

Role of analytical techniques in trace evidence interpretation

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In trace evidence analysis, conducts analysis, identification, and interpretation of physical evidence for catch the truth and work for justice. An expert of forensic science provides his service to a criminal justice system and to civil legal communities as he can interpret and consult on the results of their analytical techniques like GRIM, XRF/XRD, SEM, GC/MS and FT-IR. There are numerous techniques which have been used in forensic science. The type of analytical method used depends on the type of trace evidence and on its interpretation. Through this report, we have tried to explain the importance of all possible analytical techniques in forensic trace evidence analysis as our cases studies. The focus is on new technologies that are in used having some limitations. The goal of this study is to encourage innovations to improve technological capabilities in characterization of trace evidences and to enhance use of these analytical techniques in forensic science around the globe.

Biography

Mukesh Sharma obtained his Ph.D. in Physics in 2005 at the age of 26 years from M L Sukhadia University. Since 2001 he is actively engaged with research in field of compton scattering techniques, XRF/XRD, trace evidence analysis, cyber forensic etc. He has published about 85 papers in very reputed journals/conferences. He is also reviewer of some international reputed journals of Forensic Sciences, Digital/Cyber Forensics etc. He is actively associated with various International societies like International Society for X-rays Absorption Spectroscopy (IXAS), Italy, International Association for Computer Science and Information Technology (IACSIT), Singapore (Fellow Member : 80341901), International Society for Condensed Matter and Nuclear Sciences (ISCMNS), England, International Association of Engineers (IAENG), Universal Association of Computer and Electronic Engineers (UACEE); the Society of Digital Information and Wireless Communications (SDIWC); International Association of Science and Technology for Development (IASTED) etc.

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