

UNIVERSITY OF PORTSMOUTH

SCHOOL OF EARTH & ENVIRONMENTAL SCIENCES

Undergraduate & Postgraduate Programmes

Dave Giles

Principal Lecturer in Engineering Geology

Portsmouth



Faculty of Science

School of Earth and Environmental Sciences

Head of School: Rob Strachan

Geoscience Programme

Applied Geoscience Programme

Environmental Science Programme



School of Earth and Environmental Sciences

- 1963: Department of Geology
*External London University
geology degree*
- 1998: We became the **School
of Earth and Environmental
Sciences**
- We now run 10 undergraduate
courses, 4 MSc courses
- Engineering Geology &
Geotechnics celebrating 45 years
in 2012



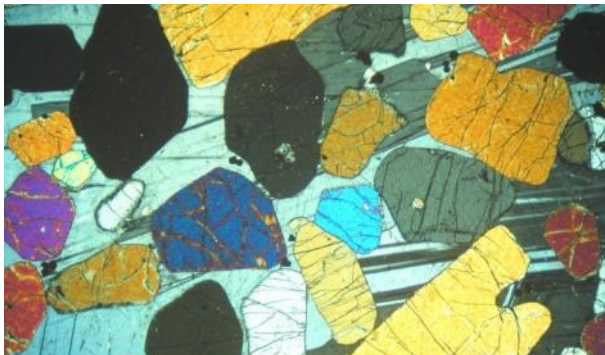
Staff and Student profile

- c. 400 Undergraduate Students
- 60 Postgraduates (MSc and PhD students)
- 24 Academic Staff
- 15 Support Staff
- All located in Burnaby Building
- Nationally, we supply just over 6% of undergraduate geology places



Geoscience Honours Degrees

- BSc(Hons) Geology
- BSc(Hons) Palaeobiology & Evolution
- *Both courses fully accredited by the Geological Society of London*



Applied Geoscience Honours Degrees

- BSc Geological Hazards
- BEng Engineering Geology & Geotechnics
- All courses fully accredited by the Geological Society of London



BSc (Hons) Geological Hazards



Introduction to *Geomechanics* - L2



Volcanology & Seismology- L2



Geohazard Systems - L2



Geological Hazard Management & Remediation - L3



GIS & Remote Sensing - L3



Professional Practice in *Geological Hazards* - L3



Subsidence and Landslide Risk Assessment - L3



Independent final year project - L3

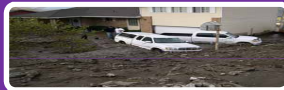
BEng (Hons) Engineering Geology & Geotechnics



Soil Mechanics - L2



Rock Mechanics - L2



Site Investigation - L2



Design of underground spaces - L3



Geotechnical Engineering - L3



Landslide Analysis & Remediation - L3



Contaminated Land - L3



Independent final year project - L3

Applied Geoscience Masters

- **MSc Geological & Environmental Hazards**
- **MSc Contaminated Land**
- **MSc Engineering Geology**
- **MSc Crisis & Disaster Management**
(run jointly with School of Business)



MSc Geological & Environmental Hazards

SEES

- Geohazard Management & Remediation
- Volcanology
- Seismology

- Geoscience Risk Analysis
- Rock & Soil Mechanics
- Landslide Hazard Analysis

- Catastrophic Geological Events
- Groundwater Hydrology
- Geohazard Data Modelling
- Remote Sensing & GIS

Thesis



MSc Engineering Geology

SEES

- Fundamentals of Contaminated Land
- Ground Engineering
- Ground Investigation & Assessment

- Geoscience Risk Analysis
- Rock & Soil Mechanics
- Landslide Hazard Analysis

- Rock Engineering
- Engineering Geomorphology
- Geohazard Data Modelling
- Remote Sensing & GIS

Thesis



MSc Contaminated Land

SEES

- Fundamentals of Contaminated Land
- Chemistry of Contamination & Pollution
- Ground Investigation & Assessment

