

# VMSG Durham 2012 – annual meeting report

The annual VMSG meeting took place from 4-6<sup>th</sup> January 2012 in Durham. The local organising committee of Ed Llewellin, Claire Horwell, Rich Brown, Kirstie Wright and Pete Tollan did an excellent job of organising and hosting a very successful meeting. Their report follows.

Budd (Uppsala, Sweden) for the poster entitled 'How to make a big explosion: Probing the Toba super-eruption'. Additionally the publisher Springer donated books that were awarded to the best student presentation (talk or poster) in each session. These went to Sam Clark (Durham), Leanne Gunn (Open University), Anna Hicks (UEA), Katie Preece (UEA) and Sandra Karl (Leeds).



Dr Madeleine Humphreys, winner of the Max Hay Medal 2012 from the Min Soc.

Prof John Gamble, VMSG Award Winner 2012 with his award nominator, Prof Jon Davidson, presented by VMSG chair, Prof David Pyle.

Dr Dan Morgan, winner of the Max Hay Medal 2011 from the Min Soc.

The 2012 annual meeting of the Volcanic and Magmatic Studies Group in Durham in early January was a hugely enjoyable and scientifically-rich event attended by nearly 200 delegates from the UK, Ireland and abroad. Delegates presented their most recent findings in six sessions covering virtually every aspect of volcanism from the generation, transport and differentiation of magma within the crust through to the societal impacts of eruptions and emissions. Over the course of two-and-a-half days 49 oral presentations were attentively watched, 97 posters were scrutinised over beer and 6 keynotes were given. The standard, as we have all come to expect, was very high and the diversity, breadth and depth of the research being undertaken by the VMSG community was readily apparent. As is usual for VMSG, student participation was paramount: 50 % of the talks and 60 % the posters were given by PhD students, who made up over half of the attendees. The Bob Hunter prize for the best student talk went to Claire McCleod (Durham) for her presentation entitled 'Compositional and age (U-Pb) constraints on the nature of the Central Andean continental crust', and the Geoff Brown prize for best student poster went to David

The VMSG award, given out each year to a member of the community who has made an outstanding contribution to science went to Prof. John Gamble (University College Cork) for his contribution to volcanic geochemistry, in particular his work on andesites as building blocks for continental crust. Also, we were honoured to be able to present two medals from the Mineralogical Society during the conference. The first, the Collins medal, was awarded to Barry Dawson (University of Edinburgh) for 'an outstanding contribution to mineral sciences during a long and active career', and the second, the Max Hey medal, was awarded to Dan Morgan (2011, University of Leeds) and Madeleine Humphreys (2012, University of Oxford). This was a great chance for the community to recognise and celebrate lifetime contributions and early career excellence.

Other notable highlights included the conference banquet in the Great Hall of the Castle. This is an imposing Harry Potter-esque dining hall with coats of arms, racks of weapons and paintings of past luminaries displayed on the walls. The fantastical atmosphere was much enhanced by the raging gales outside. Also, in collaboration with Durham Brewery, the committee were able to have a special VMSG beer brewed, which was wittily called (groan) Erta Ale (geddit?): it tastes lava-ly (even bigger groan). Hope you managed to save your bottle—a collector's item for sure.

The Durham organising committee would like to kindly thank again: all delegates for contributing scientifically and socially to such a successful event; the VMSG committee for their great support and advice in organising the meeting; and our many industrial and publishing supporters.

See you in Bristol!

#### **New Opportunities**

## Deep Carbon Observatory: calling young researchers!

The DCO is a multidisciplinary, international initiative dedicated to achieving a transformational understanding of Earth's deep carbon cycle,



funded for 10 years through the Sloan Foundation and operated from the Geophysical Laboratory, Carnegie Institution of Washington (Director: Craig Schiffries). Of the Four specialist Directorates, the Reservoirs and Fluxes is probably most relevant to VMSG, steered currently by Eric Hauri and Bernard Marty, but take a look at all of the Directorates. A rolling programme of exciting new postdoctoral positions is available, not only in the USA but globally. Please their see main website https://dco.gl.ciw.edu/ which contains a rapidly updated appearance, DCO regular news and announcements of opportunities; you may have to dig around a bit to find the postdoc links, and perhaps email the Directorate leaders. Adrian Jones (mailto:adrian.jones@ucl.ac.uk) of the VMSG committee can also provide some further details.

