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Western Regional Group

Geological Fakes and Frauds

Dr Alastair Ruffell, Queen's University Belfast

S.H Reynolds Lecture Theatre, Bristol University, Bristol.

21st September 2016. 6:30pm Start

The Western Regional Group is pleased to invite Dr Alastair Ruffell from Queen's University Belfast. During this talk, Alastair will be sharing his experience using Earth science techniques in forensics for the search of hidden objects and trace evidence analysis, and how systems of valuation are affected by fraud.

Some geological fakes and frauds are carried out solely for financial gain (mining fraud), whereas others may have increasing aesthetic appeal (faked fossils) or academic advancement (fabricated data) as their motive. All types of geological fake or fraud can be ingenious and sophisticated.

Fake gems, faked fossils and mining fraud are common examples where monetary profit is to blame: nonetheless these may impact both scientific theory and the reputation of geologists and Earth scientists.

The substitution or fabrication of both physical and intellectual data also occurs for no direct financial gain, such as career advancement or establishment of belief (e.g. evolution vs. creationism). Knowledge of such fakes and frauds may assist in spotting undetected geological crimes: application of geoforensic techniques helps the scientific community to detect such activity, which ultimately undermines scientific integrity.



This interactive talk will introduce forensic geology and then demonstrate with a series of case studies the application of this discipline to the history of, and investigation into, fakes and frauds. These will include geological crimes committed for purely financial gain (oil/gas, water, gems/precious metals) and academic fakes, especially fossils. Fakes and frauds that use analyses familiar to geologists will be considered (XRD, FTIR, SEM, radiocarbon) in archaeology, antiques, paintings and manuscripts. We will end with the weird and wonderful – geological frauds and fakes that were the result of non-scientific belief, academic rivalry and probably pure madness, but the audience can reserve judgement on the latter or indeed all of the above.

Forthcoming Talks

The WRG is constantly on the lookout for fascinating talks. If you would like to present, know someone who is willing please contact the WRG committee (details below) and we will try our very best to accommodate your requests.

Contact

For all enquiries regarding the Western Regional Group and events please contact us using the details below.

Venue

S.H. Reynolds Lecture Theatre (Room G25), Department of Earth Sciences, University of Bristol, Wills Memorial Building, Queen's Road, Bristol BS8 1RJ. For directions see <http://www.gly.bris.ac.uk/about/directions.html>.

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