIAMS** Sophie; **WILLIAMS** Catherine Toyin; **WILLIAMS** Emily Jane; **WILLIAMS** Paul; **WILSON** Alexander Thomas; **WILSON** Katie; **WINSTANLEY** Jennifer Anne; **WINTER** Helen Joanne; **WOODMAN** Nicholas Daniel; **WOODMAN** Michael John Andrew; **WOODS** Margaret; **WOOLHOUSE** Christopher; **WRATHMELL** Edward Joseph; **WRIGHT** David Andrew; **WRIGHT** Simon James; **WRIGHT** Timothy David; **WRIGHT** Oliver Charles; **WROOT** Deborah Catherine; **YAKUB** Muftau Adewale; **YUSUF** Mohammed Mukhtar

Chartered Geologists

AMBERG Anthony John; **AYRES** Michael William; **BAIRD** Dominica; **BARKER** Paul; **BARRIT** Timothy Richard; **BESIEN** Anna; **BETTS** Christopher Stuart; **BIRKS** David Christopher; **BIRTHWHISTLE** John Stanley; **BOELEMA** Robert; **BURRIS** Philip Justin; **CHAN** Hon Kwan Haydn; **COPE** Michael; **COY** Vicky; **CURTIS** Peter; **DRURY** Philip; **DYER** Julie; **ECKHARDT** Thomas; **EDWARDS** Alan Jonathan; **ESSLEMONT** Neil; **FALL** David Alan; **FIELDING** Andrew William Spencer; **FLANAGAN** Mark; **GOW** Gillian Anne; **GROWCOTT** Andrew; **GUNN** David Andrew; **HILL** Alistair Edward; **HOLLICK** Louise; **HOLROYDE** Kathryn Elizabeth; **KORNISTKIY** Anton; **LAKE** Charlotte Sophie Matheson; **LEWIS** Scott Jonathan; **LOVERIDGE** Fleur; **MANNING** Sarah; **MCLORINAN** David Patrick Joseph; **MORRIS** Simon; **MUNRO** Colin; **O'GRADY** Christopher Michael; **PAUL** Darren Ross; **PRITCHARD** Alexandra Louise; **RHODES** Heidi Caroline; **ROBINSON** Judith Nicola; **ROGERS** Stephen Phillip; **SANDERS** Duncan James; **SOJKA** Ged; **STEVENTON-BARNES** Hannah; **TOMLINSON** Stephen John **WALLACE** Mark; **WEATHERLEY** Simon

Candidate Fellows

ABBOTT James; **ABU-BAKER** Hussain; **AMOB** Nnenna Natalie; **ARNOLD** Adele; **ASH** Lucy Jayne; **AUSTIN** Daniel Mark; **BAKER** Thomas William; **BANKER** Edward James; **BARNES** Gina Lee; **BARNES** Rosie; **BARROTT** Julie Jayne; **BATT** Kieron; **BATTEN** Michael; **BATTY** Timothy; **BEALE** Joshua Christopher; **BENNETT** Sam; **BEWICK** Sam; **BHARTH** Garpreet; **BINKS** Matthew Robert; **BITTLESTONE** Robert Gavin Alexander; **BOISSIERE** Claire Elaine Alice; **BOOTH** Matthew; **BRODIE** Mark William; **BROWN** Thomas Roger Edward; **BROWN** Sarah; **BUTCHER** George; **BUTLER** Catriona Elizabeth; **CARMICHAEL** Charles; **CARRUTHERS** Dan; **CHAMBERS** Edward Charles; **CHOWN** Peter; **CLARK** Lindsay; **COBBOLD** Madeleine Fay; **CONYBEARE** Dominic; **CORCIONE** Luigi; **CORMACK** Avril; **COTTRELL** Sam; **CRAYTON** Rozel; **CRIDFORD** Jane; **CROSS** Hannah Rebecca; **DAVIS** Oliver; **DIXON** Sophie; **DOCHERTY** Kevin John; **DODDS** Stuart; **DODSON** Annabelle; **DREDGE** Ian David; **DUDLEY** Emma; **EDWARDS** Andrew; **EDWARDS** Deborah; **EGOH** Kelvin; **ELLIOTT** Christopher; **ERRETT** Tom; **EVANS** Ashley; **FARQUHAR** Helena; **FINBOW** Julian Lawrence; **FOWLER** Rebecca; **GEACH** Martin Roy; **GETTY** Rebecca Claire; **GLOVER** James Michael Harvey; **GOODMAN** William; **HADCOCKS** Michael; **HALL** Sophie; **HALL** Nathan; **HALLWOOD** Sophie; **HARDY** Benjamin Maurice; **HARPER-PRICE** Sophie; **HARRIS** Christopher Michael; **HARRISON** John; **HEDGER** James; **HILL** Jessica; **HOOLEY** Daniel Peter; **HOWLETT** Paul Robert; **HUDSPITH** Victoria; **INDUNI** Allan; **JOHNSON** Simon Alexander; **JONES** Rebecca; **KAEMBA** Robert Ntokwa; **KEEBLE** James; **KERNAHAN** Christopher Michael; **KIRBY** David Charles; **KIRKWOOD** Scott William; **KOMOLAFE** Olutoyin Eynice; **KOMORI** Onyerhouwu Raymond; **LAIT** Helen; **LARIJANI** Cyrus; **LAWAL** Morufu Ayodeji; **LEE** Katherine; **LEWIS** Robert Matthew; **LORD** William; **MACKENZIE** Katie; **MADDEN** Neil William; **MANN** Jaswinder Kaur; **MANZE** Ben; **MARKS** Victoria Elizabeth; **MARKS** Amelia; **MARSHALL** Joanna Katherine; **MARTIN** Richard James; **MARTIN** Rebecca; **MARTIN** Emily; **MCDERMOTT** Kathryn; **MCKENZIE** Robert Alexander; **MIRZA** Umar; **MOCHRIE** Jamie; **MORLEY** Ann Marian; **MORRIS** David Charles; **MORRIS** Joanna Rhian; **MORTLEY** Henry James; **MULLINS** Chris; **NADEN** Emma Joanne; **NAYLOR** Maria Hayley; **NOTT** Thomas; **OLVER** Dan; **PALIN** Richard Mark; **PALUBICKI** Kristina Louisa; **PANUE** Subir; **PARDOE** Annabel; **PEARCE** Andrew Oliver Thomas; **PERNET-FISHER** John; **PEZZA** Giuseppina; **PHIPPARD** Claire; **PRATELLI** Tom; **REID** Emma; **RENOUF** Alex; **REYNALD** Mark; **RICKERD** Alex; **ROBERTS** Richard Philip; **ROCHE** Crispin Andrew; **SANDISON** Thomas Alan; **SELLS** Angela Jennifer; **SHAH** Neil; **SHAW** Eleanor Margaret; **SHORE** Jack; **SIMPSON** Thomas Edward; **SKINNER** Rhianan; **SMITH** Christine Frances; **SMITH** Jack William; **SODOMKOVA** Kristina; **SOLAN** James Philip Napier; **SPARKS** Sarah; **STAUNTON** Toby; **STOCKWELL** Paul James; **STOKOE** Phillip James; **THOMAS** Glenn; **TISCHMULLER** Alex; **TODOROVIC** Iris; **TRAVIS-SHELTON** Josephine Emma Latimer; **VINEN** Stuart James; **WAITE** Lee James; **WAKEFIELD** Charlotte; **WARRINGTON** Daniel; **WEATHERBURN** Will; **WEATHERLEY** Samuel Mark; **WELHAM** Nathalie; **WESTGATE** Alexander; **WHIDDON** Gareth; **WHITAKER** James; **WILCOCK** Jack; **WILKINSON** Debbie; **WILLIAMS** Tom; **WYBAR** Steven

Attendance statistics

Below are the attendance statistics for members of Council and Standing Committees for the calendar year 2002. The figures give number of attendances against the number of meetings to which each was entitled to come during this period.

