Newsletter of the Climate Change Research Group of the Royal Geographical Society and the Institute of British Geographers

No. 4, February 2008

Contents

Editor’s Introduction ............................................................................................................................... 2
Minutes from the 2007 Annual General Meeting .................................................................................. 3
Report from the RGS-IBG Annual Conference 31 August 2007 ........................................................... 4
Looking ahead to the RGS-IBG Annual Conference 2008 .................................................................. 5
Website (www.rgs-ccrg.org.uk) .............................................................................................................. 6
Points of interest ..................................................................................................................................... 6
  CCRG Easter Meeting and Postgraduate Workshop .......................................................................... 6
  Collaborations with RMetS .................................................................................................................. 8
  Member activities ................................................................................................................................ 8
  Other activities .................................................................................................................................. 8
    Book Proposal ................................................................................................................................. 8
    Meetings .......................................................................................................................................... 8
Meetings .................................................................................................................................................. 8
  RMetS meetings ................................................................................................................................. 8
  General Meetings .............................................................................................................................. 9
  Summer schools and courses .............................................................................................................. 9
  Links to meeting calendars ............................................................................................................... 9
Recent publications of CCRG members ............................................................................................... 10
Recent grants of CCRG members ......................................................................................................... 11
Funding opportunities ............................................................................................................................ 11
Subscription announcement .................................................................................................................. 12

Subscriptions

Nearly half of the CCRG members however have still not paid their subscriptions! It is critical that our members pay their subscriptions as we do need to have a solid subscription base in order to successfully plan and develop the Group’s activities.

If you have not done so yet, please complete the subscription form appended to this Newsletter, and return this to as soon as possible to:

Dr Duncan McGregor
Centre for Developing Areas Research
Department of Geography
Royal Holloway, University of London
Egham, Surrey TW20 0EX, U.K.
If you are also a member of the RGS/IBG please register your membership of CCRG separately with the RGS/IBG (details are in their recent Subscription circulation). This does help the Group in that we get a small (£1 per head) subvention from RGS/IBG annually.

**Thanks in anticipation!**

---

**Editor’s Introduction**

Welcome to the fourth Newsletter of the Climate Change Research Group of the RGS-IBG. We continue to be productive; the meeting together with the IHDP and our postgraduate meeting in Leeds have been a success and we have had a number of sessions at the RGS-IBG annual conference with highly esteemed speakers. Our web site is also developing into a useful resource for the group and we plan to make this a resource for the wider community.

Support the CCRG: Please contribute to the newsletter and the website – let us know about publications, grants, meetings, conference presentations, funding opportunities, … A disappointing point is the fact that still nearly half of the members of the CCRG have not paid their subscriptions. Please see the section “Subscriptions” below, if you still need to pay.

Let us hear what you think about the activities of the CCRG and the further development of the group.

With the very best wishes, Jörg Kaduk

---

**Minutes from the 2007 Annual General Meeting**

**The meeting started Friday 31.10. at 13.10**

Apologies from: Andy Morse, Laurel Murray

**Chairs report: Mark Pelling**

The success was noted of the 2007 Easter meeting hosted by the University of Leeds, which attracted over 70PhD students on two days. This event was held jointly with UK HD, with funding from ESRC, University of Leeds, Department of Geography (University of Leeds), RGS and CCRG.

The winner of the 2007 undergraduate dissertation prize was announced: Alice Ingham, University of Birmingham

**Treasurers report: Duncan McGregor**

Starting balance: £495.35
Income: £814.00
Expenditure £500.00
Balance: £809.35

It was noted that much of the income comes from 3 year subscriptions so the end of year balance is an uncertain indicator of the health of the Group. It was suggested that given the strong balance the CCRG will provide a post-graduate award (a small contribution towards the research of the student) for 2007/08.

46 members had paid members subscription, this is very low given that over 100 members are on our e-list. The Treasurer will liaise with RGS on strategies to help convert members to paying members.

