

Dr Laurance John Donnelly

BSc (Hons), PhD (Geol), CGeol, CSci, EurGeol, FGS, FGSA



Geologist

FORENSIC GEOLOGY

CRIME SCENE EXAMINATION

GEOLOGICAL TRACE EVIDENCE

POLICE AND LAW ENFORCEMENT SEARCHES

Forensic Geology Biographical Summary

Dr Laurance Donnelly is a chartered geologist and a chartered scientist with a first class honours degree and PhD in geology with approximately 30 years international experience. He has 30 years' international experience in; (a) forensic geology and police searches, (b) mineral exploration and mining and (c) engineering geology and geohazards.

He has provided operational support for the police and law enforcement investigators, including: (a) crime scene examination and sample collection, (b) geological trace evidence analysis and (c) the design and implementation of a new and innovative ground search strategy for high profile burials related to; missing persons, homicide (shallow graves), serious and organised crime, and counter terrorism. Operational cases include; The Moors Murders and the search for Ben Needham, Madeleine McCann and April Jones.

He has also provided and been responsible for training police and law enforcement agencies including; Argentina, Australia, Brazil, Colombia, Greece, Ireland, Japan, Kazakhstan, Netherlands Portugal, Russia (Moscow), Sicily, Sweden, UAE, UK and USA. In 2002, he was invited to Westminster Palace, Houses of Parliament, in London to give a presentation on The Moors Murders and the application of geology to police and crime investigations.

Dr Donnelly is the founder of the Forensic Geoscience Group, of the Geological Society of London and served as its first Chair. He is also the founder and current Chair of the International Union of Geological (IUGS), Initiative on Forensic Geology (IFG). In this role he has been responsible for the provision of operational support, training, knowledge transfer and outreach events for the UK National Search Centre (PNSC), Colombian Police, Australian Federal Police, FBI, Brazilian Federal Police, Abu Dhabi Police and the Russian Federal Centre of Forensic Science in Moscow (RFCFS) and Institute of Forensic Science Ministry of Public Security People's Public of China.

Dr Donnelly has pioneered and developed a new search strategy (the Geoforensic Search Strategy) now used by the police to locate homicide graves, firearms, weapons, drugs and other buried items related to high profile critical cases, missing persons (MISPER), homicide, serious and organised crime and in counter terrorism searches. These have involved collaboration with the Home Office, Centre for Applied Science & Technology (CAST), Ministry of Defence (DSTL) and military (British Army, Royal Engineers and Royal Air Force, Joint Air Reconnaissance Intelligence Centre (JARIC)), Oak Ridge National Laboratory and 'The Body Farm' in Tennessee, USA and the Federal Bureau of Investigation (FBI) in Washington DC. He also became an invited member of the Home Office (CAST) Search Technology User Group (STUG) (now DSTL) to address gaps in technology or equipment related to front line policing operational support, serious crimes and counter terrorism.

He routinely collaborates with the UK Police National Search Adviser, various PoISAs, PoISCs, CSM's, forensic specialist, Home Office Centre for Applied Science and Technology (CAST), Dstl, Oak Ridge National Laboratory (The Body Farm) in Tennessee and the FBI Laboratory, in Quantico, Virginia. He published approximately 395 publications, delivered around 175 guest and keynote lectures around the world.

He is the recipient of awards and recognition for applied geology and forensic geology from; the Institution of Mining & Metallurgy, Geological Society of London, Geological Society of America, Russian Federal Centre of Forensic Science, Ministry of Justice of Russia in Moscow, Police National Search Centre and Home Office Centre for Applied Science and Technology.

Selected Operational Case Work, Forensic Geology Investigations and Training

1. 1994-2021 (ongoing): The Moors Murders

Search of Saddleworth Moor, northern England, for the last remaining 'Moors Murders' victim. A 12 years old by who 'went missing' in 1964. This geological search began in 1994 and has included working in close collaboration with the UK Police, UK Police National Search Advisor, National Crime Agency (previously NPIA, Royal Engineers and Royal Air Force).

