



Forensic Analysis using Geological and Geochemical Techniques

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Due to the globalisation of legal (and illegal) trade there is an increasing demand for techniques which can verify the geographical origin and transfer routes of many legal and illegal commodities and products.

Although geological techniques have been used in forensic investigations since the emergence of forensics as a science in the late eighteenth century, the last decade has seen a marked increase in geo-scientists initiating concept studies using the latest analytical techniques, including studying natural abundance isotope variations, micro analysis with laser ablation ICPMS and geochemical mapping.

Most of the concept studies have shown a good potential but uptake by the law enforcement and legal community has been limited due to concerns about the admissibility of the new methods.

As an introduction to the UGU2009 session “Forensic Provenancing using Geological and Geochemical Techniques” I will give an overview of the state of the art of forensic geology and the issues that concern the admissibility of geological forensic evidence. I will use examples from the NITECRIME and FIRMS networks, the EU TRACE project and other projects and literature to illustrate the important issues at hand.