Council

Dr I D Bartholomew (2, 4); Prof J R Cann (1, 2); Mr A J Carbray (3, 4); Mr G T Cayley (1, 4); Prof M G Culshaw (3, 4); Prof E Derbyshire (2, 2); Prof A G Doré (0, 2); Prof A J Fleet (4, 4); Dr R A Fortey (3, 4); Prof C M R Fowler (1, 2); Prof L E Frostick (1, 2); Prof P Henderson (4, 4); Prof R E Holdsworth (2, 4); Prof D A C Manning (1, 2); Prof J D Marshall (1, 2); Prof N Petford (0, 2); Dr M O Rivett (4, 4) Dr N W Rogers (2, 4); Mr D T Shilston (2, 4); Mr G Tuckwell (3, 4); Mrs J H E Turner (0, 4); Prof J A Underhill (2, 4); Dr E Valsami-Jones (4, 4); Prof A B Watts (4, 4); Prof R White (2, 4); Dr R A W Wood (4, 4)

Elections Standing Committee

Dr I D Bartholomew (0, 2); Prof J R Cann (0, 1); Prof M G Culshaw (1, 1); Dr R A Fortey (2, 2); Prof A J Fleet (2, 2); Prof P Henderson (2, 2); Prof D A C Manning (0, 1); Dr N W Rogers (1, 2); Mr G Tuckwell (0, 2); Mr D T Shilston (1, 2); Prof A B Watts (0, 2); Prof R White (1, 2)

External Relations Committee

Bartholomew, Iain (1, 1); Brown, Susan (0, 1); Derbyshire, Edward (Chair 1, 1) Edwards, Adam (1, 1); Fortey, Richard (1, 1); Fowler, Mary (1, 1); Hiscock, Kevin (1, 1); Lakin, Judi (0, 1); Nickless, Edmund (1, 1); Nield, Ted (1, 1) Radford, Tim (1, 1); Sanderson, Dave (1, 1); Underhill, John (0, 1); Veal, Steven (0, 1); White, Bob (0, 1)

Information Management Committee

Carbray, Alex (1, 2); Fleet, Andy (2, 2); Lee, Mick (0, 2); Lees, Nigel (1, 2); Payne, Dorothy (corresponding member) (0, 2); Petford, Nick (1, 1, Chair (Jan - May)); Roberts, Alan (1, 2); Rogers, Nick (1, 2); Scholes, Helen (1, 2); Sharpe, Tom (1, 2); Tuckwell, George (2, 2, Chair (May - Dec)); Wigley, Peter (0, 2)

Management and Finance Committee

Dr I D Bartholomew (2, 5); Prof J R Cann (1, 2); Prof M G Culshaw (4, 5); Dr R A Fortey (3, 5); Prof A J Fleet (3, 3); Prof P Henderson (5, 5); Prof D A C Manning (1, 2); Dr N W Rogers (4, 5); Mr D T Shilston (0, 5); Prof A B Watts (0, 5)



Professional Committee

Allington, Ruth (1,3); Nickless, Edmund (0,3); Culshaw, Martin (1,3); Palmer, Jon (2,3); de Freitas, Mike (1,3); Payne, Dorothy (corresponding member 0,3); Findlay, James (1,3); Rivett, Michael (2,3); Gaskarth, Bill (1,3); Shilston, David (Chair, 3,3); Lewis, John (3,3); Thorn, Peter (2,3); Manning, David (2,3); Tuckwell, George (1,3); Nathanail, Paul (0,3); Turner, Helen (2,3).

Publications Management Committee

Culshaw, Martin (0,1); Doré, Tony (0,1); Fleet, Andy (2,3); Hall, Gwendy (1,1); Holdsworth, Bob (1,3); MacLeod, Norman (2,3); Marshall, Jim (1,2); Pankhurst, Bob (3,3); Rivett, Mike (2,2); Rogers, Nick (Chair, 3,3); Strachan, Rob (2,3); Winter, Mike (3,3); Cayley, Glen (0,3); Hills, Angharad (0,3); Nickless, Edmund (1,3); Strachan, Rob (0,3); Valsami-Jones, Eva (2,3); Vining, Bernie (0,3); Wood, Rachel (1,3); Watts, Tony (3,3); Zalasiewicz, Jan (1,3)

In memoriam

Obituary policy

All members of the Society are entitled to receive an obituary in the Annual Report covering the year of their decease. The names of all recently deceased members are listed each month in *Geoscientist*. Those for whom no obituarist has been identified are indicated. Readers interested in contributing an obituary, or in suggesting someone else, should contact Dr Ted Nield. Those members for whom no obituarist comes forward are recorded in a roll of honour. All obituaries are published on www.geolsoc.org.uk.

Roll of honour

The Society records with sadness the passing of the members listed below for whom no obituary was forthcoming. Some of the following may receive obituaries in the next *Annual Report*.

Ardus, Dennis; Bowles, Richard; Brewer, Timothy S; Curtis, Michael; Dasgupta, Sankar Prasad; Hill, Hamilton Stanton; Hancock, Franklin; Harries, Keith John; Land, John; Marshall, Wilfred (William); Phillips, Kenneth Austin; Rendell, Nigel; Saunders, Arthur; Smith, Denys Barker; Smith, Joseph Victor.

Obituaries



Peter Baker (1937–2008)

Colleagues will be saddened to hear of the untimely death, just short of his 71st birthday, of Peter Baker – formerly Professor of Igneous Petrology in the School of Earth Sciences (now Earth & Environment), University of Leeds.

After graduating in Geology from Sheffield University in 1960, Peter Baker became a DPhil research student and then research fellow at Oxford University. He was appointed to a lectureship at the University of Leeds in 1969 and made a reader in 1976. Two years later, he moved to Nottingham University as Professor of Geology and Head of Department. In 1989, following the Earth Sciences Review, which resulted in the closure of several smaller geology departments, he returned to Leeds. He retired from the University in 1998.

Peter's research was directed largely towards the volcanoes and volcanic rocks of island arcs and oceanic islands, extending from eruptive mechanisms to the geochemistry of their lavas and evaluation of hazards. His DPhil thesis was on the geological development and potential hazards of Mt Misery (now Liamuiga) volcano on the West Indian island of St Kitts. He continued to work for some time in the Lesser Antilles, notably on the islands of St Vincent, Montserrat and Saba. In the meantime, when the remote South Atlantic island of Tristan da Cunha erupted in 1961 and the population was evacuated, he took part in an investigation of the event as a member of a Royal Society expedition. He also participated in several expeditions to the Antarctic and sub-Antarctic islands with the British Antarctic Survey, the Royal Navy, the Chilean Navy and Argentine Navy.

Perhaps his most significant contributions came from work in the South Sandwich Islands, which remain the type example of a primitive oceanic island-arc. A lava specimen from Cook Island in the South Sandwich group created interest in the late 1990s as being the nearest terrestrial equivalent to some of the boulders analysed during the Pathfinder mission to Mars. He spent three fieldwork seasons on Deception Island, off the Antarctic Peninsula, where a series of volcanic eruptions over the period 1968–70 destroyed the British and Chilean scientific stations. In the Andes, he worked on Ojos del Salado, the highest active volcano in the world and in 1976 was a member of a UK-Chile-Argentine expedition to the southern Andes and Patagonia.

Peter Baker made the first detailed geological map of Easter Island, publishing on its volcanic history, petrology and geoarchaeology. He also worked on the Juan Fernandez Islands,



which lie between Easter Island and Chile. In 1969 he was a member of the Cook Bicentenary Expedition to Tonga, organised by the Royal Society of New Zealand. With research students, he worked on Mt Etna, and on volcanoes in Saudi Arabia, Sudan and Egypt. Following his return to Leeds, he was a shipboard scientist on two Ocean Drilling Program legs, one in the vicinity of the New Hebrides island arc and the other in the Mid-Pacific Mountains between Hawaii and the Marshall Islands. He also worked in southern Iceland on the 934 AD Eldgja fissure eruption that produced the largest lava flow in historic times.

