The Ussher Society
Geoscience in south-west England
43rd Annual Conference
Newquay, 3rd - 6th January 2005

Second Circular

The Ussher Society is pleased to announce its 43rd Annual Conference at the Kilbirnie Hotel, Newquay, Cornwall. This 4-day conference for earth/environmental scientists and engineers comprises two days of presentations (Tuesday 4th & Wednesday 5th), incorporating a joint session with the South West Regional Group of the Geological Society, and pre- and post-conference field trips (Monday 3rd and Thursday 6th January).

A pre-conference field trip will take place on Monday 3rd January; Robin Shail (CSM) and Brian Leveridge (BGS) will take a tour of some interesting Variscan localities around the Newquay area – see programme below for details. After the fieldtrip, an icebreaker reception, courtesy of IGI Limited, will be held in the bar at the Kilbirnie Hotel from 7-8pm. Pre-registration for the conference will be possible during this period.

Tuesday 4th January will see the commencement of our oral and poster presentations (posters available for viewing during all scheduled breaks), beginning with a look at aspects of Geodiversity, fossils of west Dorset, and Variscan/Tertiary weathering. After coffee, the Scott Simpson Lecture will be presented by Alex Halliday on the topic of ‘Developments in isotope geochemistry’, followed by a review of Permian and Triassic chronological methods and results. The afternoon session will focus on aspects of Variscan geology, including gold mineralisation, structure and ore textures. Following an afternoon tea break, we take a huge step forwards in geological time to look at processes relating to Holocene and Quaternary processes.

The Annual General Meeting of the Ussher Society will be held in the evening, at 5.15pm, to which Members are warmly invited. It is requested that items to be included on the agenda, or major items for discussion under Any Other Business, are submitted to the Chair well in advance. The AGM will be followed by an interlude for socialising, with background musical accompaniment, prior to the Conference Dinner being served at around 8pm.

Wednesday 5th January begins with a focus on petroleum geoscience in the southwest, followed by a look at aspects of micro-palaeontology. The morning session concludes with two papers reviewing engineering aspects of Jurassic and Cretaceous age rocks in the east of the area.

The afternoon session is held in conjunction with the South West Regional Group of the Geological Society, based around the theme of ‘Coastal Zone Engineering and Management’. The session commences with a Keynote address from Prof. Reeve (University of Plymouth), and continues with a diverse and interesting range of presentations related to this topic, covering a geographical area from east Devon through to the Channel Islands.

On the morning of Thursday 6th January, those registered for the post-conference trip will set off to examine a range of localities representative of granite-related mineralization, ‘cross-course’ Pb-Zn veins and the Great Perran Iron Lode. Richard Scrivener (BGS), Simon Camm and Bruce Grant are the Scientific Directors for this trip; booking is essential – see below for details.
## Provisional Programme

### Monday 3rd January - Field excursion 1: An introduction to the geology of the Newquay area

**Scientific directors:** Robin Shail, Brian Leveridge & Louise Hollick  
**Administrative leaders and safety advisors:** Chris Cornford or Ran Kelly of Hallsannery Field Centre

The field excursion will provide an overview of the geology of the Newquay area, including aspects of rift basin development and sedimentation (Lower Devonian), geological structures developed during Variscan convergence (Carboniferous), late- to post-Variscan structures, minor igneous intrusions (early Permian), a little mineralization and even some Quaternary sediments – something for everyone!

Meet in the **National Trust Car Park at Holywell Bay (SW 767 586)** for a 10.30am departure. Warm clothes, hat, gloves, full waterproofs and wellington boots are strongly recommended. Lunch will be taken at a public house. Beach, shore platform and steep flights of steps will be encountered. The itinerary is weather and tide dependent.

- **18.00-19.00** Committee meeting at the Kilbirnie Hotel, Newquay
- **19.00** ICEBREAKER RECEPTION sponsored by IGI Ltd at the Kilbirnie Hotel, Newquay

### Tuesday 4th January: Presentations of papers and posters

**08.30 onwards**  
**Registration** – Kilbirnie Hotel

**09.10 – 09.20**  
**Chairman’s Introduction**  
Dr Brian Leveridge

**09.20 – 09.45**  
Valuing geodiversity for conservation in Devon  
Peter Scott, David Roche, Clive Nicholas, Robin Shail and Philip Denby

**09.45 – 10.10**  
Geodiversity Audit for Cornwall and Isles of Scilly  
Paul Wheeler

**10.10 – 10.35**  
Distressed Somerset – Some aspects of Variscan/Tertiary weathering  
Hugh Prudden

- **10.35 – 11.00** **Tea / Coffee**  
Posters available for viewing

**11.00 – 12.00**  
**SCOTT SIMPSON LECTURE**  
Developments in Isotope Geochemistry  
Prof. Alex Halliday – Oxford University