2. 2019-2021: Search for missing persons in Colombia

Provision of general advice and the adoption of the Geoforensic Search Strategy (GSS) to search for

- missing persons in Colombia.
3. **2020: Search for Missing Person:** The provision of advice and guidance to the National Crime Agency for an open area search to locate a missing teenager.
 4. **2020: Landslide Investigation:** Support for a police investigation following a landslide that caused fatalities.
 5. **2019: Advice on search, Federal Bureau of Investigation (FBI), Headquarters, Washington DC**
Confidential.
 6. **2019: Search support, Puerto Vallarta, Mexico**
Design and delivery of training in search, crime scene sampling and the sampling of soil as forensic evidence from a vehicle and associated items.
 7. **2019: Missing Persons Search, north of England**
Provision of informal advice during the search for a missing person. The body was later found in the area suggested.
 8. **2019: Collaboration with ARISTA, Netherlands**
Geological collaboration in search techniques.
 9. **2019: European Police**
Training on search and the recovery of graves for the police in England, Scotland, Sweden, Germany, and the Netherlands.
 10. **2019: Brazilian Federal Police, Brazil**
Provision of forensic geology support in search and crimes associated with minerals and mining.
 11. **2019: Countering fraud and corruption in minerals and mining, Global**
Collaboration with global experts for covert strategies to investigate crimes in minerals and mining.
 12. **2019: University of Warsaw and Central Forensic Laboratory, Poland**
Forensic geology support for a new MSc course and advice on searches for graves.
 13. **2019-2020: Search for missing persons in Chile, Argentina, Peru and Brazil**
Meeting held in Puerto Vallarta to discuss geological methods and techniques to help locate and detect suspected graves.
 14. **2019: Federal Bureau of Investigation (FBI), training video on soil collection from crimes scenes, USA**
Endorsement and support for a training video on the collection of geological samples from crime scenes.
 15. **2019: Conflict Minerals, Democratic Republic of Congo**
Visit to Lubumbashi, DRC to consider forensic geological strategies to trace and track minerals.
 16. **2019: Adulteration, Substitution and Theft, Chile**
Visit to Santiago to consider forensic geological strategies to trace and track minerals.
 17. **2019: Adulteration, Substitution and Theft, China**
Visit to Beijing to consider forensic geological strategies to trace and track minerals.
 18. **2019: Adulteration, Substitution and Theft, Zambia**
Visit to Ndola to consider forensic geological strategies to trace and track minerals.
 19. **2006-2020 (ongoing): Support for UK National Search Adviser**
Provision of formal and informal geological advice for ground searches, for numerous burials and missing persons throughout the UK and internationally.
 20. **2019: MSc, Forensic Science, University of Nottingham, UK**
Guest lecturer on forensic geology and search.
 21. **2019, Rossendale and Pendle Mountain Rescue Team, UK**
Knowledge exchange and search strategies for missing persons and burials.
 22. **2019: Search for a Missing Mother and Child, UK Police**
Design of a search in a remote part of the UK, centres on an abandoned quarry, for a mother and her child that went missing several years earlier. This required collaboration with the force PoISA, forensic archaeologists and crime scene examiners.
 23. **2019: SOP for Soil Analysis in a Search, UK Police**
Provision of a SOP to enable the collection of soils for VOC and leachate analysis during the search for a homicide grave.
 24. **2018: Adulteration, Substitution and Theft, Mexico**
Visit to Manzanillo and Guyamas to consider forensic geological strategies to trace and track minerals.
 25. **2019: Home Office Centre for Applied Technology and DSTL**
Provision of advice on ground searches for burials.
 26. **2019: Human Decomposition Facility.** Provision of geological advice and guidance for the location of a new human remains research facility. This included the provision of a geological baseline desk study, the collection soil samples for geochemical and mineralogical analysis and the design of a baseline geophysical survey (confidential).
 27. **2018: MSc, Advanced Field Geoscience, University of South Wales, UK**
 28. Guest lecturer, including forensic geology, missing persons and search.