From 1975 to 1983, Peter Baker was Secretary-General of the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) and served on a number of related national committees. In 1982-83 he was Vice-President of the Geological Society of London and he was on the editorial board of the *Journal of Volcanology and Geothermal Research* from its inception in 1976. At Leeds he was for several years a Chair of Appointing Committees. He also served for periods as Dean of Science, and as Chair of both Senate Research Degrees Committee and the University Progress Committee.

Following his return to Leeds, Peter played a full and rich part in both departmental and university life. Unfailingly courteous and obliging, willing to take on the most unpopular jobs and see them through to success, he was a constant source of wise counsel across a wide range of matters; many colleagues had occasion to be grateful for his good sense and good grace.

Marjorie Wilson



John Wykeham Barnes
1921-2007

John Barnes was born in Liverpool

on 13 February 1921, and attended preparatory and grammar schools in the Wirral. He started a mining course at Wigan Mining College and qualified for enrolment for an external London BSc before war intervened.

In 1938 John joined the Territorial Army, was mobilised in 1939 and in 1941 sent to Greece to destroy bridges to slow the German advance. Cut off from his unit, he trekked across mountains for three days to the coast and was picked up by a ship bound for Crete that came under air attack; concerted rifle fire brought the bomber down, but the ship was damaged and diverted to Alexandria.

There, John joined the 8th Army and spent his 21st birthday during the siege of Tobruk. Later, at El Alamein, he remained on minefield duty long after being taken ill, until finally he collapsed. He was invalided out to Jerusalem where rheumatic fever was diagnosed; there followed six months' recuperation in an orange grove near Bethlehem. The only long-term effect was a life-long aversion to oranges.

He rejoined the North African campaign in Tunisia and then progressed to Italy. North of Naples John was involved in an incident from which he was clearly lucky to have escaped with his life. All that he could recall was coming to with a broken arm and head injuries and no recollection of the previous two weeks.

Back home in 1946 he entered the Royal School of Mines. On graduating with 1st class honours in 1949 he joined the Geological Survey of Uganda. There, in 1951 John registered for an external

London PhD under the supervision of H H Read, gaining it in 1956. He had married Mary Fleet, who followed him out to Uganda in 1951 where their four children, Richard, Duncan, Jennifer and Matthew, were born. Successive promotions brought John the Deputy Directorship of the Geological Survey and on Ugandan independence in 1962 John was offered the Directorship, but declined it as he was unsure of the country's future.

In 1963 he went to Turkey as adviser to CENTO for the MTA (Turkish equivalent of a geological survey). During this time he was visiting professor at the Middle Eastern Technical University in Ankara where he gained experience of university lecturing, which he much enjoyed.

In 1965 he returned to the UK and was appointed to the Geology Department at University College Swansea. He was a major asset to the department, not only for his teaching in economic geology (where he carried an enormous teaching load) but also for his contribution to geological mapping training. John's time in Uganda was the source of countless stories that added colour to his lectures. Swansea geology graduates across the world are grateful for what they learned from John.

John's original research publications were principally concerned with the history of mining, particularly in the Middle East. Summers were spent engaged on CENTO geological map training programmes that led to the 1971 award of OBE for training geologists in developing countries.

John's name will live on in geology degree courses, thanks to his immensely successful *Basic Geological Mapping*, first published in 1981 and now in its fourth edition; it remains standard reading for most geology undergraduates.

John was devastated by Mary's death in 1992, but soldiered on with more courage and independence than many had thought possible. In the past few years the deterioration of his eyesight meant that he had to give up driving, the *Daily Telegraph* crossword, the *Journal of the Geological Society*, but still looked forward to his *Geoscientist*. Finally, a heart attack and pulmonary congestion ended the life of this universally loved geological figure.

John CW Cope



John Bartlett Warren Day
1925-2007

John Day's professional career was spent entirely in public service with the British Geological Survey. He was born on 11 November 1925 at Heathfield, Sussex, and died suddenly on 13 August, aged 81, at his home near Farnham, Surrey. His secondary education, at Hurstpierpoint College, Sussex, was completed in 1943. He then volunteered for the Royal Navy, was commissioned and served in the Mediterranean in landing-ships.

After demobilisation he entered University College, Cardiff to read for a degree in geology; graduating with first class honours in 1951. He was immediately offered a post with the Geological Survey of Great Britain's Newcastle office. There he mapped the geology of the Bewcastle Sheet and wrote the associated Memoir (1970). He transferred to the Water Department in 1955 to become a hydrogeologist, first in London and from 1980/81 in Wallingford. During those 30 years his work fell into three categories: groundwater

resources and associated research in the UK; overseas supply studies generally within the British Technical Aid Programme, and in his role (from 1974) as Chief Hydrogeologist. The results of these many activities are detailed in numerous reports, maps and publications.

John's initial work in the UK concerned groundwater supplies for public authorities and industry. Subsequently, he undertook regional studies of the groundwater resources of the Chalk in the western sector of the South Downs and the Great Ouse Valley. In 1964 John initiated, with a map of North Lincolnshire published in 1967, the first of some 20 hydrogeological maps of England and Wales. He compiled (with Stephenson Buchan) the International Legend for Hydrogeological Maps (UNESCO, 1970). There followed (in 1976) the English and Welsh components of Sheet B4 of the International Hydrogeological Map of Europe, and subsequently the Hydrogeological Map of England and Wales.

Following the 1966 Aberfan disaster John undertook some of the field studies investigating the cause of the tip's collapse. In 1971 he conceived a new method of developing wells in both fissured and intergranular aquifers. With colleagues he oversaw early pioneering research to exploit the use of heat-pumps to develop low-grade sub-surface heat.

John's view of service to society was international in scope, encouraged by a love of travel. He worked on groundwater development projects in many countries including Morocco, Iran and Nepal. His work in the arid territories of Chad, Mauritania, Mali and Niger led him to commission and install successfully pre-fabricated casing for wells in shallow aquifers in several of those countries.

John enjoyed a long association with the International

Association of Hydrogeologists. He was Chairman of the UK National Committee for over 10 years, serving as a Vice-President from 1984 to 1993. In 1993 he was elected an Honorary Member of the Association in recognition of his service and valuable counsel.

In the mid-1950s, when he and his wife Cynthia were contemplating putting down roots, they bought five acres of woodland near Dippenhall in Surrey where John began to build a magnificent house in a woodland setting with an impressive garden. This was an astonishing achievement; a tribute to his energy, perseverance and enthusiasm for all things practical. Throughout his life John's passion for gardening and embellishing his home remained undiminished.

John had a quiet, retiring, modest personality. He had a good sense of humour, never got ruffled, and had no vanity. He was a true gentleman. John married Cynthia in 1951 and she and their son, Martin, survived him. Sadly, Cynthia died two months later, in mid-October.

Dick Downing, David Gray & Andrew Skinner



Shirley Louise Donovan
1935 – 2007
Shirley Louise Donovan

(née Saward), known to many as Lou, took life very seriously and was always prepared to fight for what she thought was right. She was passionate about geology and through dedication and tireless effort managed to undertake field work in many countries, and to carve out a varied and diverse career.

After graduating with a BSc in geology and zoology from Bristol University in 1957, and attending lectures for the geology honours

course, she began her wide-ranging and varied working life. Her first job was in the Palaeontology Department of the British Museum (Natural History) (1958–59). Following her marriage to Desmond Donovan and the birth of her three children, Tom (1961), Tessa (1963) and Daniel (1965), she was awarded a diploma in town planning from University College London in 1971. In 1972 she left the family home to continue her interrupted career, working in planning departments at Cheshire County Council (1972–1974) and Greater Manchester Council (1974–76) before taking a job as Deputy Minerals Officer at Staffordshire County Council (1976–1978). She later retrained as a well logger and well site geologist and worked for the UK state oil company BNOC/Britoil (early 1980s), and finally the Geological Survey in Edinburgh (1985–90) before returning to London, where she was based for the rest of her life.

She became a fellow of the Geological Society of London in 1958, and was also an active member and strong supporter of the Geologists Association, the Edinburgh Geological Society, the Hull Civic Society and the Yorkshire Geological Society. She served on the Society's External Relations Committee (c.1996–2000) and was a vocal supporter of governance reforms at the Society's AGMs, frequent correspondent to *Geoscientist*, and a great champion of women in geology.

