The International Union of Geological Sciences, Initiative on Forensic Geology
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The Scene
A forensic geologist may be required to assist the law enforcement investigator, crime scene manager or forensic scientists to examine a crime scene; to collect geological samples and prepare interpretations of the soil, sediment, rocks, and air/meteors involved. This may include a variety of skills that have been honed by law enforcement as part of an investigation to provide evidence. IUGS-IFG has developed methodologies for the recovery of geological samples from crime scenes and exhibits. Scientists also have to consider IUGS-IFG as a tool/handle, the recovery of geological samples and interpretations from crime elements and exhibits, based on the practical means of sampling and of simple or complete scope if property submitted in a forensic capacity. The samples collected must be unbiased and representative of the original mass.

The Search
The need to conduct complex, open area searches for buried objects to date very different, non-invasive techniques of geology and a law enforcement officer both interested in the ground surface. One such technique is called Forensic Ground Penetrating Radar (GPR). The ground can be scanned using ground penetrating radar (GPR) and modern data acquisition equipment, with the results collected, and with the results compared to the known location of any valuable evidence. The idea is to search for markers indicating the presence of buried objects or features, such as pipes, tanks, or pipes, that are of interest to the crime scene investigation. The technique is based on the fact that GPR can detect differences in electrical conductivity and dielectric constant between different types of materials. The information is then processed to create a map of the subsurface, and the results can be used to identify potential targets for further investigation.

The Search
When geospatial evidence includes minerals, rocks, soils and sediments (sedimentary deposits), mineralised rocks, or metalliferous deposits, anthropogenic (artificial) deposits (e.g. a mine head), metal detection systems are used to scan the area for any evidence of metal objects, such as a metal tree for example. By using evidence of geological data and information to identify and locate suspicious or unknown items, the geological approach may be used to assist in the search for evidence or to confirm the presence of potential targets. Geologists can be involved in the search process, and they may be able to provide a geologist’s perspective to the search effort, based on their understanding of geological processes and the potential impact of geological features on the area of interest. Geologists may also be involved in the recovery of evidence, and they may be able to assist in the interpretation of the evidence collected.

The Sample
A forensic geologist may be expected to assist the law enforcement investigator, crime scene manager or forensic scientists to examine a crime scene; to collect geological samples and interpret interpretations of the soil, sediment, rocks, air/meteors involved. This may include a variety of skills that have been honed by law enforcement as part of an investigation to provide evidence. IUGS-IFG has developed methodologies for the recovery of geological samples from crime scenes and exhibits. Scientists also have to consider IUGS-IFG as a tool/handle, the recovery of geological samples and interpretations from crime elements and exhibits, based on the practical means of sampling and of simple or complete scope if property submitted in a forensic capacity. The samples collected must be unbiased and representative of the original mass.

IUGS Initiative on Forensic Geology
Forensic geology is the application of geological knowledge and skill to help solve criminal cases. It is a growing field, and it is employed in a wide range of cases, from small-scale property crimes to large-scale organized crime investigations. The International Union of Geological Sciences (IUGS) has established a group, the Initiative on Forensic Geology (IFG), to promote the development and use of geological methodologies for the investigation of crimes and the recovery of evidence.

IUGS - Initiative on Forensic Geology
The focus of this initiative is to support the development of scientific knowledge and methodology in forensic geology, to promote the use of geological approaches in the investigation of crimes, and to encourage the training and education of professionals in this field. The initiative aims to provide a platform for the exchange of information and best practices, to facilitate collaboration between professionals from different countries and regions, and to raise awareness of the importance and potential of geological approaches in forensic investigations.

IUGS - Initiative on Forensic Geology
The initiative is led by a group of experts from around the world, including geologists, forensic scientists, and legal experts. They work together to develop and promote methodologies, guidelines, and best practices for forensic geology. The initiative also provides training and education opportunities for professionals who wish to develop their skills in this field.

IUGS - Initiative on Forensic Geology
The initiative is supported by a range of international organizations, including the International Union of Geological Sciences (IUGS), the British Geological Survey (BGS), and the National Institute of Standards and Technology (NIST). Together, these organizations work to promote the development and use of geological approaches in forensic investigations and to facilitate collaboration between professionals from different countries and regions.

IUGS - Initiative on Forensic Geology
The initiative is an important part of the broader effort to develop and use scientific knowledge and methodology in forensic investigations. By promoting the use of geological approaches, the initiative aims to improve the accuracy and reliability of forensic investigations, and to help ensure that those involved in crime investigations receive the best possible care and support.