**Membership Secretary report: Laurel Murray (Mark Pelling)**

Total membership has increased from 95 (2005), 127 (2006) to 132 (2007). The rate of increase is slowing. Most members are academic with few (18) postgraduate members. Priority is to increase postgraduate membership.
Newsletter report: Jörg Kaduk
The newsletter has been well-received by members. Members were asked to submit news for the next newsletter. Jörg will co-ordinate this and place on the CCRG www as a record of our activities as with previous newsletters. Jörg to send an email to members requesting information on awards, publications and conferences.

Website report: Eran (Riz Nawaz)
The website has had some recent improvements including the installation of a counter 2 weeks ago, 150 hits had been recorded in this time alone.
The website continues to be hosted by the University of Leeds with a searchable database hosted by HydroRisk, the editor’s LtD company. This was discussed with no serious objection. The editor asked if a logo could appear on the CCRG page in recognition of his company’s sponsorship of the search engine. It was agreed that with RGS agreement this would be allowed.
The Editor is to look into any graphic way of depicting members geographic and thematic areas of research.

Postgraduate membership report:
None made

RGS conference coordinator: Jeff Blackford
It was felt that despite some world class papers and plenary speakers, attendance at RGS 2006 and 2007 was disappointing, almost embarrassing. It was felt that the conference fee prevented many from attending. In response for next year the aim is to develop more co-hosted sessions. DARG was identified in particular.
The RGS conference website was also felt to have been difficult to navigate and late with news of papers and plenaries.

Other Business

Easter meeting 2008
A focussed meeting on short-range climate modelling coupled with impacts and adaptation focussed on Africa was agreed upon. A hosting institution will be sought.

New Committee Members
Four new ordinary committee members volunteered at the meeting:
Chris Bennet, Confidential Business Services theatr hut@btconnect.com
Pete North, Geography, University of Liverpool p.j.north@liv.ac.uk
Clive Roberts, University of Wolverhampton c.l.roberts@wlv.ac.uk
Allison Wylde, London Metropolitan University a.wylde@londonmet.ac.uk
Given that elections will be held for committee posts next year this new blood was welcomed. Ordinary members will be encouraged to play supporting roles in 2007/08

Mark Pelling
3 September 2007

Report from the RGS-IBG Annual Conference 31 August 2007
The theme of the group's contribution to the RGS-IBG this year was 'Global climate change: impacts and adaptation', timed to coincide with the publication of the IPCC Fourth Assessment Report, working group II (http://www.ipcc-wg2.org/). This included two invited lectures from IPCC authors (Martin Parry, Robert Nicholls) who came as guests of the RGS-IBG. The programme was completed by a strong collection of papers from group members, with an international scope and a wide range of subjects, and we scheduled our slots to incorporate a special session on carbon sponsored by Progress in
Physical Geography. The content of the meeting is summarised below, followed by a brief comment on the meeting; what went well and what did not. Full abstracts are still available at http://www.rgs.org/WhatsOn/ConferencesAndSeminars/Annual+International+Conference/Programme/Friday++Paper+Abstracts.htm

The first lecture was given by Professor Martin Parry, on *Global climate change: impacts and adaptation*. This addressed several key findings of the working group II report, including a high confidence that impacts of observed warming on physical and biological systems are now being felt throughout the world, and that at least a further 0.5°C of warming is unavoidable. To keep warming to < 2°C will be very difficult. The impacts of this warming will be increased water scarcity, flood risk in coastal zones and reductions in crop yield in low latitudes, particularly impacting upon economically or politically marginalised people. Adaptation therefore needs much more attention, as many impacts are now inevitable.

Professor Parry answered questions on coral reef impacts and uncertainties in scenario formulation, and made the point that geographers have taken key roles in the IPCC report process, with UK geography particularly well represented.