But this reveals only part of the story. Lou's interests were truly global, and she was a passionate supporter of many causes. She was a lifelong socialist, marched with CND and campaigned on the ground at Faslane and Greenham Common. She also lent her support in industrial disputes, such as the 1984–85 miners' strike, and campaigned on local issues. She saw much that she believed was wrong in the world, and led a determined

fight against what she considered to be sexism, favouritism and needless bureaucracy.

Although she could come across as abrasive and argumentative – she was always willing to enter the fray in defence of her beliefs – she was above all, sincere in all she undertook. She showed a lot of kindness and encouragement to many, including myself.

In spite of growing mobility problems she remained very active to the end of her life. Her last illness was unexpected, and she died of ovarian cancer at the Royal Free Hospital in London on 19 February 2007. She was, notes former Council member David James, 'the best sort of gadfly, born of ethical conviction rather than career opportunism, and will be much missed.'

She is survived by her husband, Desmond, Emeritus Professor of Geology at UCL, her three children, Tom, Tessa and Daniel, and her much loved grandchildren, Tom's daughter Laura (1994), and Tessa's daughters, Emily (1999), Keira (2001) and Darcy (2003).

Nina Morgan



Donald Griffiths
1919–2007

Donald Harrison Griffiths was born

on 20 Sept 1919 in Manchester into a family with a great love of chamber music, literature and the countryside and developed interests in climbing, skiing and geology. He died on 8 October 2007.

He was educated at William Hulme Grammar School, Manchester and was admitted to read geology at the University of Manchester in 1938. He was a Conscientious Objector during the War, which interrupted his university studies, and in which he worked at the North Mosley

pit in Lancashire. It was an experience which was to prove useful in later years in the famous 'mine experiment' in 1950 which required measurements of the Earth's magnetic field in a mine and on the surface above to see if the gradient was consistent with the ideas of the Professor of Physics, Nobel Laureate PMS Blackett, on the origin of the field. He graduated in 1949 with first class honours in geology but he had become interested in geophysics and went on to study the behaviour of the Earth's field in the last few thousand years by measuring the magnetisation directions of dated varved clays from Sweden for his PhD.

In 1950 he accepted an appointment to start geophysics in the Geology Department at the University of Birmingham against the advice of his Professor, Sir William Pugh, later Director of the British Geological Survey, who warned him that there was no future in geophysics! Donald was promoted to Professor of Geophysics in 1965, one of the first such appointments in a UK geology department. He continued his work on varved clays with his lifelong friend, collaborator, and brother-in-law the Cambridge physicist Roy King, whom he recruited for the fieldwork in Sweden and who later became a Reader in Geophysics at Birmingham. They started one of the UK's first taught MSc courses in Geophysics in 1955, a highly prestigious postgraduate training course that ran for over 40 years. They initiated the department's extensive investigations into the deep structure of N. Wales combining gravity and magnetic with on- and off-shore seismic surveys. These pioneering surveys were done with Derek Blundell and their graduate students using their own specially designed equipment and techniques to record signals from underwater explosions after dispelling the well-publicised fears of local fishermen.

The confidence gained from the success of this work led to a bold proposal for geophysical investigations in Antarctica to the Director of the Falklands Islands Dependencies Survey (FIDS), Sir Vivian Fuchs, who had negotiated an agreement with the Vice-Chancellor, Sir Raymond Priestley, also of Antarctic fame, to set up the Antarctic Group in Geology at the University of Birmingham in the 1950s. Geophysical work continued for 25 years. The team, led by Peter Barker, carried out seismic, gravity and magnetic surveys, dredging, and drilling in the Scotia Sea over an area of more than a million square miles underlain by complex geology. The data were skilfully interpreted in terms of micro-plates resulting from 'back arc spreading', a model which could not have been foreseen when the project started.

Donald also became interested in the East African Rift where one of his former students Aftab Khan at Leicester had started geophysical surveys in 1965 to determine the deep structure of the Rift. Their work led to the Kenya Rift International Seismic Project (KRISP), the landmark study of continental rifts, which ran from 1985 to 1994.

Donald was also a pioneer in small-scale geophysics. After retirement in 1987, he and Ron Barker developed a visionary computer controlled resistivity meter and imaging system. The methodology is now routinely used in a wide range of investigations in hydrogeology, engineering, environmental monitoring, and archaeology, all of which require knowledge of the shallow subsurface.

Donald was an imaginative and inspirational geophysicist. He was a wonderful raconteur and wit with a great sense of fun. He was much loved by colleagues, friends and students from many parts of the world. Geophysical field camps were often run as

family affairs, often managed by lively wife Jean who survives him, and assisted by his daughter Bronwen, and son Geoffrey who followed him into an academic career, which started with a PhD on remote sensing in East Africa. Donald served the geophysical community well. He and Jim Briden initiated the formation of the JAG, the forerunner of the BGA. The two editions of his geophysics textbook with Roy King were extremely popular with geologists and engineers for whom it was written. He was recognised for his contributions to geophysical research and education by awards from the Geological Society of London and the European Association of Geoscientists and Engineers.

Aftab Khan



George Richard Hallowes
1939–2007

George Hallowes spent his early childhood in Ireland. He was sent to school in England at eight, first to Highfield and latterly Shrewsbury. George returned to Ireland to study civil engineering at Trinity College Dublin, graduating in 1961.

He joined Binnie Deacon & Gourley in Westminster in 1961 and started working on designs for Mangla dam in Pakistan. He was soon posted to Scotland, to work on the construction of sewerage and water-supply schemes.

In the late 1960s he worked in Iraq on an irrigation scheme, then between 1969 and 1971 on a water resources project in Lesotho before spending a year at Imperial College acquiring his MSc in soil mechanics.

Subsequent work on dams and reservoirs included Brenig and Marchlyn in north Wales, High

Island and Discovery Bay in Hong Kong, Peochos in Peru, Ilisu and other proposed dams in Turkey, Upper Muar in Malaysia, the Ghazi-Barotha hydropower project and the proposed Kalabagh dam in Pakistan, and Adhaim dam in Iraq. In the 1990s he led safety reviews of Dokan and Derbendikhan dams in Iraq and in 2000 he returned to Mangla dam in Pakistan, working on a scheme to heighten it. George was appointed to the All Reservoirs panel in 1999.

But dams and reservoirs were not the entire story of his career, which also embraced landslide studies in Hong Kong, the design of coastal reclamation works in Macao, and managing the design of the Bombay sewerage project, which included seven kilometres of undersea tunnels and deep-shaft pumping stations with a discharge capacity of up to 24 cubic metres per second. He wrote and co-authored a dozen technical papers on subjects that included embankment construction on soft foundations, coastal reclamation, the hydraulic design of large diameter sewer tunnels, and various aspects of dam engineering, including the refurbishment of spillway gates.

His work took him all over the world, and included extended periods of residence in Hong Kong (1973–74 and 1978–79), Peru (1974–76) and Pakistan (1982–85 and 1990–91).

George remained with 'Binnies' through the merger with Black & Veatch, finally leaving in 2000 to set up his own consultancy business, in which he specialised in dams and geotechnical advice.

Outside work, George had a wide range of interests and was renowned for his encyclopaedic knowledge. He was a keen rower at school and university, afterwards joining London Rowing Club. He continued as an active 'veteran' oarsman, competing in many overseas events up to

2006. For 20 years he was a member of the Thames Philharmonic Choir.

Family life in Putney and overseas was also important to George and he was much involved with his wife's work as a potter and sculptor. He is survived by his wife Veda and two daughters, Teya and Kiri.

John Ackers & Jane Walbancke



Brian Hardcastle 1921 – 2008

Appropriately for a hydrogeologist, Brian Hardcastle's birth was marked by the great drought of 1921. He graduated in Civil Engineering at Imperial College in 1942, and after war service (Royal Engineers) joined the Thames Conservancy (TC) in 1947. His next 15 years were spent on land drainage and river engineering, including the reconstruction of locks and weirs for the Thames Navigation, dredging, and river improvements for flood alleviation and to facilitate new town development, and a short secondment to the Kent River Board for the 1954 North Sea tidal floods.

