

## ROBERT MYHILL

Department of Earth Sciences  
University of Cambridge  
Bullard Laboratories  
Madingley Rise  
Cambridge, CB3 0EZ  
UK

*phone* +44 (0)7841 714164  
*fax* +44 (0)1223 360779  
*email* [rm438@cam.ac.uk](mailto:rm438@cam.ac.uk)

### EDUCATION

*Current*

PhD Research at the University of Cambridge

*The Mechanisms of Deep-Focus Earthquakes*

I am researching the causes of earthquakes occurring at depths greater than 300 km through an integrated analysis of seismic distributions, focal mechanisms and the pressure-temperature regimes within which these events occur. I will combine this analysis with geophysical modelling techniques to elucidate aspects of the interaction between subducting plates and the upper-lower mantle boundary.

*Advisors: Dan McKenzie and Keith Priestley.*

*2004-2008*

MSci + BA Peterhouse, University of Cambridge, Class of 2008.

Natural Sciences (Physical; 4 years).

Part III: First Class. 1/36 in Class (Geological Sciences).

Part II: First Class. 1/39 in Class (Geological Sciences).

Part IB: First Class (Maths, Stratigraphic Geology, Mineralogy, Petrology).

Part IA: First Class (Geology, Maths, Physics, Chemistry).

### SELECTED GRANTS AND AWARDS

*2010*

The Kingsley Bye-Fellowship, Magdalene College Cambridge.

*2008*

The Hugo de Balsham Prize for Exceptional Academic Distinction.

The Harkness Scholarship (first-placed Finalist in Geological Sciences, University of Cambridge).

The Huppert Prize in Geophysics.

*2007*

The Henry Wilkinson Cookson Senior Scholarship in Natural Sciences.

The John Reekie Memorial Prize for the best geological fieldwork-based thesis submitted for the first degree at the Department of Earth Sciences.

*2005-2006*

Peterhouse Junior and Senior Scholarships.

*2005-2007*

Departmental Field Mapping Prizes

(5 prizes, from the Arran, Sedbergh, Dorset and Cornwall and Greece Field Trips).

*2004*

The George Watson Prize for Outstanding Scholarship

(Best results, Class of 2004, Sir John Leman High School).

*2003*

St. John Ambulance Grand Prior Award.

### SKILLS

- Competent user of L<sup>A</sup>T<sub>E</sub>X, Microsoft and Serif Office programs.
- Experience of FORTRAN, C, C++ languages, and use of the OpenGL API.
- Experience in BASH and HTML scripting.
- Over 400 hours experience with THERMOCALC.

## PUBLICATIONS AND PRESENTATIONS

### Peer-reviewed journal articles

- 2010 R. Myhill, D. McKenzie, K. Priestley, "Clustering of deep-focus earthquakes in the southwest Pacific".  
*Submitted to Earth and Planetary Science Letters.*
- 2010 R. Myhill, "Constraints on evolution of the Mesohellenic Ophiolite from sub-ophiolitic metamorphic rocks".  
*Geological Society of America Special Publication, accepted.*
- 2010 A. Rassios, Y. Dilek, R. Myhill, D. Ghikas, A. Mpatsi, "Melange Formations beneath the Pindos Basin Ophiolites, Northern Greece: Evidence of an active, rapid decollement emplacement surface".  
*Geological Society of America Special Publication, accepted.*

### Presentations

- 2010 "The search for structure: deep-focus earthquakes". *Cambridge Earth Sciences Graduate Talk.*
- 2009 "Clustering of deep-focus earthquakes in the southwest Pacific". *Poster presentation, American Geophysical Union Fall Meeting.*
- 2009 "Faulting 300 kilometers down: The mystery of deep-focus earthquakes". *Magdalene Parlour Talk.*
- 2008 "Deep-focus earthquakes". *Bullard Laboratories Friday Talk.*
- 2008 "The significance of high temperature low pressure rocks beneath the Mesohellenic Ophiolite".  
*Poster presentation, Institute of Geology and Mineral Exploration (IGME) Field Symposium.*  
IGME Field Symposium: Ophiolites 2008. *Field demonstrator and member of the organising team.*  
Köln undergraduate field trip to Greece. *1-day invited field demonstrator.*

## RELEVANT EXPERIENCE

- 06/07-01/08 Masters Thesis at the University of Cambridge: Metamorphic Development beneath the Mesohellenic Ophiolite. I obtained a high First (80%) for this project.  
*Advisor: Dr. Timothy Holland, University of Cambridge.*
- 06/06-01/07 Bachelors Thesis at the University of Cambridge. Independent mapping project and industrial work experience: Vourinos, Northern Greece. I obtained the top First in the year for this project (80%).  
*Advisors: Dr. Alan Smith, University of Cambridge and Dr. Anne Rassios, IGME.*
- 07/05-08/05 Field geologist, British Geological Survey. Paid appointment for the Tellus Project, part of a national environmental survey completed in 2006.  
*Advisors: Louise Ander, Sean Quigley, Sophia Passmore (British Geological Survey).*
- 2008-present Supervisions given in the following courses: *Geology (IA), Hydrosphere (IB), Tectonics and Structural Geology (IB), Tectonics (II/III) and Revision and Essay Skills (IA/IB/II/III).*  
Demonstrated practicals for the following courses: *Tectonics and Structural Geology (IB), Tectonics (II/III) and Seismology (II/III).*  
Field Demonstrator: *Ketton (IA), Arran (IA), Sedbergh (IB).*
- 2005-present 250+ days fieldwork experience (as of May 29, 2010) as demonstrator, field guide, employee, researcher and student.  
*(Locations include: Ireland, Iceland, Greece, Dorset, Cornwall, Sedbergh, and the Isles of Arran and Skye.)*

## OTHER INTERESTS

- First Aid: I am presently Duties Coordinator for Cambridge LINKS, the student division of St John Ambulance, having been a member since 1998.
- Magdalene College MCR: I am currently MCR Treasurer.
- Outreach: I volunteer for Time Truck (the student geological outreach organisation) and also SEEK (Science and Engineering Experiments for Kids).
- The Sedgwick Club (The University of Cambridge geological society): As an undergraduate I was president of this society, and I remain an active member.
- Foreign travel: I particularly enjoy my time in Greece, and spent my final year at undergraduate level learning Modern Greek at the Department of Medieval and Modern Languages.