David Jarosweski (with Chapman and Dobney) then discussed *The complexities of assessing the impact of climate change on transport*. Anna Wesselink discussed *water management and sustainable land use*, concluding from studies in the Netherlands that institutional arrangements needed to change to move towards the sustainable use of wetlands with increasing flood risk. Three lectures that followed on the theme of 'carbon'. First, Martin Wooster took a global view of biomass burning in *Progress in Quantifying Biomass Burning Contributions to the Global Carbon Cycle*. Aleyne Street-Perrott discussed the possible role of silica and diatomite in long-term nutrient cycling in her talk *Glacial / interglacial variations in the global carbon cycle: what have we overlooked?* and Martin Evans reported recent findings from upland peat areas in *Peatland degradation, restoration, and carbon storage: understanding the carbon balance of the UK’s upland peatlands*. All these contributions gave a considered, highly original and clearly presented views of carbon budgets and balances, perhaps revealing a higher level of uncertainty in future carbon cycling, at a wide range of spatial and temporal scales, than those working with climate projections would like.

In the afternoon, our second invited speaker Professor Robert Nicholls covered *Global climate change: coastal systems and low-lying areas*, based on his work for the IPCC. He summarised the findings of Chapter 6, showing that coastal systems are experiencing the adverse consequences of hazards related to climate and sea level, that coasts will be exposed to increasing risks over coming decades due to compounding climate-change factors, that the climate impacts are exacerbated by increasing human-induced pressures, that adaptation for developing countries will be more challenging, and that adaptation costs for vulnerable coasts are much less than the costs of inaction. Finally, Professor Nicholls concluded that the unavoidability of sea-level rise even in the longer-term frequently conflicts with present-day human development patterns and trends.

Nupur Bose (with Ashok Ghosh, Kumar Singh and Rajiv K. Sinha) discussed the link between *Global warming and changing land use patterns in Bihar Plains, India*. Based on satellite images from 1984 and 2004, changes in land use were shown- especially decreases in crop cultivation and wetlands, and increases in sandy bare ground. These were attributed, in part, to the shrinking of perennial water sources. Georgina Endfield and Sarah Davies (with Metcalfe, Fernandez-Tejedo, Tapia, Bohm and Rodriguez) presented a multi-element study of the relationship between climate, water management, land use and lake levels in a maar lake system from central Mexico (*Drying out: water, society and climate in central Mexico*). Using lake sediments and historical records, they showed that climate change is only one of a number of factors influencing water availability. A similar complexity of factors was discussed by Felix FitzRoy (with Franz), who presented *Desertification and climate change: global*
and regional impacts of degradation in the Aral Sea Basin, and concluded that poor management of water for the cotton industry had caused many problems.

In the final session Joerg Kaduk (with Sietse Los) examined the Response of plant phenology to future climate change. They emphasised the importance of the length of the growing season, as leaves mediate large carbon and water exchange fluxes, and this paper provided modelled estimates of change in the growing season due to climate change and changes in carbon uptake. William Burgess, (with James and Mondo) discussed The implications of climate change for groundwater recharge in Botswana. Taking as a start point previous work which predicted severe water stress for Botswana, this paper presented the results of a regional climate model and studied groundwater as well as surface water. They concluded that projected climate change might be neutral, or even result in increased water availability during this century. Finally, Jeff Blackford (Global climate change: Impacts and adaptation- summary and overview) summarised some of the main points of the day, and identified key uncertainties (research gaps) in the area of climate impacts and adaptation.

Overall, the sessions comprised a series of very high quality talks, covering a wide range of climate change issues and leading into excellent discussions. However, attendance at the sessions was very disappointing, especially considering the topicality of the theme. The later sessions were particularly thin, and outstanding talks went largely un-noticed. In the future, we will try and move the times to earlier in the conference week, but feedback on why members did not attend would be most welcome. The organiser would like to thank the invited speakers (Professors Parry and Nicholls) and all the speakers for the time they put into their presentations. Also, thanks to Joerg Kaduk and Mark Pelling for chairing sessions.

Jeff Blackford

Looking ahead to the RGS-IBG Annual Conference 2008

Please see the details of a proposed joint session with DARG for the RGS-IBG conference, August 27-29th 2008 below. This session will hopefully appeal to many group members, and many RGS-IBG members outside our group. Deadline for abstracts is 28th March. We can nominate 'guests' - key speakers who have their registration paid, before the beginning of May, so please think about who you might like to invite under this theme, and let me know.