The Water Resources Act 1963 was the motivation for Brian to become a "Water Conservation Engineer", and he sent back to Imperial College for a one-year postgraduate course to obtain a DIC in Civil Engineering Hydrology. (The name of the appointment was rapidly changed to "Water Resources Engineer", as the Board of Conservators thought that "WR Engineer" sounded better than "WC Engineer"!)

Lord Nugent, Chairman of the Thames Conservators, had already decided that the TC

would concentrate on developing groundwater resources for the augmentation of stream flow; so groundwater became Brian's postgraduate topic. He already had some awareness of groundwater, as it was always a problem when, during the reconstruction of Thames weirs, cofferdams were pumped out and clear spring water would bubble up from the bottom - especially where the Thames crossed the Chalk outcrop. His next 11 years were driven by the requirements of the new Water Resources Act, establishing and operating a water abstraction licensing system, including the consenting of drilling and test pumping new groundwater abstractions, and analysing the results; establishing hydrometric networks for both surface and groundwater resources, and conducting a survey of the water resources of the Thames catchment and the London Excluded Area - including proposals for new water resources. The latter included "The Lambourne Valley Pilot Scheme" (1967 - 69) to test the Conservators' proposals to augment stream flow by groundwater abstraction. This pilot was later developed between 1972 and 1976 into the Thames Groundwater Scheme for river flow augmentation.

By 1970 Brian had become Deputy Chief Engineer (Water Resources); but after the Water Act 1973, the Thames Water Authority was set up (1974) and the Thames Conservancy became one of its Divisions. Brian became Divisional Manager.

During the following 10 years, the TC Division promoted and constructed the Thames Groundwater Scheme, Farmoor II Pumped Storage Reservoir and the River Mole Flood Alleviation Scheme. Brian's primary interest remained with Water Resources. By taking the requirements of the Water Resources Acts seriously, and through his management, the Authority

established a very competent technical water resources function, staffed by professional engineers, hydrologists, hydrogeologists and technicians. In particular, a very comprehensive groundwater monitoring network was established in all the major aquifers. This complemented the surface water network of river flow monitoring and gauge weirs. By the time the water industry was privatised and split in the late 1980s, the Thames Region had one of the most professional and efficient water resources functions in Britain.

After his retirement in 1983, Brian worked as a consultant to Rofe, Kennard & Lapworth, (involving a visit to Cyprus, to advise on the reorganisation of the water industry there). He had been involved in the work of the charity "Christian Engineers in Development" since 1985 and was one of its directors.

My lasting memory of Brian is of a very kind gentleman who took a great interest in his staff and their development. Time spent with Brian was always a pleasure.

VK Robinson



Brian Keith Holdsworth 1936 – 2007

Brian Holdsworth - BK to colleagues and students, died on 5 August 2007 after a long battle against cancer. He was a distinguished stratigrapher, internationally acknowledged for his innovative and influential researches in radiolarian biostratigraphy, and a highly regarded teacher.

BK was born in Newcastle-under-Lyme in 1936. He attended

Wolstanton County Grammar School where his father, an accomplished botanist, was Head of Biology. Except for some notable forays, Brian spent most of his life in and around North Staffordshire but it would be difficult to find anyone less parochial or more eclectic in their interests - scientific and cultural.

Brian entered University College, Oxford as an Exhibitioner in 1956 and graduated in geology in 1959. He was a major contributor to *Isis*, the student news-magazine, honing journalistic skills that served him well in later life. His geological originality was demonstrated during his Finals mapping project when he identified then new-fangled turbidites in the manifestly non-geosynclinal setting of the North Staffordshire Basin.

Through Wolverston Cope, Head of Geology at the nascent Keele University, BK undertook research for his PhD on the Namurian of the South Pennines that unravelled the stratigraphy and complex provenance of the basinal deposits. More significantly, he discovered well-preserved radiolaria in calcareous "bullions", establishing the focus for nearly 40 years' research.

He was appointed Demonstrator at Keele in 1963, then successively Assistant Lecturer (1965), Lecturer (1966) and Senior Lecturer (1973). Deteriorating health and disenchantment with the changing ethos of British higher education led him to take early retirement in 1993.

Brian demonstrated the biostratigraphic potential of radiolaria in the British Carboniferous (and more widely) in a series of influential publications - including a paper on the oldest known radiolaria jointly authored with the current President of this Society, Richard Fortey. However, it was his participation in a Leg of the Deep

Sea Drilling Project in the SW Pacific (1973) that alerted the wider geological community to his radiolarian expertise and led to very fruitful research collaboration over following decades with US and Canadian geologists working in Alaska and the Cordillera of western North America.

Brian and his collaborators developed acid-leaching techniques to extract delicate and exquisitely preserved radiolaria from Palaeozoic and Mesozoic cherts and he won worldwide recognition as a skilled exponent of this arcane art. This approach produced a broadly applicable radiolarian zonation for the later Palaeozoic and facilitated accurate dating of hitherto poorly constrained rock sequences. One important result was the recognition of discrete continental blocks in the Cordilleran collage that had been juxtaposed by very large-scale fault-movements – forming the ‘suspect terrains’ of modern jargon. In 1980 BK documented arguably the first application of this concept to British geology, suggesting in a book review that Anglesey was a Palaeozoic ‘suspect terrain’.

BK was a dedicated and effective teacher whose attention to detail and clarity of delivery were legendary. *The British Micropalaeontologist* panegyric on his retirement recounts how his undergraduate courses in micropalaeontology enthused many students to pursue post-graduate studies in this topic. Eschewing modern technology, Brian spent hours before lectures preparing blackboards full of meticulous chalk drawings in order, as he put it, “to give the kids the latest ‘gen’”. His end-of-fieldtrip syntheses were exemplary in their lucidity and scope, with students hanging on every word – and betting on the length of ash he could sustain on a cigarette!

BK was fundamentally an old-school naturalist with interests

ranging far beyond geology. Over many years he meticulously recorded the butterflies and moths visiting his garden. His home was at the junction of Shropshire, Staffordshire and Cheshire, and he thus contributed important lepidopteran records to the archives of three counties. Over recent years Brian devoted much thought and effort to creating a woodland garden at his home that attests to his botanical skills. He also greatly appreciated the visual arts, organising exhibitions at Keele for some years and championing the work of his brother-in-law, the painter Douglas Swan.

The intellectual rigour, perfectionism and acerbic wit that underpinned Brian’s research and teaching also engendered wariness, even trepidation, in some – although good students always found in him a ready ear and wise counsel. Those who penetrated his rather daunting carapace delighted in his wide knowledge, humanity and deep insights into the worlds of science and the mind.

He will be greatly missed by his wife, Sheila, son Douglas, daughter Clare and grand-daughter Amy and by his many friends across the wider community.

Gilbert Kelling, with thanks to John Collinson, David Emley, Colin Exley, Tony Phillips and Hugh Torrens



Robert Kinghorn
1942–2007

Robert Kinghorn, member of research, academic

and administrative staff at Imperial College London, 1969–2006, died on 17 October 2007.

Robert was educated at Eastbourne College and read Chemistry at Edinburgh University. He then undertook research in organic chemistry at

the Northern Polytechnic, now the University of North London, and obtained his PhD in 1969. In the same year, he joined the Geology Department at Imperial College as a Research Assistant and took charge of a newly established organic geochemistry laboratory at the Royal School of Mines. To gain tenure, he was required to obtain a degree in geology. He did this by enrolling at the Open University and, following the completion of his degree, joined the academic staff and became involved in source rock studies in several parts of the world. His students researched the geochemistry of source rocks in Iran, Pakistan, Nigeria and the Wessex basin. He also lectured on the subject to the MSc Petroleum Geology course at the College. His work resulted in a number of articles and culminated in the publication in 1982 of a book entitled *The Chemistry and Physics of Petroleum*. Robert was a Fellow of the Geological Society and of the Royal Society of Arts.

