# Dr. Zoë K Mildon

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#### **CURRENT EMPLOYMENT**

Since January 2018: Lecturer in Earth Sciences, School of Geography, Earth and Environmental Science, University of Plymouth. Module leader for Dynamic Earth (1<sup>st</sup> year undergraduate), lecturer for Natural Hazards (1<sup>st</sup> year), Geosystems (1<sup>st</sup> year) Geophysics (3<sup>rd</sup> year), Tectonics (3<sup>rd</sup> year), Professional Case Studies (3<sup>rd</sup> year) and Fundamentals of Geoscience (foundation year). Field teaching for courses in Spain and various UK locations.

# **QUALIFICATIONS**

- 2018 2019 Postgraduate Certificate of Academic Practice and associated Fellow of Higher Education Academy, University of Plymouth.
- 2013 2017 Institute for Risk and Disaster Reduction (IRDR), University College London PhD Student (NERC Studentship funded).

Thesis title: The link between earthquakes and structural geology; the role of elapsed time, 3D geometry and stress transfer in the central Apennines, Italy

2009 - 2013 University of Cambridge (Peterhouse), MSci- Geological Sciences. 1st class Dissertation title: Microseismicity within the Krafla caldera, north east Iceland: Seismicity within a cluster and non-double-couple events

#### **GRANTS AWARDED**

PATA days ECR travel grant to attend the PATA days conference in Chile, November 2020. Free registration and accommodation, €500 towards travel costs.

Geological Society (Jeremy Willson Charitable Trust and Mike Coward Fund) funding to conduct 1 week of fieldwork in the central Apennines of Italy, September 2018. Value £1220.

JSPS (Japan Society for the Promotion of Science) Short-Term Fellowship, February to June 2016. Four months at International Research Institute of Disaster Science (IRIDeS), Tohoku University, Japan, working with Prof. Shinji Toda (who co-wrote *Coulomb 3.4*, USGS program). Value ~£8500.

NERC PhD Studentship.

### **INVITED TALKS**

Imperial College seminar "Lessons learnt from past earthquakes in Italy on seismic hazard and continental deformation". (January 2020)

Invited speaker for 2020 Hokudan International Symposium on Active Faulting, Awaji Island, Japan. (January 2020)

Participant for "Hydro-geological Hazards and Resilient Urban Growth" UK-China workshop (funded by the British Council/Newton Fund), one week in Xi'an, China (September 2019)

Ludwig-Maximilians-Universität München seminar in the Department of Geophysics (July 2019).

Invited speaker at International Nathiagali Summer College Advances in Geophysics, Islamabad, Pakistan (July 2019).

IPGP (Institut de Physique du Globe de Paris) Doctoral Students Congress (March 2017). "Modelling Coulomb stress transfer between non-planar faults in the Italian Apennines". Travel and accommodation paid by the organisers to attend the meeting.

Imperial College Earth and Planets Seminar Series (January 2017) "Modelling Coulomb stress transfer between non-planar faults in the Italian Apennines". Earth and Planets seminar series

#### PRESENTATION AND ACADEMIC AWARDS

Halstead Award for early career researchers, Geologists Association, 2020. Cash prize £500.

JpGU Student Outstanding Presentation Award, May 2016. Title "How variable normal fault geometry affects fault interaction and stress transfer, using examples from the Italian Apennines".

BGA Postgraduate Talk, 2<sup>nd</sup> prize. September 2013. Talk title "Non-double-couple earthquakes in Krafla volcano, Iceland", I was the only Masters student among 28 speakers to present my research.

Paleontological Association Prize: Awarded to the highest palaeontology mark amongst third year undergraduates, June 2012 at the University of Cambridge.

#### **ACADEMIC ACTIVITIES**

Member of Equality, Diversity and Inclusion committee, University of Plymouth (2020 – present)

Topical editor on Structural Geology and Tectonics for Solid Earth EGU journal (2020 – present)

Earthquake Deformation To SHA (EDITH) committee member and organiser, INQUA funded project (2020 – 2023)

Tectonic Studies Group Early Career Researcher Representative (2020 - present

EGU member and Science Officer for Tectonic and Structural Division (2019 - present)

Faults2SHA (Seismic Hazard Assessment) group member. Attended workshop in Barcelonnette, France, in April 2017.

Earthquake Engineering Field Investigation Team Field Mission member, Amatrice, Italy, Oct 2016.

#### **OUTREACH ACTIVITIES**

Invited speaker for Lyme Regis Fossil Festival, postponed to October 2020.

Interviewed for "Deadly Disasters – Earthquakes" program, produced by CIC media. To be released in 2020.

Speaker at Girls into Geoscience 2019, University of Plymouth. A two-day event aiming to encourage more girls into geoscience. Organised an earthquake workshop in 2018 and 2019.

Speaker at GeoHazards day, organised at the University of Plymouth, Feb 2019. Gave a talk about plate tectonics, earthquakes and mitigating impacts to A-level students (<a href="https://www.youtube.com/watch?v=wSdbIGH\_Xlw&t=3s">https://www.youtube.com/watch?v=wSdbIGH\_Xlw&t=3s</a>).

Interviewed live on the BBC World News Channel about Fuego volcanic eruption in Guatemala. Speaker for Harrow & Hillingdon and Farnham Geological Societies on earthquakes in central Italy. Exhibitor at Royal Society Summer Science Exhibition with a stand entitled "Explosive Earth"

# PREVIOUS EMPLOYMENT

**TEACHING** 

Lecturer for Geological & Geotechnical Hazards module in Natural Hazards MSc, UCL (2017)

Field course co-leader for undergraduate (3rd year) geophysics and seismic hazard trip to central Italian Apennines, UCL (2014 and 2015).

Demonstrator for Earthquake Seismology and Earthquake Hazard course, Master's level, UCL (2014 – 2017).

Demonstrator for Introduction to Matlab course, undergraduate level, Birkbeck College (2017).

Demonstrator for Integrating Science into Risk and Disaster Reduction Module, IRDR, UCL (2014 and 2017)

BASc (Bachelor of Arts and Sciences course) geology tastes class, UCL (2015).

# RESEARCH

Research Assistant, July – September 2013. University of Cambridge, Bullard Laboratories. Continued research from Masters project and working towards a paper (published in 2016).

### **ADMINISTRATION**

Assisting the organisation of IRDR Annual Conference, UCL (2014 and 2015).

Content Editor for IRDR website and blog, UCL (2015 – 2017).

# **REVIEWS FOR JOURNALS**

Geomorphology (2019), Nature Scientific Reports (2018), Tectonophysics (2018, 2019), Journal of Seismology (2018), Geophysical Journal International (2016)