In addition, the Geography of Leisure and Tourism Research Group is interested in a joint session. If any group members are interested in convening or participating in a joint session with GLTRG, please let me know asap.

Similarly, if any members of the group would like to propose another themed session, especially from the physical geography side, please contact me asap as the deadline for proposals to RGS-IBG is 22nd Feb.

Jeff Blackford


The 2007 IPCC reports have shown, through overwhelming consensus, that global warming is a real and current problem. Developing areas are particularly vulnerable to rapid changes due to a combination of high climatic sensitivity, high social vulnerability, and compounding socio-economic factors that may reduce adaptability (Boko et al. 2007). Projected future climates in Asia, Africa and South America are
highly likely to lead to water and food shortages, increases in health risks and damage to natural ecosystems.

The aim of this session is to draw together the two research groups (CCRG and DARG) and focus on the connections between climate change and developing areas. Papers are invited on any theme relating developing areas and climate change, including:

(1) The science-base of climate change in developing areas, including all aspects of monitoring, modelling and understanding climatic change. Themes could include changing sea-levels, temperature, water balance and the frequency and intensity of extreme weather events.

(2) Impacts of future climate on developing areas, including impacts on health, agriculture, natural and semi-natural ecosystems, water availability, fuel, trade, poverty and political stability. Presentations could also cover the complexities of climate change impacts coupled with 'multiple stresses' caused by other factors, such as urbanisation and rapid industrialisation (Cruz et al. 2007), and the effects of the interactions of climate change and human drivers of environmental change.

(3) Mitigation and adaptation to climate change in developing areas, including social and economic measures, embedding sustainability, 'climate-proofing' policies, specific agricultural adaptations and health policies.

(4) Implications of changing policy and land use in developing areas to climate change, including industrialisation, energy consumption, deforestation and afforestation, agriculture and fire and their role in the global climate system.

References


Website ([www.rgs-ccrg.org.uk](http://www.rgs-ccrg.org.uk))

Our website has experienced some further development and is now managed by our new Web Editor Rizwan Nawaz ([n.r.nawaz@leeds.ac.uk](mailto:n.r.nawaz@leeds.ac.uk)). Riz has handed over the day-to-day management to Eran Md. Sadek [gyessm@leeds.ac.uk](mailto:gyessm@leeds.ac.uk). See report from the AGM

**Points of interest**

**CCRG Easter Meeting and Postgraduate Workshop**

'African Climate and Climate Change: Physical, Social and Political Perspectives'
The 2008 Easter meeting of the Climate Change Research Group is to be hosted by the Walker Institute for Climate System Research at the University of Reading, over 2 days on 1-2 April 2008.

The meeting is open to all academics and PhD students working in this field. Participants are invited to submit an abstract (of no more than one page) for a 15 minute presentation. In addition, there will be 4 plenary speakers and break-out sessions to allow further discussion. There will be an optional conference dinner on the evening of the first day.

Plenary speakers:

1. **Richard Washington** - OUCE, University of Oxford
2. **Dominic Kniveton** - Department of Geography, University of Sussex
3. **Andy Morse** - Department of Geography, University of Liverpool
4. **Chasca Twyman** - Department of Geography, University of Sheffield

Costs: £20 registration, plus £25 conference dinner (optional – includes 3 course dinner, coffee and wine). Delegates are asked to fund their own accommodation, although advice as to where will be offered. There will be a competition for PhD students, two of which will receive full funding (travel, accommodation, registration and dinner).

Please see [http://www.met.rdg.ac.uk/~charlie/africa_meeting08.html](http://www.met.rdg.ac.uk/~charlie/africa_meeting08.html) for more information, and to register.

