

Structure and Emplacement of High-Level Magmatic Systems

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Preface

LASI II (*Laccoliths, Sills and Dykes*) was held on the Island of Skye, Scotland, on 1–3 April 2006. Building on the success of LASI I held in 2002 at TU Bergakademie Freiberg, Germany, 40 participants from around the world descended on Portree for a combined workshop and field trip to examine the classic Paleocene sill complexes, led by Donny Hutton, Ken Thomson and students from Birmingham University. Papers from the LASI I meeting in Freiberg, Germany were published by the Geological Society in 2004 (Geological Society, London, Special Publication **234** edited by C. Breitkreuz & N. Petford).

LASI II provided an opportunity to discover how the study of high-level magmatic systems had developed over the 4 years since Freiberg. With contributions on physical geology, igneous petrology, volcanology, structural geology, crustal mechanics and geophysics, the 43 presentations at the Skye workshop covered the entire gambit of geological processes associated with the shallow emplacement of magma. Arrangements for LASI III, to be hosted by Italian colleagues on Elba island, are already well underway (<http://www.dst.unipi.it/dst/rocchi/LASI3/Home.html>).

LASI II (the difficult second meeting) would not have happened without the organizational drive and hard work of Ken Thomson. Ken's specialism was

at the interface between geophysics and physical geology, as applied to the nature and geometry of sills and other intrusions. His work was interdisciplinary, thought-provoking and colourful, often best enjoyed through paper-framed spectacles with green and red plastic lenses! Ken provided a conduit linking two subject areas distinguished largely by their historical lack of cross-over, namely reflection seismology and volcanology. In pioneering the transfer of knowledge between the two, Ken was at the forefront of a research area set to become increasingly relevant as the need to understand better the role of high-level intrusions in thermal maturation, storage and trapping of hydrocarbons grows.

Tragically, Ken Thomson died on 18 April 2007, just as the first revisions from authors were arriving at Birmingham. Ken's hand runs deep through this volume and I know he was proud of the work put into the assembled papers by authors and reviewers alike, and grateful of support from the Geological Society, the Volcanic and Magmatic Studies Group, and the IAVCEI commissions on granites and volcanogenic sediments. This Special Publication is dedicated to him.

Ken is sadly no longer with us. But LASI lives on.

NICK PETFORD

Obituary: Dr Ken Thomson 1966–2007

It was a huge shock to us all when Ken Thomson died suddenly while at work in April 2007. Ken was a familiar face in volcanology circles, and co-organized the highly successful LASI II conference (the inspiration for this Special Publication). It is a great shame that the geological community has lost such a free thinker.



Ken began his career as a medic at Manchester, but realized his true calling and transferred to Geology, graduating in 1990. He then moved to Edinburgh, where his PhD thesis concentrated on basin dynamics of the Moray Firth. After completing his PhD he took up a position at the University of Oxford as the BP Exploration Junior Research Fellow in Geophysics, before moving on to a lectureship in petroleum geology at Durham in 1995, and then finally to Birmingham in 1999.

His enthusiasm for geology was abundant and his research eclectic. He was best known in volcanology and igneous circles for using oil industry offshore three-dimensional (3D) seismic data to pioneer the development of sophisticated high-resolution 3D images of buried volcanic fields and sill complexes. He realized that this kind of visualization would give unprecedented access to the geometry and architecture of unexposed sill complexes, and help us in understand their emplacement and associated magma flow. This led to a number of key breakthroughs including a paper published in 2004 looking at the emplacement of saucer-shaped sills from the NW Atlantic Margin, which showed that sills emplaced as a series of lobes similar to those seen in lava flows. His work was clearly beginning to provide significant insights and was tackling some long-standing issues in emplacement of sill complexes. The final major paper before his death gave very convincing evidence for an interconnected plumbing system of sills and dykes feeding past fissure eruptions in the now submerged approximately 60 Ma flood basalts of the NW Atlantic Margin.

The innovations of Ken's research were not restricted to igneous intrusions. Using the visualization techniques he developed for igneous bodies and making use of the otherwise unexploited top few tens of metres of seismic data, he was able to help the Institute of Archaeology and Antiquity at the University of Birmingham to reconstruct a vast submerged landscape in the southern North Sea. It is a particular tragedy that Ken's death came just a week before the work he pioneered was the subject of a 'Time Team Special' on Channel 4.

Ken was proud of his Doncaster roots. He has been described, and will be remembered, as an archetypal Yorkshireman and a traditionalist. His mild-mannered unassuming persona and unique sense of humour endeared him to a great number of people.

He is greatly missed, as both a good friend and colleague.

NICK SCHOFIELD,
CARL STEVENSON
& DONNY HUTTON