29. **2018: Visit to Federal Bureau of Investigation (FBI) Laboratory, Quantico, USA**
Confidential
30. **2018: Federal Police of Argentina, La Plata, Argentina**
Deployment of a team to Argentina.
31. **2018: Search Technologies Academic Research Team, Home Office, UK**
The provision of advice and support for UK ground searches.
32. **2018: MSc, Advanced Field Geoscience, University of South Wales, UK**
The provision of advice and support for a new MSc course.
33. **2018: MSc, Forensic Science, University of Nottingham, UK**
Guest lecturer on forensic geology and search.
34. **2018: Collaboration with forensic institutes and ministers, Government of India, Delhi**
Initiation of forensic geology and search in India. Collaboration with Ministry of Home Affairs; Geological Survey of India; Geovale Ltd; Amity University & Aspire Forensics; Central Forensic Laboratories and National Institute of Criminology and Forensic Science.
Provision of advice for the search for graves in Colombia.
35. **2018: Biohazard from a Cemetery, UK Police**
The provision of guidance and support for an investigation to identify a possible biohazards from a cemetery.
36. **2018: Human Decomposition Facility, Europe**
Collection of soil samples and the design of a geophysical survey to provide a baseline for a human decomposition research facility.
37. **2017: Search in Scotland, Police Scotland**
Advice on the search of peat bog area for a missing person.
38. **2017: Collaboration with Key Forensics, Warrington, UK**
Analysis of rock samples the police believed were used in a murder. The offender was subsequently found guilty (confidential).
39. **2017: Forensic Geology, Vancouver, Canada**
Deployment of a team to Canada to develop forensic geology.
40. **2017: Forensic Geology, Singapore**
Deployment of a team to Singapore to develop forensic geology. In association with Trace Evidence Working Group (TEWG) of the Asia Forensic Sciences Network (AFSN) Forensic Geoscience, Singapore.
41. **2016: Murder, Cumbria**
Site visit to possible crime scenes to identify the geographic provenance of rock samples used in a murder.
42. **2016: Australian Facility for Taphonomic Experimental Research (AFTER), Australia**
The exploration of ideas to measure and monitor VOCs and leachate during human decomposition and to facilitate ground searches for burials.
43. **2016: MSc, University of Messina, Sicily, Italia**
The provision of advice and support for an MSc including forensic geology.
44. **2016: Taphonomic Chemistry and Grave Detection, University of Staffordshire, UK**
The influence of geology and hydrogeology during the canine detection of graves as part of a detective search to locate a homicide grave.
45. **2016: An Garda Síochána Headquarters, ICLVR, Dublin, Ireland**
Collaboration with contacts in Ireland regarding the search for buried items and graves.
46. **2016: Institute of Geologists of Ireland (IGI), Geological Survey of Ireland (GSI), Dublin, Ireland**
The development and advancement of forensic geology and search in Ireland.
47. **2016: Forensic Soil Science and Geology, Cape Town, South Africa**
The applications of forensic geology in Southern Africa.
48. **2016: The Disappeared, Pinochet's Dictatorship, Chile**
Meeting in the UK with contacts from Chile to discuss search methods to locate missing persons in Chile.
49. **2016: International Forensic Science Interpol, Lyon, France**
The development of forensic geology.
50. **2016: Universidad de Antioquia y Tecnológico de Antioquia, Medellin, Colombia**
Advice on ground searches in Colombia to locate graves associated with Cartels.
51. **2016: National Crime Agency (NCA), UK**
Meeting with the new National Search Adviser to discuss geological methods and strategies in search.
52. **2016: Forensic Geology in China**
Responsible for the development of Forensic Geology in China in collaboration with the Institute of Forensic Science, Ministry of Public Security, Division of Trace Evidence Analysis, China.
53. **2015: Missing Persons in Colombia**
Provision of a strategy to search for missing persons in Colombia. In collaboration with the National

University of Colombia, Department of Geology; Colombia's National Institute of Medical, Legal and Forensic Sciences; Instituto Nacional De Medicina y Ciencias Forense (National Forensic Crime Laboratories) and the Federal Police.

