



Durham University  
**St Mary's College**  
Travel Bursary Report Form Pro Forma

Name: Alexander J Baker Degree: BSc Geology Year of study: 3

Amount awarded: £170 Total cost of trip: £176 Duration of trip: 1 week

**Brief summary of project:**

From the 7<sup>th</sup> - 14<sup>th</sup> January, 2009, I attended a geological field course in Cyprus. This comprises 10% of 'Dyanmic Earth 1', a level three module in the Department of Earth Sciences, which equates to 1% of my degree. Flights ran between Manchester and Paphos airports, and accommodation in Cyprus was provided by the Atlantica Miramare hotel in the town of Limassol.

**Brief description of activities:**

The field party was split into two groups and the field course was comprised of two separate three-day excursions. The first (days 1-3) was led by Dr. Howard A. Armstrong; the second (days 4-6) by Dr. Colin G. Macpherson. Day 1 was spent north of the Troodos Mountains, where I was introduced to the recent geological history of Cyprus and examined different scales of climate change evidenced in rocks formed during the Miocene epoch (5-23 million years ago). This work relates to a project I am currently undertaking in a different module. Days 2 and 3 were spent correlating the sedimentary rock sequences in the Khirokitia and Pissouri Basins and interpreting the environments in which they were deposited. This was assessed by a group presentation and the production of a poster presenting group findings. Days 4, 5 and 6 were spent in the Troodos Mountains and Troodos Forrest looking at the Troodos ophiolite, a section of ancient oceanic crust and mantle material which has been emplaced onto land by tectonic forces. I saw evidence for different stages of melting of mantle material and of mineralisation. I also observed what is known as the 'Moho' - this is the transition zone between Earth's crust and mantle. This second half of the field course was assessed by a short test. I am enormously grateful to St. Mary's College Travel Bursaries Committee and to alumni who have helped me.

**Personal development statement:**

I am putting together applications for postgraduate research degrees in climatology. I will require some experience in studying past climate change in the field as well as in the classroom, which this field course provided. I have delevoped my understanding of rapid and gradual climatic changes, and how they are recognised in the 'rock record'. I have learnt to think of earth as a dynamic system.