In 2001 he took early retirement from Imperial College but continued to serve the Department of Earth Science and Engineering, successor to the Geology Department, on a part time basis in an administrative capacity. He retired fully in March 2006.

Robert was a life long supporter of the Conservative Party and stood as a Parliamentary candidate for Blyth Valley in 1987 and Norwich North in 1997. He was strongly committed to local government and served as a councillor for Islington during 1968–71 and for Hounslow (Chiswick Riverside ward) from 1986 until his death. At Hounslow, he was Conservative Group leader from 1992 to 1995 and, since the Conservatives took power in May 2005, Executive Member for Children & Lifelong Learning. He also served as churchwarden at St Nicholas Parish Church in

Chiswick, where his funeral took place on 31 October with over 350 people attending. Robert was a very sociable and friendly character and his services to the local community, including the Royal National Lifeboat Institution, earned him respect and admiration. He was described by one of his Hounslow Council colleagues as exceptionally charming, informed and passionate.

Robert was also Chairman of the Conservative Transport Group. He was a railway enthusiast and published a number of railway books, most recently, *Lost Railways of Northumberland*. He was a devoted family man and leaves a wife, Rosemary, and two sons, James, 12, and Phillip, 22 months.

Mike Ala, Dick Selley, Gill Davies



John Alfred Miller
(1935 – 2007)

Jack Miller was a formidable innovative scientist. He worked at Windscale during his school holidays, read Chemistry with Geology at Hull, did an MSc in Geophysics at Birmingham and in 1958 won a Shell Research Award to do a PhD in Cambridge on the geochronology of rocks and minerals using the potassium-argon method of radio-isotopic dating. He became a Royal Society Smithson Research Fellow in 1962 and in 1964, a Junior Research Fellow at Churchill College. As Assistant Director of Research in the Department of Geodesy and Geophysics, he built a pioneering rock dating laboratory. He was an active supporter of rowing and boxing at Cambridge and was

President of the Churchill College Boat Club for over 25 years.

In 1962 he began research collaboration with Frank Fitch of Birkbeck College London. An exceptionally talented group of research assistants and post-graduate students gathered in Cambridge and London around the Fitch-Miller partnership. In 1965 the pair formed FM Consultants Limited, a scientific consultancy that aimed to make British academic expertise more readily available to commercial enterprise. In the early days Jack's forays into the world of commercial consulting often went against academic traditionalists but he challenged and changed attitudes through sheer strength of character. Certainly this approach did his academic career no harm, he was awarded a ScD in 1969. At Churchill he became a Senior Research Fellow in 1975, Vice-Master in 1978, Director of Studies in Earth Sciences in 1982 and Tutor in 1991. While Vice-Master, he also served as Acting Master in 1993. He became Chairman of Examiners in 1997.

Along the way he spent 11 years as a Consultant in Hydrology in Belgium, became a Council Member of the Winston Churchill Memorial Trust, Fellow of the Geological Society, and Member of the Royal Society of Chemistry. Jack was author, co-author or editor of over 300 books and papers (many of which appeared in important Geological Society volumes). His work ranged widely - from revisions of the timescale and technical advances in geochronometry to the dating of earth movements, fossiliferous, detrital and diagenetic minerals in sediments and of innumerable individual rocks from slate to gneiss and basalt to granite.

Jack had enormous energy and mental capacity for work and was very much a larger-than-life character. After his recent retirement he was able to spend

more time working with Cambridge based R B Hawkins and Associates, a company he co-founded over 20 years ago specialising in the scientific investigation of insured losses, and which now has offices all over the UK. His breadth of intellect was outstanding, as was his huge network of colleagues and friends. Jack has a son, Marcus, born in 1961 of his first marriage to Elizabeth Woodward. He later married Marcia Blore in 1969. A scientist herself, she became his principal research assistant and participated fully in his experimental work in the laboratory, fieldwork in Africa, Iceland and Belgium and his academic life in Cambridge.

Frank Fitch



William Owens
1941–2007

Dr William Harper Owens, always known as Bill, died on 26 October 2007 from prostate cancer. Although he had formally retired in 2002, he had continued part time to teach, take part in undergraduate fieldwork and to find an increasing amount of time to further his research in rock magnetism, which was centred on the application of magnetic anisotropy measurements to problems in structural geology.

Bill was born in Hong Kong, on 14 April 1941. From December 1941 to December 1945 he and his mother were interned by the Japanese while his father in the Merchant Navy was troop-carrying in the Far East. When he was 12, he was sent "home" to boarding school in Belfast. In 1963, after completing his degree in Physics at Queens University, Belfast, Bill took the MSc course in Geophysics at Birmingham. Following a year teaching with VSO at the University of Ibadan, Nigeria, he returned to

Birmingham in 1965 for a PhD with a group carrying out laboratory studies of magnetic anisotropy acquired during the deposition of sediments.

It was hoped that this work would make it possible to correct the remanent magnetism of recent sediments for the deflection due to currents during deposition; but it became clear that the 'magnetic fabric' was best used to assess the direction and strength of the palaeocurrents. Bill, with Tony Rees and Norman Hamilton, extended the application of the method to lava flows, granite emplacement and the development of tectonic fabrics, and he made particularly important contributions to the analysis of complex fabrics associated with different magnetic minerals present either as isolated grains or as inclusions, and to the statistical analysis of the measurements. He was appointed Lecturer in 1970.

Bill had a wide range of interests including music, literature and swimming (and was an instructor for the University's Life Saving Club). In his last months he particularly appreciated Roger Deakin's Waterlog, connecting as it did with his own love of swimming and the countryside. He also enjoyed mountain walking, and all these interests came together at the University's Priestley Centre by Coniston and in fieldwork, which culminated in an expedition sampling the Theron Mountains in Antarctica only three years before his death. He considered this to have been the greatest and most beautiful experience of his life.

Sadly, he did not live to see his two most recent publications, jointly with his student (and subsequently, colleague) Dr Carl Stevenson, receive awards from this Society. One received the *Journal's* Young Author Award for 2007 and the other, a paper in the *GSA Bulletin*, won the Ramsay Medal for 2008. He will be greatly missed by his

colleagues, former students and friends, and particularly by his wife Chris and their sons David and John.

Roy King



Bruce William Sellwood
(1946–2007)

It is with great regret that we report the death of Bruce Sellwood who, as a former Professor of Applied Sedimentology in the Department of Geology and subsequently the Postgraduate Research Institute for Sedimentology, Emeritus Professor and Research Fellow, was one of the UK's most respected, and well-known sedimentologists.

Bruce undertook his first degree at Reading, graduating in 1967 before going onto Oxford for his DPhil in early Jurassic stratigraphy and ecology under Prof Tony Hallam. One of the references for Bruce in 1967 describes him as 'bubbling over with intellectual and physical vigour and imagination, Sellwood already shows definite promise for original research. He has that desirable ability to bring a fresh view to problems, whether formal exercises or independent investigations, and, moreover, the innocent personality to do it pleasantly'. Those who knew Bruce will recognise that many of these traits stayed with him throughout his life. After his DPhil, Bruce undertook postdoctoral research at the University of Oxford before taking up a lecturing post at the then Oxford Polytechnic until 1974. He was quick to return to Reading to take up a position as lecturer in the Geology Department in 1974

under the then Head of Department, Prof. Perce Allen. Bruce remained in Reading for the rest of his academic career, being promoted to a Personal Chair in 1993, and brought a great deal of respect to both the Department of Geology and the Postgraduate Research Institute for Sedimentology.

Bruce was one of Britain's foremost sedimentologists and was an acknowledged world expert. His research interests were very wide, but mostly in the European Mesozoic and early Tertiary. His earlier work on the stratigraphy, palaeoecology and sedimentology of the British Jurassic led directly to his later interests in the diagenesis of carbonate and siliclastic rocks. His expertise brought him into frequent contact with many oil and gas companies operating in the UK and abroad, where he became an invaluable expert, particularly for onshore oil exploration in Southern England. As a consequence of this he was able to extend his own research interests and fund a substantial number of research students. At his death Bruce, with others, had supervised a total of 45 PhD students - from Keith Morris (started 1976) to Kevin Hayward (finished 2006). Bruce also taught extensively on the MSc in Sedimentology at Reading which produced a large number of people who are now in the upper echelons of geological industries. Bruce kept in contact with many of these people throughout his career. He was often described as an inspirational teacher by past and present students, and served as head of Postgraduate Research Institute for Sedimentology from 2001-2003.