#### **Student reports**

#### Lara Blythe, Trinity College Dublin

Firstly I would like to sincerely thank VMSG for providing me with financial support to attend Goldschmidt, 2011. This year, the conference was held in the beautiful city of Prague, in the Czech Republic. The Prague Congress Centre gave stunning views across part of the city's skyline, and provided an apt setting for the conference and the presentation of cutting edge research. The title of my Ph.D. is 'Remobilisation of Crustal Volatiles by Magmatic Activity', and I am currently in the



final stages of my studies. As (co-)author on three contributions to the meeting, the presented conference me with an unmissable opportunity to receive feedback and encouragement on the projects I have been involved in. All of these projects are in one aspect or another related to work I am doing for my PhD, and all of the presentations,

(both oral and poster presentations) were very well received at the conference. I listened to many interesting talks, some of which were related to my work, and one in particular provided me with new aspects to consider in my own work. Attending the conference also enabled me to meet with some of the international co-authors I am working with. We had several meetings to discuss, develop and refine a manuscript, which was extremely productive and rewarding. Moreover, the meeting gave me the opportunity to continue networking within the gas geochemistry community and meet some extremely well known scientists, whose work has been an inspiration to me, but whom I had never met in person so far. Overall, my experience of Goldschmidt 2011 was a very positive one, with direct implications for the work I am doing for my PhD. I am very grateful to VMSG for the award of £300, which covered my registration fees and eased the financial pressure of this conference visit considerably.

#### VMSG fieldtrips for 2012

Adamello Massif, Italy – <u>open for registration</u>

26<sup>th</sup> August – 1<sup>st</sup> September 2012 Leader: Jon Blundy

#### New VMSG Chair – Prof Andy Saunders

I was delighted to be asked to be Chairman of VMSG. I'd like to thank my predecessor, David Pyle, and the members of the committee, especially Kate Dobson, for the smooth transition of power. Being involved in such an active specialist group, with a large number of very enthusiastic members, is always a pleasure, and I hope that I can rise to the occasion. I look forward to helping to make Bristol 2013 a success, and planning and implementing the Big One for 2014, the 50<sup>th</sup> Anniversary bash.

My interests are manifold, but in terms of research I mostly study LIPs. That is, large igneous provinces. Especially basaltic ones. And especially ones that are contemporaneous with mass extinctions.

It's not that I have a morbid fascination with mass



extinctions. but I am keen to understand whether or not large scale volcanism, with its attendant degassing, capable is of knocking out large swaths of the Earth's biota ľm not all convinced

that the Chicxulub impactor could have caused the KT extinction without the help of the Deccan Traps and, so far, no one has convincingly demonstrated an impactor at the time of the end-Permian mass extinction. Or the end-Triassic, for that matter. Whether or not mantle plumes are involved in LIP formation is another argument. I believe that they mostly are, but I'm willing to believe that not all LIPs are plume generated. Other current research interests include the composition of aseismic ocean ridges (Emperor-Hawaii, Kerguelen, Louisville), and the interaction between intrusive sills and organic-rich shales, Skye.

I look forward to ideas on how we can make VMSG even more successful. In this regard, ideas for the 2012 Frontiers meeting hosted by the Geological Society would be particularly welcome.

### New Committee Members

Becky Williams (University of Leicester)

Thank you to everyone who voted, giving me the



opportunity to be involved in VMSG the committee. I am excited to be an Ordinary Member in the society which supported me so well

through my PhD on pyroclastic density currents. Currently, I am a Teaching Fellow and PDRA at the University of Leicester. My current NERC-funded research looks at the geochemistry and Hf-isotope signature of the Louisville Seamount Chain in order to understand the origin and the evolution of the volcanism. I look forward to help continue the future success of the group and ensuring that new and early career scientists remain the heart of the organisation.

#### Madeleine Humphreys (University of Oxford)

I'm a Royal Society Research Fellow at the University of Oxford. I have quite diverse research interests, ranging

from shallow magmatic degassing and magma mixing to the physical and chemical evolution of gabbroic crystal mush. I did my PhD at Bristol on magmatic processes at Shiveluch Volcano. Kamchatka. and then moved to Cambridge on a college Junior Research Fellowship, where started to work on



intrusive rocks (mainly the Skaergaard Intrusion) alongside the active volcanism, which focused on Soufrière Hills Volcano, Montserrat. I moved to Oxford in January 2011. Currently I'm trying to understand how the oxidation state of magma may change as it moves through the crust, and working on a method to quantify the importance of mafic magma during magma mixing.

#### Adrian Jones (UCL)

Adrian is the Hayman Reader in Petrology and teaches



hard rock courses at UCL. His research in petrology started in Durham, then Chicago and CalTech. He has broad experience in mineralogical and geochemical tracers for pathways of carbon from crystallisation of diamond and fluidmetasomatism in mantle rocks to carbonatite volcanism and the

volcanic degassing of  $CO_2$ . He is especially interested in diamond in meteorites, effects of shock-melting during impacts, spherules, carbides, carbonates and rare earth minerals. He is Director of an experimental laboratory and serves on the Executive Committee of the Deep Carbon Observatory at the Carnegie Institute Washington. webpage <u>http://www.ucl.ac.uk/vco2</u>

#### Editorial

Please forward any articles, comments or notices of events, workshops and conferences before 11<sup>th</sup> May '12.

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