54. **2015: Serious Sexual Assault, Leeds, UK**
Analysis of a cobble of sandstone alleged to have been used during a serious sexual assault in Beeston, Leeds.
55. **2015: Water Searches, UK**
Experimental deployment of sonar and water penetrating radar searches of a canal in the UK. In collaboration with the UK Home Office, Centre for Advanced Science and Technology (CAST) and a UK Police Force, Underwater Search and Marine Unit.
56. **2015: Double Murder, Ireland**
Advice on search strategies and techniques for two missing teenagers in Northern Ireland and a suspected double murder.
57. **2015: Operation Bennett**
Search strategy for a missing person in Scotland (confidential).
58. **2015: Search in Iraq**
Advice and guidance for the National Search Adviser in relation to a search in Iraq for a missing person (confidential).
59. **2015: Missing Person in Edinburgh**
Advice to James Hutton Institute relating to an open area search for a missing person (cold case).
60. **2015: Australian Facility for Taphonomic Experimental Research (AFTER)**
Collaboration with the Australian Federal Police and the University of Technology Sydney (UTS) following the announcement the opening of AFTER. This included soil experiments for VOC and leachate analysis to assist with searches for
61. **2014-2015: Operation Ben, Kos, Greece**
Advice on search strategy, search assets and the design and delivery of soil sampling and analysis during the search for Ben Needham (confidential).
62. **2011-2014: Search For Ben Needham**
Provision of advice during the planning for a search to locate Den Needham (confidential).
63. **2015: Operation Fraserborough**
Search for a missing person in Scotland (confidential).
64. **2015: Operation Peatmount**
Provision of search strategy to the National Search Advisor and the recovery of a missing person from a shallow grave who went missing 15 years earlier (confidential).
65. **2015: Soil analysis from a homicide grave**
Soil samples were taken from the grave of a homicide grave and subsequently analysed to determine the chemistry, VOCs and mineralogy of the soils. This results were aimed at reducing open area ground searches so that a cost-effective and practicable ground search for burials can be deployed.
66. **2015: The Disappeared, Ireland and Northern Ireland**
Advice on open areas search strategies and assets for shallow, unmarked graves (confidential).
67. **2015: Forensic Geology in Sicily**
Support for the establishment of forensic geology for an MSc at the Università degli Studi di Messina, Dipartimento di Scienze dell'Ambiente, Messina, Sicily. This also included training in search and the recovery of geological trace evidence from a vehicle and associated items, in collaboration with the Polizia and Carabinieri.
68. **2015: Forensic Geology in Japan**
Responsible for a Forensic Geology knowledge exchange event in Japan with the National Research Institute of Police Science.
69. **2015: Collaboration with the Abu Dhabi Police, Al Ain, UAE**
The General Directorate of the Abu Dhabi Police initiated a project to concentrate on geosciences and its applications to forensic investigations including the establishment of a Forensic Geology Group. A series of meetings were held with the Abu Dhabi Police, in Al Ain, UAE to discuss training requirements in ground and water searches and case work.
70. **2015: Police National Search Centre, The College of Policing, NCA, Coventry, UK**
Provision of a training event for the Police National Search Centre, The College of Policing. This included new search strategies and techniques to locate burials relate to homicide, terrorism and organized crime.
71. **2014-2015: Operation Sorrento**
Analysis of air photos and guidance on open area searches on peat moorland. Victim found in a shallow grave.
72. **2014: Road Traffic Accident**
General advice on possible methods to identify the source of water flowing across a road at the location