**12.00 – 12.25**  
The Production of Dioritic Magmas by Fluid Infiltrational Mixing in the Plutonic Igneous Complex at Sorel Point, Jersey, Channel Islands  
S. Salmon

**12.25 – 13.30**  
**Lunch**  
Posters available for viewing

**13.30 – 13.55**  
A simple technique for revealing the texture of Cornubian ore deposits  
J B Grant & C W E H Smith

**13.55 – 14.20**  
Gold mineralisation in the Early Devonian passive margin of SW England  
B E Leveridge & R C Scrivener

**14.20 – 14.45**  
Large-scale southwards facing structures in the Looe Basin (Lower Devonian): evidence of basement controls upon Variscan passive margin inversion and post-convergence extension.  
R.K. Shail & B.E. Leveridge

*cont...*
14.45 – 15.10  Chronology of the Permian and Triassic of Devon: a review of methods and results  
G Warrington

15.10 – 15.35  A review of the stratigraphy and ammonite faunas of the Charmouth  
Mudstone Formation (Lower Jurassic, mid Lower Sinemurian to basal Upper  
Pliensbachian) of the West Dorset coast, south-west England.  
Kevin Page

15.35 – 15.55  **Tea / Coffee  Posters available for viewing**

15.55 – 16.20  Identifying phases of periglacial slope activity in Cornwall  
Dr Jasper Knight

16.20 – 16.40  Soil evolution in the Holocene – a gardener’s view  
C M Bristow

16.40 – 17.00  The forgotten spas and mineral springs of south-east Somerset  
J D Mather and H C Prudden

17.15 – 18.30  **Annual General Meeting of the Ussher Society**

18.30 – 20.00  Jazz music and pre-dinner drinks in the Ballroom

20.00  Ussher Society Conference Dinner – Kilbirnie Hotel, Newquay

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**Wednesday 5th January : Presentations of papers and posters**

08.30 onwards  **Registration** – Kilbirnie Hotel

08.55 – 09.00  **Chairman’s Introduction**  
Dr Brian Leveridge

09.00 – 09.25  Petroleum geochemistry of the Wessex Basin (Dorset, UK)  
Paul Farrimond, Richard Paterson, Mustafa Erhuma & Andrew Hindle

09.25 – 09.50  Intelligent geochemical databases  
Chris Cornford, Tony Gliddon & Chris Burgess

09.50 – 10.15  Geology and Geotechnical aspects of Devonport Dockyard, and implications for  
redevelopment and New build  
Michael Whitworth

10.15 – 10.45  **Tea / Coffee  Posters available for viewing**

10.45 – 11.10  Foraminifera from Restronguet Creek  
Olubunmi Olugbode, Malcolm B. Hart & Sheila Stubbles

11.10 – 11.35  The St Erth Formation: geometry of the deposit and micropalaeontology.  
Malcolm B. Hart, Richard Messenger Duncan Pirrie, Lesley Allen,  
Graeme K. Taylor & Ben Dashwood

11.35 – 12.00  Engineering stratigraphy of the Lower Lias of the Glastonbury District  
Alan Cattell

12.00 –12.25  Large-scale partial dissolution of the Chalk of the Devon coast and its engineering  
significance.  
R W Gallois

12.25 – 13.30  **Lunch  Posters available for viewing**

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### 13.30 – 14.20  
**Geological Society South West Keynote Address**  
Modelling Coastal Morphology and its Evolution  
**Prof. D Reeve – University of Plymouth**

### 14.20 – 14.45  
Cliff stabilisation and management at Beer, East Devon  
**David Roche and David Allen**

### 14.45 – 15.15  
*Tea / Coffee  Posters available for viewing*

### 15.15 – 15.40  
Erosion and failure of an apron of Devensian head on the north coast of Jersey, Channel Islands: Techniques of investigation, results, and significance for future development in an environmentally sensitive area.  
**J.T. Renouf, J.S. Sharp, S. P.Watson, & R.A.N. MacKean**

### 15.40 – 16.05  
Landslide and mass movement process and their distribution, in the Wellington District  
**K. A. Freeborough, A. Gibson, M. Hall, C. Poulton G. Wildman, A. Forster**

### 16.05 – 16.30  
A basis for development of a quantitative risk assessment methodology for coastal slopes in Cornwall  
**B M Westgate, J S Coggan & R J Pine**

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**Thursday 6th January - Field Excursion 2: Mineralisation of the Perranporth and St. Agnes areas**

Scientific directors: **Richard Scrivener, Simon Camm, Bruce Grant**  
Administrative leaders and safety advisors: **Chris Cornford** or **Ran Kelly** of Hallsannery Field Centre

The excursion will examine a number of localities representative of granite-related mineralization, ‘cross-course’ Pb-Zn veins and the Great Perran Iron Lode.