Alternatively complete the attached registration form and return to C.J.R.Williams@reading.ac.uk


The Urbanisation and Climate Change theme will be held as part of the special session on "Climate change from the geological eras to the 21st century: characteristics, impacts and governance". The theme aims to bring together findings from original research in areas of physical and human geography and inter-disciplinary research activities to help further understanding of urban climate and the relationships between climate, the urban environment and urban society. Papers within this theme are welcome on aspects of the physical environments of cities and related human-environment interactions, particularly those covering:

(i) physical climate and climate-related processes operating in urban environments, including projections of future urban climates;

(ii) human-environment interactions associated with expressions of climate-related risk and vulnerability in the urban environment; and

(iii) applications of climatic knowledge in urban design and other climate adaptation options, including the cultural, social and political dimensions of adapting to climate change.

This session is sponsored by CCRG (Climate Change Research Group of the Royal Geographical Society with the Institute of British Geographers) and IAUC (International Association for Urban Climate).
Deadline for abstract submission is 31 May 2008. Interested parties should clearly state that they would like their submission considered under the “Urbanisation and Climate Change” theme within the climate IYPE special session.

CCRG organiser and contact: Sarah Lindley <sarah.lindley@manchester.ac.uk>

Collaborations with RMetS
The Royal Meteorological Society has very kindly decided that, in the interest of cross-society collaboration, CCRG members will be made welcome at any of the Met Soc's monthly London meetings (Wednesday afternoons) with no charge for the meeting (or even for the refreshments!). Meteorology and climatology is a fairly small science area so it would be good for everyone to know what everyone else is up to!
Many thanks to Howard for his liaising with the RmetS!

Member activities
Martin Kernan is the Science Co-ordinator Euro-limpacs, an EU funded Integrated Project over 5 years (we are currently in Year 4) and it is focused on the effects of climate change on freshwater aquatic ecosystems (rivers, streams, lakes and wetlands) across Europe. The Project considers not only the direct effects of climate change but also the interactions between climate change and other stressors (hydrological / land use change, eutrophication, acidification and toxic substances).
http://www.eurolimpacs.ucl.ac.uk/

Other activities

Book Proposal
An edited volume based on CCRG members research interests is planned. Under the title 'Climatic change: process and response' papers will be invited from all the contributors to the RGS-IBG meetings in 2005-7, but is also open to all group members in the first instance, and depending on the response to the first call, more widely and internationally. This will include papers on the science of climate change, past and present, impacts and adaptation. Any enquiries or offers of papers from CCRG members should be e-mailed to Jeff Blackford (Jeff.Blackford@manchester.ac.uk).

Meetings
During the next 12 months, CCRG meetings will include a joint session with the Developing Areas research Group, a themed meeting on climate change and business, and possibly a meeting on 'Radical Ideas' in climatic change research. Further details will be circulated and posted on the group web pages.

Meetings
RGS

RMetS meetings
http://www.rmets.org/event/calendar.php
General Meetings

EGU General Assembly
13 – 18 April 2008 – Vienna, Austria
http://meetings.copernicus.org/egu2008/
Last year there were around 30 themed climate-related sessions. This year, CCRG members may be interested in the proposed session "Century to millennial scale climate variability: external forcing or internal dynamics?". Contact co-convener Jeff Blackford if you are interested in contributing (Jeff.Blackford@Manchester.ac.uk).

AAG 2008
15-19 April 2008, Boston, Massachusetts
Abstract deadline 31.10.2008
http://www.aag.org/annualmeetings/2008/index.htm

AGU 2008 Ocean Sciences Meeting
2–7 March 2008, Orlando, Florida, USA

AGU 2008 Joint Assembly
27–30 May 2008, Fort Lauderdale, Florida

Groundwater & Climate in Africa
INFO: E-mail: info@gwclim.org Web: www.gwclim.org
Current monitoring and assessments of the impacts of climate variability and change on water resources commonly exclude groundwater. This omission is of particular concern in Africa where current usage and future adaptations in response to climate change and rapid population growth, place considerable reliance upon groundwater to meet domestic, agricultural, and industrial water demands.
The conference seeks to bring together water and climate scientists from research/academic institutions, government departments, and private sector as well as representatives from international agencies, donors and consortia in order to share knowledge and expertise, and thereby improve current understanding of the impact of climate variability and change on groundwater resources in Africa.