- of a fatal road traffic accident (confidential).
73. **2012-2014: Operation Grange, Madeline McCann, Portugal**
Advice on search strategy, search assets and the design and delivery of soil sampling and analysis during the search for Madeline McCann (confidential).
 74. **2014: Search in Northumberland**
Design and implementation of an open area search for a missing person in Northumberland (confidential).
 75. **2014: Search for Missing Person in Australia**
Advice on a well search for a missing person (confidential).
 76. **2014: Provenance of Beach Sand, United Arab Emirates**
Provided geological advice to help determine the type and origin of beach sand in association with an investigation.
 77. **2014: Advice for the search for a war grave, Ukraine.**
UK based advice to assist a search to locate the presence of a mass grave relating to World War II, which was believed to be located in the Ukraine.
 78. **2014: The grave site of Genghis Khan, Mongolia**
UK based advice on the Search for the grave site of Genghis Khan. This included the review a research paper and the provision of ground search strategies.
 79. **2014: Oxford Geology Group & Thames Valley Police**
Delivery of a training presentation to the Oxford Geology Group to outline the applications of geology to policing and law enforcement. The event was attended by approximately 50 delegates, including undergraduate students, professional geologists and Thames Valley Police. As a result of this presentation more specific information on forensic geology was requested, and supplied, to officers working in the Forensic Laboratory, of Thames Valley Police.
 80. **2014: Search for Service Men Missing in Action, Belarus**
UK based advice and guidance on techniques and strategies to assist with the search to locate sites of servicemen in Belarus, who are believed to be 'missing in action', from World War II, including partisans, and prisoners-of-war.
 81. **2014: Kuwait Police Officer Training**
Following on from training provided to the Abu Dhabi Police a serving police officer from Kuwait visited the UK to attend a training in search.
 82. **2013: Abu Dhabi Police, United Arab Emirates**
Provision of advice and guidance on ground searches for burials in association with the UK National Police Search Advisor, GMP PoISA and CAST.
 83. **2013: Grave Exhumation, CAST**
Geological search strategy and advice on the geophysical imaging of a grave for potential exhumation.
 84. **2013: Open Area Search, Northern England, Greater Manchester Police**
Geological search strategy and advice to the GMP Force PoISA for the search of several lay-by's in northern England for a missing person.
 85. **2013: Ground search for a missing person, Greece**
From the UK, provided for the UK National Search advisor, a force PoISA and CAST, a geological search strategy for a missing person in a remote part of Greece. This included the sampling of soils for traces of human remains and the deployment of a search using geophysics, VRDs and soil probe.
 86. **2013: Ground Search, Australian Federal Police**
From the UK, provided a geological search strategy for a missing person in a remote part of Australia, believed to be located in a confined space.
 87. **2013: Search Training, Serious Organised Crime Agency, SOCA, Leicestershire, UK,**
The provision of a Police Search Adviser (PoISA) and training event with SOCA, held at Leicestershire Police headquarters, UK. To raise awareness regarding the support and guidance available from experts operating within a range of academic disciplines, in the search for missing persons and 'no-body' murder victims.
 88. **2013: Forensic Geology at the International School Science Fair (ISSF), Cornwall, UK,**
Design and delivery of a forensic geology training event for ISSF, including a simulated crime scene and geological trace evidence recovery and analysis exercise and a geological ground search for burials, such as weapons and items commonly used in crime, using geophysics.
 89. **2013: INTERPOL, International Forensic Science Managers Symposium, France**
Support for an IUGS-IFG attendance at INTERPOL, to provide a summary of advances in forensic geology.
 90. **2013: Training, Brazilian Federal Police, Brazil**
Co-organiser of a search and forensic geology training with the Brazilian Federal Police (BFP). This took place at Nacional Institute of Criminalistics (INC), Brasilia. The Federal Police test site 'SITCRIM' was used as a mock crime scene with which to evaluate the samples. This facility was created specifically to test

equipment used in search and proved invaluable as a location for discussion of sampling locations (routes of access, suspect ground), and to deploy a spatial sampling scheme. Buried targets included a pig cadaver, loose cow bones, weapons (rifle and handgun), shell casings, barrels filled with a variety of materials (air, liquid and explosives), boxes and a computer.

