Particle Analysis in Forensic Science

REFERENCE: Bisbing RE, Schneck WM: Particle analysis in forensic science; 18:119–114; 2006.

ABSTRACT: Microscopic trace evidence includes particles from many sources such as biologicals, soil, building materials, metals, explosives, gunshot residues, and cosmetics. The particles are identified by morphological analysis, microscopy, and chemical analysis. Their identity is confirmed by comparison with reference materials or other comparison samples. The probative value of particles of forensic interest depends on their nature and the circumstances of their presence.

KEY WORDS: Biologicals, building materials, cannabis, cosmetics, diatoms, explosives, feathers, foodstuffs, forensic, gunshot residues, leaves, lichen, metals, microanalysis, microscopy, minerals, mosses, paper products, particles, phytoliths, polarized light microscopy, pollen, scanning electron microscopy, seeds, skin particles, spores, wood pulp.