Bruce made a number of major contributions to the oil and gas sector over his career by acting as a consultant, teacher and expert, as well as serving on numerous bodies such as the United Kingdom Offshore

Operators Association Drill Cuttings Advisory Group (1999-2002). He served academia in equal measure being, among others, an Editor in Chief of *Sedimentary Geology* for over 20 years.

Although Bruce retired in 2006 he was still active both as a researcher and teacher. He was working on a number of key scientific papers and projects at the time of his death, notably, *Water, Life and Civilisation*. Bruce began his palaeoclimatology research with the Department of Meteorology at Reading in the late 1980s and went on to publish numerous articles in this area until his death. During his career Bruce published over 150 papers and several textbooks including the seminal works:

Dynamic Stratigraphy of the British Isles with R Anderton, P Bridges and M R Leeder, (1979), and the shallow marine carbonate environments chapter in Harold Reading's *1978 Sedimentary Environments and Facies*. However, he was at his best in the field, standing in front of an outcrop, pondering the nature of the deposits and grinning with enthusiasm when he had worked it out. Everyone on his undergraduate, postgraduate and industry field courses will remember the enthusiasm and knowledge that he brought to them, as well as to the drinking afterwards! One of Bruce's favourite places was Mallorca, for which he produced a GA field guide (with H C Jenkyns and L Pomar) in 1990.

Bruce enjoyed geology, life, his family, wine, travel, opera, good company and laughter. His repertoire of jokes and funny stories could keep people entertained for hours. Bruce was a keen member of the Maiden Earley Wine Society and obtained his Wine and Spirit Educational Trust qualifications in 2003. He taught a number of wine courses, which appealed to his sense of fun. He also became

Senior Wine Steward for the Senior Common Room at the University of Reading (2002 to 2003).

Bruce was very well liked and will be very greatly missed by us all. He leaves his wife Jan and two sons: Matthew 29 and Daniel 27, to whom we extend our deepest sympathy.

Stuart Black



Felicity Ann Tabor 1934-2005

Had Felicity Tabor (*née* Hudson)'s first interest and subsequent enthusiasm for geology developed late in her teens, her obituary would no doubt now reflect on a distinguished career in this field. It was to the misfortune of our subject that her first serious studies in matters geological commenced only when she was well into her fifties. Her early career as brilliant academic and much loved wife and mother can, therefore, only briefly be told.

Born in Harrow, Middlesex, on 11 October 1934, Felicity attended Harrow County School for Girls. There she proved both an academic high-flyer and keen sportswoman. She left school in 1953 to join a local industrial research organisation as a laboratory assistant. Keen to further both her interest in science and career prospects she launched into part-time degree studies, involving three evenings' and Saturday morning's attendance at Birkbeck College. In 1959, she achieved an outstanding first class Honours Degree in Physics and Mathematics, and was

immediately invited to study for a doctorate in X-ray diffraction. Newly wed, with limited finances, the option to continue work as an industrial scientist was ultimately determined by the untimely death of her proposed research supervisor.

Felicity was to devote much of the next phase of her life to her family, supporting and encouraging her children, both of whom are now senior university academics. Fluent in French, many family holidays were taken camping in France, where Felicity's first geological interests were aroused. Together, with her husband, she subsequently joined the Harrow and Hillingdon Geological Society, the Geologists' Association, and a wide range of University of London extra-mural classes in geology at the Natural History Museum.

I regret that I only became acquainted with Felicity at that time. Not that she ever allowed her natural abilities to be revealed in her behaviour. She was quiet and undemonstrative in class, always polite and charming, a delightful and quietly enthusiastic student. On field excursions, to localities ranging from Iceland to the Aegean, her powers of observation obviously reflected a high level of academic competence. With her husband's retirement and other responsibilities diminished both decided to consolidate their geological knowledge and they registered for a degree course by part-time evening study at Birkbeck.

Four years later, in 2000, Felicity was awarded a first class BSc Honours Degree in Geology. Felicity won both the undergraduate student awards for her year - The Palaeontological Association prize and the award from the Mineralogical Society. A field incident in Skye exemplifies Felicity's enthusiasm and dedication to the subject. She tripped and fell onto her face

on the first day and was taken to hospital. But with stitches in her scalp and swathed in bandages, she was back a few hours later to make sure nothing was missed! Professor Hilary Downes advises that Felicity was held in high regard by her fellow undergraduates for her ability to explain mathematical and chemical concepts to them clearly and simply, in a friendly and open manner, without making them feel inferior.

Degree completed, Felicity worked by evening study at Birkbeck for a research degree, gaining her MRes (with merit) in a project on the quantification of textures in mantle peridotite xenoliths. This eventually became the subject for her PhD. She had undertaken a great deal of meticulous work when she was taken ill. Felicity died on 15 December 2005. Professor Downes tells me that a lasting record of this work is being prepared as a journal article.

John F Potter



Ken Thomson (1966–2007)

Ken Thomson hailed from the village of Stainforth in South Yorkshire. Graduating from McAuley School in nearby Doncaster, Ken originally went to the University of Manchester in 1985 to study medicine, but after a couple of years realised that his academic heart clearly lay in the understanding how the Earth works. As a result, he transferred to study Geology, achieving an Upper Second Class Honours degree in 1990. He never looked back.

Ken then moved to take up a Shell-Esso funded PhD in the

Department of Geology & Geophysics at the University of Edinburgh, studying the Tertiary tectonics and uplift of the Inner Moray Firth and adjacent areas. Several important publications arose from the postgraduate research, which lay the foundations for a long-standing interest in the use of methods to identify and quantify basin inversion and in understanding the controls on structural styles found in areas affected by tectonic uplift.

After Edinburgh, Ken moved to Oxford to take up a position as a BP Junior Research Fellow in Geophysics. Two years later, he moved once more to take up his first academic staff position as a Temporary Lecturer in Petroleum Geology at Durham University. He remained at Durham for four years before being appointed as a Lecturer in Basin Dynamics at Birmingham in 1999, a post that gave Ken the stability he needed and the platform for him to produce high-quality research in several areas.

Over the course of his time at Birmingham, Ken was among the first to document structural styles that characterised the previously unexplored North Falklands rift system at a time when the basin was undergoing its first wave of exploration. This led to Ken investigating the conjugate margin in South Africa and to produce well-argued models of South Atlantic plate tectonics which challenged existing views.

In addition to his established interests in petroleum basins, Ken also branched out and embraced the innovative use of seismic interpretation in other areas of geoscience and archaeology. His work on submerged igneous landscapes on the North West Atlantic Margin, led to some key breakthroughs with the visualisation of buried sill complexes, giving unprecedented maps of the three-dimensional geometry and architecture of these bodies thus, helping

igneous geologists better understand their flow behaviour and methods of emplacement.

Ken employed similar 3D seismic visualisation methods to demonstrate that they could have a major role in unravelling previously undetectable landscapes buried during post-glacial late Quaternary and Holocene sea-level rise. The work led to a successful collaboration with Professor Vince Gaffney in Birmingham's Institute of Archaeology and Antiquity. Together, they pioneered research into Holocene geology, palaeoenvironment and archaeological potential of the Southern North Sea in conjunction with English Heritage. The work was very well received and led to a TV documentary by Channel 4's *Time Team* entitled *Britain's Drowned World*, which was transmitted just a week after his untimely death from a heart attack.

The massive turn-out for Ken's funeral in his home town under a cloudless blue May Day sky was testament to the respect with which he was held throughout the geological community. A memorial conference will be held in Ken's honour in the School of Geography, Earth & Environmental Sciences at the University of Birmingham in May. Ken is survived by his mother and father and his sister.