91. **2013: RFCFS, Ministry of Justice of Russia, Moscow**
A soil forensics and forensic geology knowledge transfer event was organised with the Russian Federal Centre of Forensic Science (RFCFS), of the Ministry of Justice of Russia, in Moscow. This was the first international event of its kind to be hosted in Russia and the Commonwealth of Independent States (CIS) to specifically focus on soil forensics and forensic geology.
92. **2013: Abu Dhabi Police, Forensic Evidence Department, Abu Dhabi, UAE**
Collaboration with the Forensic Evidence Department, Abu Dhabi Police, at their headquarters in Abu Dhabi. Practical advice was also provided on counter-terrorism vehicle and building searches for Improvised Explosive Devices (IEDs).
93. **Abu Dhabi Navy and Abu Dhabi Coast Guard, Abu Dhabi, UAE**
Provision of marine search strategies for missing objects and to demonstrate the use of a diver-held sonar instrument, the Navigator D38. This instrument is currently restricted for use in the UK for the British military and it is used by the police to search streams, rivers, ponds, lakes reservoirs, seas and estuaries.
94. **2012: Body in Bin**
Provision of advice in relation the soil analysis following the discovery of a body in a wheelie bin in the Midlands (confidential).
95. **2012: Rare Earth Metal**
Advice on the analysis of suspected fraudulent rare earth metals imported into the UK (confidential).
96. **2012: Ground serach for a missing person, Yorkshire, Durham Police and Greater Manchester Police**
Provision of advice to the UK National Search Advisor, Durham force PoISA and GMP force PoISA for the search of a missing person in Yorkshire.
97. **2012: Ground serach for a missing person, southeast England**
Provision of advice to the UK National Search Advisor, for the search of woodland in a remote part of southeastern England for a missing person.
98. **2012: Ground serach for a missing person, South Wales Police**
Provision of advice to the UK National Search Advisor, for the search of a missing person in a remote part of central Wales.
99. **2012: Ground serach for a missing person, Strathclyde**
Advice to the UK National Search Advisor, for the search of a missing person in Strathclyde, Scotland.
100. **2012: Geological Trace Evidence, Nottinghamshire Police**
Provided Nottinghamshire Police with information and contacts for the analysis and interpretation of geological trace evidence on items and objects associated with a serious crime.
101. **2012: Geological Trace Evidence, South Wales Police**
Provided South Wales Police with geological advice following the inrush of groundwater at a coal mine, which resulted in fatalities.
102. **2011: A Northern England Police Force (2011)**
Design of a search methodology and strategy for missing persons believed to be buried in a remote, unmarked shallow graves (Confidential).
103. **2011: A Midlands Police Force (2011)**
Provision of informal advice for a missing person in the Midlands (Confidential).
104. **2011: Search for a missing person in Northern Ireland**
Provision of informal advice for a missing person in Northern Ireland (Confidential).
105. **2011: Search for a missing person in Scotland**
Provision of informal advice to the Police for a missing person in Scotland (Confidential).
106. **2010: An Eastern England Police Force**
Design of a search methodology and strategy for a missing child, believed to be buried in a remote, unmarked shallow grave. This involved attendance at briefings with the SIO and search team, followed by a visit to the search area with the force POLSA and Behavioural Profiler to conduct a geoforensic investigation.
107. **2010: NPIA, search for a missing person on a Scottish island Scotland (2010)**
Provision of informal advice to British police officers and the NPIA National Search Advisor during the design and deployment of a search for a missing person on a remote Scottish island. The remains of the victim was subsequently found in a shallow grave on a sandy beach.
108. **2005 & 2008: Search for missing persons in Northern Ireland (PSNI) (2005 & 2008)**
Provision of informal advice to the Police Service of Northern Ireland (PSNI) and Queens University Belfast

