Structural mechanics to seismic interpretation

SUMMARY
A three day special incorporating: fault zone processes - evolution, fault throw, deformation and architecture, an introduction to geomechanics - key concepts, processes and issues, with a final day on the structural interpretation of seismic data, including uncertainties in interpretation and the use of attributes to enhance structural features in seismic images. Each day of the course is designed to follow from the previous, but specific skills will not be built on in subsequent days and therefore tutees have the option of attending one or more days.

COURSE TUTORS
Dr Clare Bond, Professor Rob Butler, Dr Dave Healy, and Dr David Iacopini (University of Aberdeen)

WHO SHOULD ATTEND
Geoscientists and subsurface engineers interested in the structural geology and geomechanics of faults and fractured rock.

LOCATION
The University of Aberdeen, Aberdeen, UK

DURATION
3-day course (Tuesday-Thursday)

TRAINING METHOD
The course will be delivered in a workshop style at the University of Aberdeen. Participants will be encouraged to discuss the impact of the course content in the context of their current roles and any outstanding production/exploration issues within their company.

CONTACT
If you would like to attend this course contact: turnstone@abdn.ac.uk
Structural mechanics to seismic interpretation

TECHNICAL CONTENT
The course consists of 3 days of workshop based material, day 1 - Fault zone processes, day 2 - Introduction to Geomechanics, day 3 - Structural interpretation of seismic data - uncertainty in seismic interpretation and attribute analysis.

Day 1 - Fault Zone Processes - evolution, patterns of fault throw, fault deformation and processes and fault architecture in 2D and 3D
Day 2 - Introduction to Geomechanics - key concepts, details and applications, and issues, including pore pressure, stress coupling and rotations, shale gas, fracking and seismicity.
Day 3 - Structural interpretation of seismic data - interpreting issues, uncertainty, and attribute analysis of structural features.

LOGISTICS
The course will be based at the University of Aberdeen. Lunches, coffees and teas will be provided. The course will run Tuesday, Wednesday and Thursday, allowing non-UK based geoscientists to travel on Monday and/or Friday if required.

COST
The registration rate for this three-day course is £1,500 (+ VAT) per person. Individual days may be booked. This covers the cost of tuition and teaching materials (including fully-illustrated course workbook). Food and drink will be provided during the day.

MEET THE TUTORS
Professor Rob Butler has over 30 years experience in teaching and researching the structural geology of sedimentary basins, with over 100 publications, chiefly on fault systems. He has worked extensively on the structural geology of northern Scotland and delivered training to a variety of oil and gas companies both in the UK and overseas.

Dr Dave Healy has a decade’s experience in developing understanding of fault mechanics, especially quantifying the processes by which deformation localizes in rocks. He has published extensively on fault zones, their structural damage and the implications for fluid behaviour in deformed rocks.

Dr Clare Bond has combined a career in academia and industry, working as a structural geologist in research and consulting roles. Clare’s research interests include uncertainty in seismic interpretation and fault and fracture influence on sub-surface reservoirs.

Dr David Iacopini is a structural geologist and applied geophysicist. David’s current research addresses seismic imaging fault and thrust tectonic structures as well as reservoir characterization using seismic attributes.

ABOUT TURNSTONE
Turnstone provides focused technical training in subsurface geoscience to industry, delivered by the Department of Geology and Petroleum Geology at the University of Aberdeen. It builds upon our long record of graduate level teaching in the oil and gas sector, excellent research and professional training. Funds generated by Turnstone are reinvested in training and research. To learn more of our mission and other training opportunities visit: www.turnstonetraining.com or email: turnstone@abdn.ac.uk