- Geoscience Risk Analysis
- Principles of Soil Behaviour
- Groundwater Management & Protection

- Topics in Applied Geosciences
- Waste Disposal & Remediation
- Environmental Auditing & Assessment
- Remote Sensing & GIS

Thesis



MSc Crisis and Disaster Management

SEES

- Hazards, Vulnerability, Risk and Disasters
- Organisational Risk
- Project Risk

&

- Business Continuity and Crisis
- Management
- Crisis management Study Visits

BS

- Techniques for Disaster Management
- Natural Disasters
- Financial Planning for National Disaster
- Research Methods

Thesis

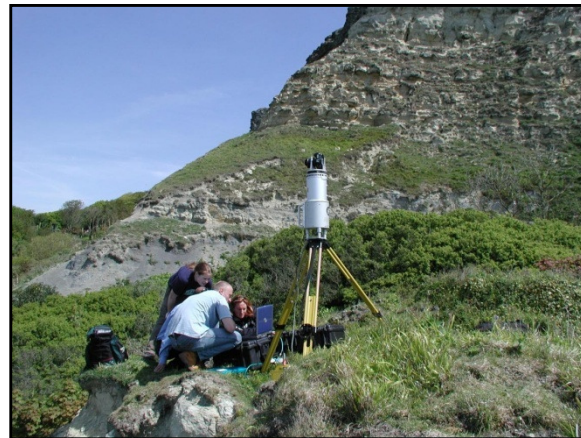
MSc
Crisis and Disaster Management



Fieldwork

Current programme

- Central Spain
- SE Spain
- Isle of Wight
- Cyprus
- Germany
- Italy
- Hong Kong
- Cornwall
- Scotland
- Greece
- French Alps
- Provence
- etc



Masters Overseas Study Tours

MSc Engineering Geology (EG)

Hong Kong

Jan 2010/1

Engineering geology study tour to Hong Kong.

MSc Geological and Environmental Hazards (GEH)

Italy

May 2011

Volcanic and seismic hazard study tour around Etna Sicily.

MSc Contaminated Land (CL)

Cyprus

April 2011

Environmental study tour, land contamination and associated environmental problems.

MSc Crisis and Disaster Management (CDM)