**Departure** will be from the **public car park at Holywell Bay**, where those attending should gather at **09.45** (the car park is close to the entrance to the Penhale Military Camp). Please bring hard hats and wear stout footwear. Lunch will be taken at an appropriate hostelry.

Please note that **registration for this excursion is essential** as we will be entering the Military Camp: those turning up on the day without registration will not be able to take part.
CONFERENCE BOOKING FORM  
The Ussher Society Annual Conference – Kilbirnie Hotel, Newquay  
3rd – 6th January 2005

Please complete and return this form with payment to Conference Secretary:
Louise Hollick, British Geological Survey, Forde House, Park 5 Business Centre, Harrier Way, Sowton, Exeter, EX2 7HU.

DEADLINE FOR RECEIPT OF REGISTRATION: 21st December 2004

NAME: .................................................................................................................................

ADDRESS: .............................................................................................................................

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PHONE: ............................................................ E-MAIL: ......................................................

I wish to register for the Conference as follows (please tick where appropriate):

I’m an ‘Ussher Society Member’ delegate (available only to paid-up members)

Both conference days (4th & 5th January) @ £22
Tuesday 4th January only @ £12
Wednesday 5th January only @ £12

I’m a Standard delegate

Both conference days (4th & 5th January) @ £30
Tuesday 4th January only @ £16
Wednesday 5th January only @ £16

I’m a Full-time Student delegate

Both conference days (4th & 5th January) @ £14
Tuesday 4th January only @ £8
Wednesday 5th January only @ £8

Note: All conference rates include tea/coffee and buffet lunches at the conference venue

Conference dinner - £14 for 3 courses and coffee, at the restaurant in the Kilbirnie Hotel

I wish to attend the conference dinner on Tuesday 4th January
I prefer a vegetarian meal

I intend to join the following field excursion(s)

Variscan Geology of Cornwall (R Shail and B E Leveridge) – Monday 3rd January
Cornish Mining (Richard C Scrivener) – Thursday 6th January

Field excursions must be pre-booked. Limited transport will be available and no refreshments are included. There is no charge for attending either excursion, but please refer to notes on programme (above).

I enclose a cheque for £.......................... made payable to L Hollick
ACCOMMODATION INFORMATION
The Ussher Society Annual Conference – Kilbirnie Hotel, Newquay
4th - 6th January 2005

Please note that it is your responsibility to make arrangements for, and payment of, the accommodation that you require before, during and after the conference. You may also wish to arrange evening meals at the same time as booking accommodation (where applicable), bearing in mind any booking you have made (above) to attend the Conference Dinner on Tuesday 4th January.

Links to information about other accommodation options, and a hotel search-engine, may now be found on the NEW Ussher Society website: www.ussher.org.uk

Accommodation at the Kilbirnie Hotel, Newquay – CONFERENCE VENUE

The hotel has kindly negotiated special rates for Ussher Society Delegates – please mention the Ussher Society when contacting the hotel to make your reservation.

► Single room, or two persons sharing twin/double room (all en suite) - £34 per person per night B&B.
► Single occupancy of twin or double room - £35 per person per night B&B.

Contact: Kilbirnie Hotel,
Narrowcliff
Newquay
Cornwall, TR7 2RS
E-mail: enquirykilbirnie@aol.com
Tel: 01637 875155
Website: http://www.kilbirniehotel.co.uk/

Demand for rooms at the Kilbirnie is likely to be high, so please book early to avoid disappointment.
The Kilbirnie Hotel offers a range of evening meals in the bar/restaurant; bookings for meals may be made at the same time as your accommodation reservation. Please bear in mind that you may have made a reservation for the Conference Dinner above, to be held on the evening of Tuesday 4th January.

Invernook Hotel

The hotel has kindly negotiated special rates for Ussher Society Delegates – please mention the Ussher Society when contacting the hotel to make your reservation.

► Rooms all at £22.50 per person per night B&B

Contact: Keith and Ros Hill
Invernook Hotel
8 Berry Road, Newquay
TR7 1AT
Tel: 01637 872436
E-mail: invernookhotel@btconnect.com

Minerva Hotel

The hotel has kindly negotiated special rates for Ussher Society Delegates – please mention the Ussher Society when contacting the hotel to make your reservation.

► Rooms all at £25 per person per night B&B

Contact: Jo, at Minerva Hotel,
The Crescent
Newquay, Cornwall
TR7 1DT
Tel: 01637 873439
E-mail: minervahotel@btconnect.com

MAP OF NEWQUAY
showing location of conference venue, and hotels listed above
Map amended from www.multimap.co.uk