- for the search for missing persons and other buried objects related to IRA activities during ‘the troubles.’
109. **2007: Search of a structure in Jersey**
Provision of informal advice to the NPIA National Search Advisor and a specialist canine search advisor for the search of a building in Jersey.
 110. **2007: NPIA, search for a missing British citizen in Portugal**
Provision of informal advice to British police officers and the NPIA National Search Advisor for the search of a missing British citizen in Portugal. A visit to Portugal was carried out in 2008 to provide guidance on geological and geophysical search methods and techniques.
 111. **2006: Greater Manchester Police, search for a grave**
Provision of informal advice to the POLSA, search teams & SIO during the search agricultural land for a shallow homicide grave. A geomorphological and geological analysis of high resolution air-photos was undertaken and this helped to find the murder victim in an shallow, unmarked grave.
 112. **2006-2009: Greater Manchester Police, search for burials**
Provision of general advice to POLSA & search teams on the search of the ground in the Greater Manchester area for burials, including fire-arms and other objects.
 113. **2006: Search for a homicide grave, USA, Federal Bureau of Investigation (FBI)**
Provision of UK based advice to the FBI and a specialist canine search advisor during the search for a shallow grave in the USA.
 114. **2006: Geological (trace) evidence, South of England Police Force**
Provision of advice on geological trace evidence for a murder investigation. This involved the peer review of reports on the mineralogy of soils and sediments found on a victim’s body and other objects associated with a suspect/offender.
 115. **2006: Search with Staffordshire Police & Home Officer Scientific Development Branch (HOSDB)**
Responsible for the design, implementation and co-ordination of a search with the Staffordshire Police POLSA, search teams and HOSDB. This resulted in a high assurance search being carried out in Staffordshire following the discovery of high monetary value Anglo Saxon gold.
 116. **2009: Colombian Police**
Visited Colombia as part of a USA & UK team of forensic geologists to deliver a series of lectures on geoforensics to an audience consisting of; judges, lawyers, police officers, forensic geologists and other forensic scientists. Provided advice on search to the Colombian police at their headquarters and training academy in Bogota, to help locate homicide graves, mass (genocide) graves, narcotics, firearms and explosive devices containing minimal metal components.
 117. **2008: NPIA, search for a missing person in Scotland**
Provision of informal advice to British police officers and the NPIA National Search Advisor for the search of a missing person in Scotland, thought to be buried within a large area of agricultural land or woodland.
 118. **2006: Search for a missing person in Staffordshire**
Provision of informal advice to the NPIA National Search Advisor and a specialist canine search advisor for the search for a missing person in Staffordshire.
 119. **2006: Search for a missing person in Derbyshire**
Provision of informal advice to the NPIA National Search Advisor and a specialist canine search advisor for the search for a missing person in Derbyshire.
 120. **2006: Search for a missing person in Yorkshire**
Provision of informal advice to the NPIA National Search Advisor and a specialist canine search advisor for the search for a missing person in Yorkshire.
 121. **2006: Search for a grave (cold case) in Virginia, USA**
Provision of UK-based informal advice for the search of a grave in a woodland and a lake in Virginia, USA.
 122. **2006: NPIA, Search for a missing British citizen in Australia**
Provision of informal advice on search strategy, methodology and techniques for a missing British person in northern Australia (in association with the Australian Federal Police).
 123. **2001: Clothes found during a search, UK**
Clothes, including shoes, jacket, trousers and personal items were found during a search of moorland in upland Britain. These belonging to a body that found by the police one year earlier. Dr Donnelly attended Her Majesty’s Coroners Court to give evidence.
 124. **1998: Spade, knife, belt and wire found during a search, Greater Manchester**
Recovery and analysis a spade, knife, belt buckle and wire found in a search area, as part of a search for a grave.
 125. **1997: Spade found during a search, Greater Manchester**
Recovery and forensic analysis of a spade found in a search area, as part of a search for a grave.
 126. **1992: Recovery of human bones, Staffordshire**
Recovery of human bones found in a field and subsequent investigation with Police.