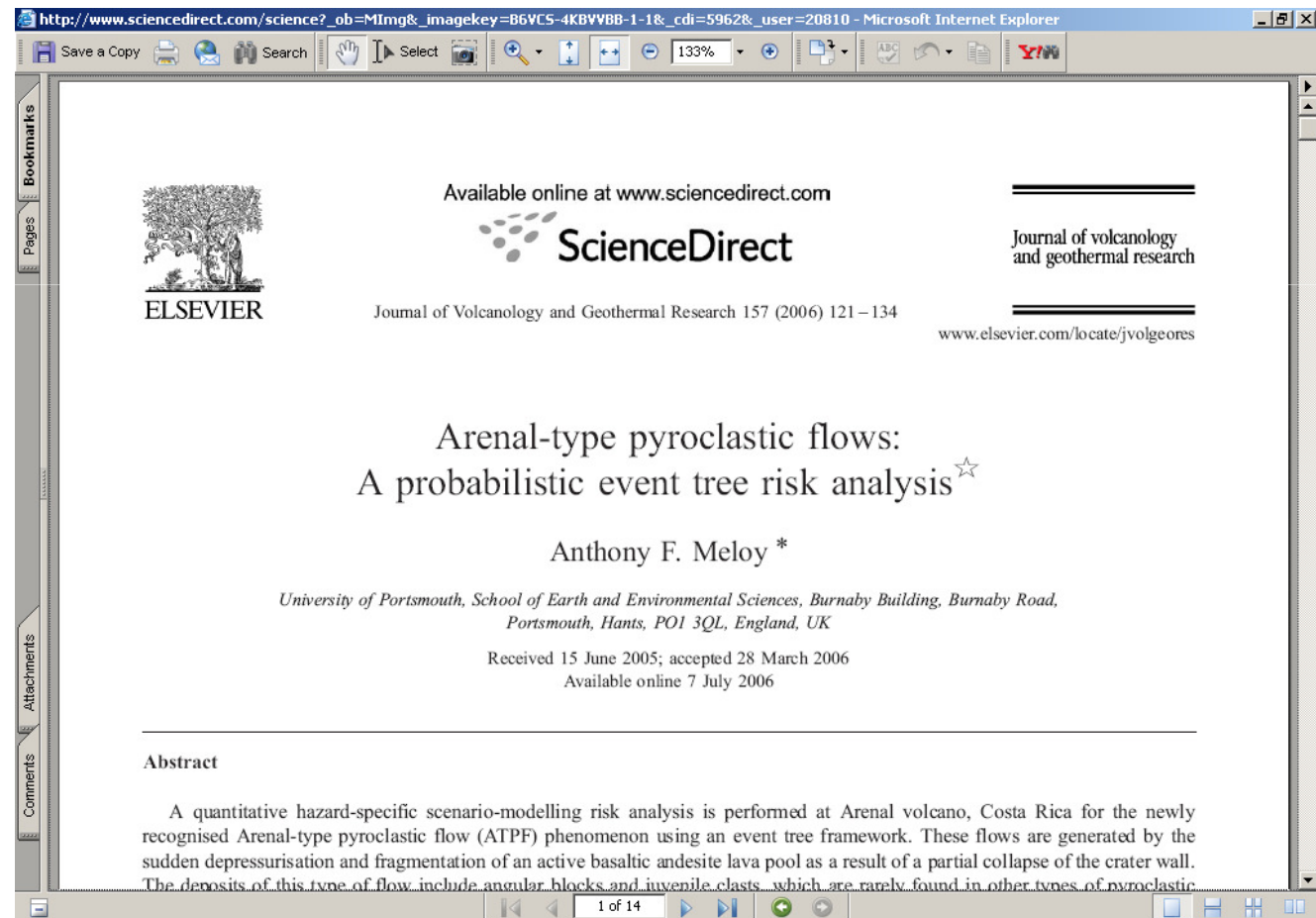
Italy

March 2011

Crisis management issues around Vesuvius Bay of Naples region, Italy.

Dissertation projects

- Previous students have published the results from their research project in peer reviewed journals.



The screenshot shows a web browser window displaying a ScienceDirect article. The browser's address bar shows the URL: http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6VCS-4KBVVB-1-1&_cdi=5962&_user=20810. The page features the Elsevier logo on the left and the ScienceDirect logo in the center. The journal title is "Journal of Volcanology and Geothermal Research 157 (2006) 121–134". The article title is "Arenal-type pyroclastic flows: A probabilistic event tree risk analysis[☆]". The author is Anthony F. Meloy*. The article's location is "University of Portsmouth, School of Earth and Environmental Sciences, Burnaby Building, Burnaby Road, Portsmouth, Hants, PO1 3QL, England, UK". The article was received on 15 June 2005, accepted on 28 March 2006, and available online on 7 July 2006. The abstract begins with "A quantitative hazard-specific scenario-modelling risk analysis is performed at Arenal volcano, Costa Rica for the newly recognised Arenal-type pyroclastic flow (ATPF) phenomenon using an event tree framework. These flows are generated by the sudden depressurisation and fragmentation of an active basaltic andesite lava pool as a result of a partial collapse of the crater wall. The deposits of this type of flow include angular blocks and juvenile clasts, which are rarely found in other types of pyroclastic". The page number "1 of 14" is visible at the bottom.

Dissertation projects

- We encourage students to present the results from their research project at local conferences.

Advances in Geological Remote Sensing
GRSG Annual General Meeting
Geological Society, London.



The use of ground based laser scanning for extracting rock mass characteristics for applied geological applications

By Madeline Clewett
MSc Geohazard Assessment University of Portsmouth

Further Details

www.port.ac.uk/geology

Earth and Environmental Sciences (SEES)

