DESCRIPTION

This book is a comprehensive introduction to the application of geoscience to criminal investigations. Clearly structured throughout, the text follows a path from the large-scale application of remote sensing, landforms and geophysics in the first half to the increasingly small-scale examination of rock and soils to trace amounts of material. The two scales of investigation are linked by geoscience applications to forensics that can be applied at a range of dimensions. These include the use of topographic mapping, x-ray imaging, geophysics and remote sensing in assessing whether sediment, rocks or concrete may have hidden or buried materials inside for example, drugs, weapons, bodies.

This book describes the wider application of many different geoscience-based methods in assisting law enforcers with investigations such as international and national crimes of genocide and pollution, terrorism and domestic crime as well as accident investigation. The text makes a clear link to the increasingly important aspects of the spatial distribution of geoscience materials (be it soil sampling or the distribution of mud-spatter on clothing), Geographic Information Science and geostatistics.

- A comprehensive introduction to the application of geoscience to criminal investigation
- Examples taken from an environmental and humanitarian perspective in addition to the terrorist and domestic criminal cases more regularly discussed
• A chapter on the use of GIS in criminalistics and information on unusual applications and methods - for example underwater scene mapping and extraterrestrial applications

• Material on how geoscience methods and applications are used at a crime scene

• Accompanying website including key images and references to further material

• An invaluable text for both undergraduate and postgraduate students taking general forensic science degrees or geoscience courses

“The whole book is peppered with useful and appropriate examples from the authors' wide experiences and also from the wider literature... an essential purchase for any forensic science department as well as for any law enforcement organisation.” Lorna Dawson, Macaulay Institute

---

### ABOUT THE AUTHOR

Dr Alastair Ruffell, School of Geography, Archaeology and Paleoecology, Queen's University, Belfast, UK.

Dr Jennifer McKinley, School of Geography, Archaeology and Paleoecology, Queen's University, Belfast, UK.

---

### RELATED RESOURCES

Student

View Student Companion Site

---

### FEATURES

• A comprehensive introduction to the application of geoscience to criminal investigation

• Examples taken from an environmental and humanitarian perspective in addition to the terrorist and domestic criminal cases more regularly discussed
• A chapter on the use of GIS in criminalistics and information on unusual applications and methods - for example underwater scene mapping and extraterrestrial applications

• Material on how geoscience methods and applications are used at a crime scene

• Accompanying website including key images and references to further material

For additional product details, please visit https://www.wiley.com/en-us