Adulteration, Substitution, Fraud and Theft

- 127.2020: Adulteration of mineral samples, Asia**
Dispatch of an international technical team to a location in Asia to investigate sample adulteration.
- 128.2020: Investigation of Adulteration (Gold Concentrate), Mexico, (pending)**
Mineralogical analysis of two samples of gold concentrate.
- 129.2020: Investigation of Gold in Concentrate, Ecuador (pending)**
Mineralogical analysis of ten samples of copper concentrate to gold mineralogy.
- 130.2019: Investigation of Adulteration (Copper Concentrate), Peru and China**
Mineralogical analysis of five samples of copper concentrate for suspected adulteration during the transfer of these samples from Peru to China.
- 131.2019: Investigation of Adulteration (Lead Concentrate)**
Mineralogical analysis of two samples of lead concentrate for suspected adulteration.
- 132.2019: Platinum in Anode Slime, Southern Africa**
Mineralogical analysis of one sample to identify platinum mineralogy in anode slime.
- 133.2019: Investigation of Adulteration (Copper Concentrate), Peru and China**
Mineralogical analysis of three samples of copper concentrate for suspected adulteration during the transfer of these samples from Peru to China.
- 134.2019: Investigation of Adulteration (Zinc Ore), DRC and Zambia**
Mineralogical analysis of two samples of zinc ore for suspected adulteration during the transfer of these samples from DRC to Zambia.
- 135.2019: Investigation of Adulteration (Zinc Ore), DRC and Zambia**
Mineralogical analysis of six samples of zinc ore for suspected adulteration during the transfer of these samples from DRC to Zambia.
- 136.2019: Erdenet Mine, Mongolia**
Provision of general mineralogical advice for the mitigation of metal discrepancies for material originating at Erdenet Mine, Mongolia.
- 137.2019: Determination of Geographic Provenance (Zinc ore), Southern Africa and Namibia**
Mineralogical analysis of a sphalerite sample to identify the source of the ore.
- 138.2019: Investigation of Adulteration (Lead Concentrate), Iran**
Mineralogical analysis of four samples of lead concentrate for suspected adulteration.
- 139.2019: Investigation of Radioactivity (Gold Filter Cake), Suriname**
Mineralogical analysis and assaying of four filter cake samples, from gold mine tailings in Suriname, to determine the presence of any radioactive minerals before transportation to Canada and Belgium
- 140.2018: Investigation of Adulteration (Gold, Lead and Copper Concentrate), Peru, Iran and China**
Mineralogical analysis of eleven samples containing gold, lead and copper for suspected adulteration during the transfer of these samples from Peru and Iran, to China.
- 141.2018: Investigation of Adulteration (Copper Concentrate), Peru and China**
Mineralogical analysis of three samples of copper concentrate for suspected adulteration during the transfer of these samples from Peru to China.
- 142.2018: Investigation of Adulteration (Zinc Ore), DRC and Zambia**
Mineralogical analysis of two samples of zinc ore for suspected adulteration during the transfer of these samples from DRC to Zambia.
- 143.2018: Investigation of Substitution and Fraud (Nickel and Copper Concentrate and Ore), Africa**
Mineralogical analysis of three samples of nickel concentrate and ore samples to identify a fraudulent claim.
- 144.2018: Investigation of Adulteration (Copper Concentrate), Peru and South Korea**
Mineralogical analysis of four samples of copper concentrate for suspected adulteration during the transfer of these samples from Peru to South Korea.
- 145.2018: Investigation of Adulteration (Copper Concentrate), Peru and China**
Mineralogical analysis of four samples of copper concentrate for suspected adulteration during the transfer of these samples from Peru to China.
- 146.2018: Investigation of Adulteration (Gold Concentrate), Portugal**
Mineralogical analysis of one sample of gold concentrate to verify the presence and physical characteristics of the gold particles.
- 147.2018: Investigation of Adulteration (Copper Concentrate), Peru to China**
Mineralogical analysis of four samples of copper concentrate for suspected adulteration during the transfer from Peru to China.