

# Forensic Geoscience: Future Horizons

3<sup>rd</sup> December 2014

The London Geological Society, Burlington House



09:35-09:45	<b>Welcome</b>
09:45-10:00	<b>Aelf Sampson</b> (Durham Constabulary): "Soil information in search and as evidence in the case of missing person Pamela Jackson."
10:00-10:15	<b>Kirstie Scott</b> (UCL): "The forensic implications of diatom seasonality: directing a new technique for the ecological assessment of trace evidence in forensic geoscience."
10:15-10:30	<b>Brenda Woods</b> (Australian Federal Police/University of Canberra): "An examination procedure for forensic soil analysis in trace evidence laboratories"
10:30-10:45	<b>Elisa Bergslien</b> (SUNY Buffalo State): "Small scale spatial variability of soil in a managed urban environment."
10:45-11:00	<b>Lorna Dawson</b> (The James Hutton Institute): "The development and validation of microbial soil community analyses for forensic purposes."
11:00-11:30 (Poster session)	<p><b>Coffee Break</b> (30 mins)</p> <p><b>Helen Chick</b> (University of Hull): "The mineral signature from soil adhering to footwear at multiple sites and its implications for establishing provenance."</p> <p><b>Aoife Dudley</b> (University of Oxford): "An investigation into the tenacity of diatoms as a form of trace evidence and their applications to forensic geoscience"</p> <p><b>Alexandra Guedes</b> (Universidade do Porto): "Identification of soil components by Raman microspectroscopy."</p> <p><b>Duncan Pirrie</b> (Helford Geoscience LLP): TBC</p> <p><b>Veerle Vanderginste</b> (Imperial College London): "The application of handheld X-ray fluorescence spectrometry in geoforensics."</p> <p><b>Duncan Pirrie</b> (Helford Geoscience LLP): "Testing the efficiency of soil recovery from clothing."</p>
11:30-11:45	<b>Beth Wilks</b> (UCL): "An experimental study on the application of geoforensic techniques to the exploitation of Improvised Explosive Devices (IEDs)."
11:45-12:00	<b>Nelson Eby</b> (University of Massachusetts): "Nuclear forensics: identification of post-detonation debris."
12:00-12:15	<b>Sally Gamble</b> (UCL): "Detection of explosives in the wastewater system: practical considerations for forensic intelligence."
12:15-12:30	<b>Olga Gradusova</b> (Russian Federal Centre of Forensic Science): "Information about the atlas of small particles frequently encountered in soil traces in casework - in aid of geoforensics."
12:30-12:45	<b>Kelly Cheshire</b> (UCL): "Geochemical analysis in forensic science - interpretation considerations."
12:45-13:00	<b>Shari Forbes</b> (University of Technology Sydney): "Does probing a grave site enhance the decomposition odour available to cadaver-detection dogs?"
13:00-14:00	<b>Lunch</b> (1 hour)

14:00-14:15	<b>Nadine Smit</b> (UCL): "Using Bayesian networks to guide the interpretation of geological forensic evidence."
14:15-14:30	<b>Duncan Pirrie</b> (Helford Geoscience LLP): "How do we best report the significance of geological evidence in court?."
14:30-14:45	<b>Jennifer McKinley</b> (Queen's University Belfast): "GIS and statistics: charting a new course for investigators."
14:45-15:00	<b>Emily Norton</b> (Bournemouth University): "Multi-temporal remote sensing of mass graves."
15.00-15.15	<b>Pier Matteo Barone</b> (Forensic Geoscience Italy/The American University of Rome): "Forensic GPR: explaining hyperbolas in the Italian courtroom."
15.15-15.45 (Poster session)	<b>Coffee Break</b> (30 mins) <b>John Cassella</b> (Staffordshire University): "Chemical markers for the detection of clandestine graves: development of complementary techniques for forensic geophysics?" <b>Amy Green</b> (Bournemouth University): "Large oval enclosure in Wessex: how geophysics has revealed the complexity of these enclosures." <b>Daniel Roberts</b> (Keele University): "Geophysical detection and analysis of the mass burial and clandestine graves within the Cementerio del Salvador, Oviedo, Spain." <b>Robert Vanderputten</b> (Keele University): "Quantifying geophysical response of graves against burial age: electrical resistivity, magnetic susceptibility and GPR methods." <b>Iwan Witt</b> (Staffordshire University): "The feasibility of a United Kingdom Human Taphonomic Research Centre." <b>Adam Booth</b> (Imperial College) X-Ray Fluorescence and Geophysical Methods to locate a Second World War aircraft crash site
15:45-16:00	<b>Alastair Ruffell</b> (Queen's University Belfast): "Geological search methodology applied to two World War II sites."
16:00-16:15	<b>John Jervis</b> (Keele University): "Seasonal variation in the resistivity response of three experimental graves."
16:15-16:30	<b>Erica Carrick Utsi</b> (Utsi Electronics Ltd): "The use of Ground Penetrating Radar for clearance of forensic sites."
16:30-16:45	<b>Peter Masters</b> (Cranfield University): "The application of geophysics in recovering the buried remains of clandestine burials."
16:45-17:00	<b>Christine Blackmore</b> (Wardell Armstrong International Ltd): "Investigation and management of nomadic tribal graves during infrastructure construction at a gold mine in Mauritania."
17.00-17.10	<b>Closing</b>

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