Summer schools and courses

METIER
For more training courses of PEER, the Partnership for European Environmental Research, see the METIER (METhods of Interdisciplinary Environmental Research) home page:

Links to meeting calendars

Information service of the EGU
http://the-eggs.org/events.php

AGU Geophysical Year Calendar
http://www.agu.org/cgi-bin/gycal

European Geosciences Union (EGU)
Meeting Overview: http://www.copernicus.org/EGU/meeting_overview.html
COSIS Meeting Calendar for the European Geosciences Union:
http://www.cosis.net/members/mc/showEvents.php?karealist=3,5&p=the%20European%20Geosciences
%20Union&ex=1&hf=egu_y

AGU meetings
http://www.agu.org/meetings/

Global Change Master Directory
Global Change Calendar: http://gcmd.gsfc.nasa.gov/ConferenceCalendar/confs_date.html

Institute for Technology Assessment and Systems Analysis
Conferences announcements: http://www.itas.fzk.de/eng/infum/gch_act.htm

Recent publications of CCRG members


Pelling M, High C, Dearing J, Smith D., 2007, Shadow spaces for social learning: a relational understanding of adaptive capacity to climate change within organisations Environment and Planning A advance online publication, doi:10.1068/a39148


**Recent grants of CCRG members**

Dr Charles Williams, Walker Institute for Climate System Research, NCAS-Climate, University of Reading: “Understanding rainfall variability and extreme events over southern Africa”, Dorothy Hodgkin's Research Fellowship from the Royal Society, starting January 2007 4 years,

**Funding opportunities**

**General**

**AHRC**
Specialist awards category of the collaborative research training scheme. Up to £10,000. Deadline: 31 March 2008. [www.ahrc.ac.uk/university_staff/postgrad/collaborative_research_training_Scheme.asp](http://www.ahrc.ac.uk/university_staff/postgrad/collaborative_research_training_Scheme.asp)

**Royal Society**
Dudley Stamp Memorial fund, to assist with research or travel. Grants up to £500 each. [www.royalsoc.ac.uk/funding.asp?id=2938](http://www.royalsoc.ac.uk/funding.asp?id=2938)

**Joint projects**
Joint projects between research teams in the UK and Western Europe; Central and Eastern Europe and the former Soviet Union; South America and Cuba; Hong Kong, India, Japan, Korea, Ghana and Tanzania; Taiwan, France and Brazil. Up to £6,000 Deadline: Generally: 12 March, 12 June, 12 September and 12 December in 2008, but: Taiwan (NSC) 12 March; France (CNRS) 12 March [www.royalsoc.ac.uk/funding.asp?id=2344](http://www.royalsoc.ac.uk/funding.asp?id=2344)

**BGRG**
Postgraduate research grants of up to £500 to cover conference grants, course attendance, field visits etc. Deadline: 31 March 2007. [www.geomorphology.org.uk/pages/funding/opportunities.html](http://www.geomorphology.org.uk/pages/funding/opportunities.html)

**Research grants up to £1,000**
Small projects, etc. [www.geomorphology.org.uk/pages/funding/researchgrants](http://www.geomorphology.org.uk/pages/funding/researchgrants)

**Libyan Studies**
Grants for research on the archaeology, history, linguistics and natural history of Libya. Up to £2,500 each. Deadline: 1 April 2008. [www.britac.ac.uk/institutes/libya](http://www.britac.ac.uk/institutes/libya)

**British Academy**
Small grants to cover costs of research at postdoctoral level in humanities and social sciences. Up to £7,500. Closing dates 15 October, 15 January, 15 April. [www.britac.ac.uk/funding/guide/srg.html](http://www.britac.ac.uk/funding/guide/srg.html)

**British conference grants.**
World congress grants, up to £20,000. Overseas conference grants, up to £900. Deadline: Closing dates 15 October, 15 January, 15 April. [www.britac.ac.uk/funding/guide/conferences.html](http://www.britac.ac.uk/funding/guide/conferences.html)
Climate Change Research Group
Royal Geographical Society/Institute of British Geographers