John Underhill



John Stuart Webb 1920–2007

Emeritus Professor John Stuart Webb, applied geochemist, dubbed "Father of English Geochemical Mapping" on his award of the Society's William Smith Medal (1981) died at Redhill, England, on 2 April

2007. He was born at Balham, London, on 28 August 1920, eldest child of George Stewart Webb and his wife Caroline Rabjohns (*née* Pengelly). His sister, Mona Audrey, was born in 1924. He married Jean Millicent Dyer (1920–97) in 1946. Their only child, Stuart, was born in 1950.

Educated at St Mary's school, Balham (1925–30), Westminster City School, London (1930–38), and Imperial College (IC), London, he graduated BSc (First Class Honours) in Mining Geology (1941), having received the Murchison Medal (1939), the Brough Medal (1940), the Clement le Neve Foster Prize and the Cullis Testimonial Fund (1941).

Briefly assistant mining geologist to the Government's Non-Ferrous Metallic Ores Committee, he then served in the Royal Engineers (1941–43), and as an economic mineralogist with the Geological Survey of Nigeria (1943–44). Awarded a Beit Scientific Research Fellowship at IC, he obtained the Judd Prize (1946) and his PhD (1947) with a study of *The origin and mineral paragenesis of the tin lodes of Cornwall*. Appointed Lecturer in Mining Geology (1947–55), he became Reader (1955–61) then Professor of Applied Geochemistry (1961–79).

Elected FGS (1943), he received the Daniel Pidgeon Fund (1948) to investigate Hercynian tin-tungsten mineralisation. However, aware of Scandinavian work on the application of geochemistry to the search for mineral deposits, in 1949 he began research in applied geochemistry (then an unknown subject in Britain), firstly in southern Nigeria, and then Cornwall and Derbyshire. The Nigerian work brought him into contact with Herbert Hawkes (1912–96), of the US Geological Survey's Geochemical Prospecting Unit (est. 1946). In 1952, Webb visited Hawkes and

toured academic and commercial geochemical projects across North America. On his return, he proposed establishment of a British programme to provide its mining industry with geochemical methods of exploration applicable to tropical terrain.

Webb then participated with Hawkes and others in a pioneering regional survey exploring for base metal deposits over 69,000 km² of eastern Canada, finance having been secured by Webb from London. Based on chemical analysis of the fine-grained (<0.177 mm) sieved fraction of samples of stream sediments, a sampling medium hitherto untried at that scale, it proved its effectiveness as a low-cost exploration method. Webb realised that similar, multi-element, surveys might eventually produce cost-effective geochemical maps useful to understanding regional geology.

The Geochemical Prospecting Research Centre (GPRC) was established at IC in 1954, with Webb as its Research Director. Over the years, he pursued his objectives with single-minded tenacity, often in the face of considerable scepticism. Early studies focused on mineral prospecting, mainly in Africa, Asia and Australia, using soil and drainage sampling. Webb's multi-element regional mapping concept had its first successful test in 1960, using drainage samples collected over 7800 km² of the Namwala-Livingstone area, Zambia. By 1966, it had also been proven in Sierra Leone.

Webb now began studies to investigate the relationship between regional geochemistry and agricultural problems in livestock, firstly in Eire in 1963, then in Devonshire, Denbighshire and Derbyshire (the first regional-scale drainage surveys in Britain) in 1965. Studies in marine mineral exploration also began in 1964, and to reflect the

increasing scope of its work, the GPRC became the Applied Geochemistry Research Group (AGRG) in 1965.

By 1966, it was shown that regional drainage surveys could indicate areas of potential disease in cattle and sheep at clinical and (of particular economic importance) at sub-clinical levels. Webb recommended in 1970 that, particularly in developing countries where people tended to eat more locally-grown produce, regional geochemistry should form part of any systematic study of trace elements and human health. In 1971, AGRG began a programme to identify the severity of contamination in the urban, agricultural and marine environments as a result of pollution related to human activity. The pioneering stream sediment geochemical atlases of Northern Ireland (1973) and England and Wales (1978) confirmed Webb's view that regional geochemistry could provide an invaluable addition to conventional geological mapping.

Webb co-authored with Hawkes the classic textbook *Geochemistry in Mineral Exploration* (1962; 2nd edition 1979) and, with members of AGRG, the *Provisional Geochemical Atlas of Northern Ireland* (1973), and *The Wolfson Geochemical Atlas of England and Wales* (1978) which remained unequalled for some 20 years.

By his retirement (1979) he had trained over 80 PhD students. His far-sighted vision of geochemical atlases as a strategic national requirement was realised in 1988 when UNESCO's International Geochemical Mapping Project was inaugurated. He was awarded the DSc (London University, 1967); the Institution of Mining and Metallurgy Consolidated Gold

Fields of South Africa Gold Medal (1953) and the Society's William Smith Medal (1981); and elected Honorary Member, Association of Exploration Geochemists (1977); Fellow, Royal Academy of Engineering (1979) and Honorary Fellow, Institution of Mining and Metallurgy (1980).

Although acclaimed abroad, recognition in Britain for the importance, and pioneering nature, of the work undertaken under his guidance by the GPRC and AGRG over the years was lacking. His ex-colleagues and students feel it is shameful that he was never elected to the Royal Society.

Richard J. Howarth



Bill Yuill 1930-2005

Bill Yuill, who died on 2 October 2005, was someone who throughout his long career at Mackay & Schnellmann, the London based mining consultants, epitomised the importance of professionalism combined with pragmatism that is required in the industry.

He was born on 20 January 1930 in Falkirk and went to Falkirk High School. He studied geology at Glasgow University. On graduation, Mackay & Schnellmann recruited him to work for the Siamese Tin Company at Leadhills. This was interrupted by National Service. He was drafted into the Royal Artillery as a gunner. But his potential was noticed and he was sent to officer training,

becoming a 2nd Lieutenant, in the Royal Engineers. Indeed, later, Bill served in the voluntary, Engineer & Logistics Staff Corps of the Royal Engineers rising to rank of full Colonel.

On being demobbed, Bill rejoined Mackay & Schnellmann, where he stayed for the rest of his career, becoming the Managing Director in 1965. He consulted on projects all over the world, especially in Africa, but also in Europe, the Americas, Asia and Australia. The company worked predominantly on metallic and industrial mineral projects and mines, from iron ore to gold, and from sand and gravel to phosphate. With Bill at the helm the company gave many young geologists their first job and provided an opportunity for senior professionals to continue to contribute their experience and judgement to the industry. On retiring from Mackay & Schnellmann, he became an independent technical reviewer of mining company prospectuses for the London Stock Exchange.

Bill believed in the mining industry as a community and the need for a professional body to serve that community for the wider public good. He served on many IMM committees, eventually becoming President in 1985. Typically of Bill his presidential address was titled *The Importance of Being Small*. In the conclusion to his address he stated, "I believe, strongly, that small deposits, mines and companies have always been the backbone of the minerals industry and that it is from these that the larger deposits, mines and companies have developed and should continue to develop."

He was a very amiable person and for many Mackay & Schnellmann was like a club -

not an exclusive one, but somewhere mining people, visiting London on leave or business, would drop in. Out of this social side, there was founded the monthly evening session in London, the famous “Last Wednesday”, which now continues as “the Mining Sundowner” on the last Thursday.

This interest in individuals was mirrored by his involvement with the Institute of Mining & Metals (IMM, now IMMM). As his work on the professional issues lessened he served on the management committee of the IMM Benevolent Fund, the IMMBF. Bill took over as Honorary Secretary of the Fund, in 1994, and continued until the successful merger with the Members’ Trust of the IoM. Bill visited all new applicants for assistance often at long distances from his home. His wide overseas experience and knowledge of overseas members was invaluable to the Fund and thus to its overseas beneficiaries. There are many beneficiaries who have cause to thank Bill for his care and interest in their welfare.

He leaves a wife, Rena, whom he met at Falkirk High School, and two sons, David and Gordon and their families.

Gavin Bowyer. Reprinted with permission of the IMMM

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