Subscription announcement

Dear Member of CCRG

Subscriptions remain unchanged for the Subscription Year 2007/08, which runs from 1 September to 31 August to facilitate reporting at the Group’s AGM (held at the RGS/IBG Annual Conference), and will be eligible from all members of the Group (including members of RGS/IBG), to support and develop the activities of the Group:

Waged: £10 per annum
Unwaged/students: £5 per annum

We also offer a three-year subscription option:

Waged: £30 for the period 1 September 2007 – 30 August 2010
Unwaged/students £15 for the period 1 September 2007 – 30 August 2010, with the caveat that members gaining full-time employment during this period would be expected to pay the balance of full subscription for any remaining complete years.

The preferred method of payment is by personal cheque (made payable to: Climate Change Research Group). Please remit your subscription to me at the address given below. Please also include your full contact details with your cheque, as per the form attached, and I will acknowledge receipt of the cheque by email.

Overseas members should pay in sterling if possible. If this is difficult, please contact me.

If you wish to set up a Standing Order through a UK bank, please email me (with contact details) and I will email instructions to you.

Yours sincerely

Dr Duncan McGregor
Treasurer, Climate Change Research Group
8 October 2007

Contact details:
CEDAR, Department of Geography, Royal Holloway, University of London, Egham, Surrey TW20 0EX, UK

Tel: (+44 (0)1784 443573; Fax: (+44 (0)1784 472836; email d.mcgregor@rhul.ac.uk
Climate Change Research Group
Royal Geographical Society/Institute of British Geographers

Subscription form  [Please circle the chosen option below]

A. I wish to pay by personal cheque (enclosed)

Please circle payment option:

Waged: £10 per annum

Unwaged/students: £5 per annum

Waged: £30 for the period 1 September 2007 – 30 August 2010

Unwaged/students £15 for the period 1 September 2007 – 30 August 2010. I understand that if I gain full-time employment during this period I will be expected to pay the balance of full subscription for any remaining complete years.

B. I wish to pay annually by Standing Order. Please email d.mcgregor@rhul.ac.uk for details.

Contact Details

Name: ............................................................... Prof/Dr/etc .......................

Unwaged status: undergrad/postgrad/retired/other: please circle as appropriate

RGS/IBG Member/Fellow: YES NO Please circle as appropriate

Address for correspondence: .................................................................
                                    .................................................................

Tel: ......................................... Fax; .............................................

Email address(es): .................................................................

Signature: .................................................................
Professor David Read, FRS Chair of the Royal Society working group on land carbon sinks. As evidence for the link between atmospheric greenhouse gases and climate change has increased, international efforts have focused on ways in which anthropogenic emissions of greenhouse gases, particularly carbon dioxide, can be reduced. The science underpinning climate change and what further work must be done in this vital area to ensure that the gaps in our knowledge are reduced. Annex 1 Land carbon sinks and the international climate change process 1.1 Overview of the Framework Convention on Climate Change and the Kyoto Protocol 1.2 Issues raised by the inclusion of land carbon sinks in the Kyoto Protocol. See more of Royal Geographical Society (with IBG) on Facebook.

Steel-making is the biggest industrial emitter of carbon dioxide - so the search is on for a clean, green method of turning iron ore into steel. Listen to today's #39WaysToSaveThePlanet with Tom Heap and Dr Tamsin Edwards, and find out how a group of Swedish companies are already doing this: http://orlo.uk/Oy8Km. Royal Geographical Society (with IBG). 20 hrs ·. But what do some expert geographers think of this in practice? Read their points that take the show's themes a bit further: http://orlo.uk/tB25F. See All. Photos. Members of the Climate Change Research Group should put forward their most effective and engaging ways of communicating the issue of climate change including its impact, solutions, policy and education. Entries will be judged by a panel of the group’s committee members, as well as Alan Evans, the Guardian’s Environment Editor, and Leo Hickman, Director and Editor of Carbon Brief. Winning entries will be published on these sites. Entries can be short or long form journalism (800-1,200 words), be visual media based, or a combination of the two. Ideas for entries may include, but are not limited