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Analysis of UOC for nuclear forensics using Scanning Electron Microscope

Nuclear forensic science is a relatively young discipline that has evolved because of the need to study banned nuclear or radioactive material needed to determine its origin. Nuclear forensic science basically makes use of observable material properties, referred to as "signatures," which provide clues on the material's history. The work done in this research was to investigate morphological parameters for uranium ore concentrates as possible with new nuclear forensic signatures. Images were obtained in an FEI Quanta FEG 250 Scanning electron microscope (SEM) operating at an accelerating voltage of 15kV. The data analyzed by SEM showed that the samples could be differentiated by image texture. Morphological aspects of UOCs have been studied extensively, showing that these signatures can provide important clues to the material's past.

Apply to be considered for a student ; award (Yes / No)?

Yes

Level for award;(Hons, MSc, PhD, N/A)?

PhD

Primary author: Ms MOKHINE, Naomi Dikeledi

Co-authors: Mrs UUSHONA, Vera (North-West University); Prof. MATHUTHU, Manny (North-West University)

Presenter: Ms MOKHINE, Naomi Dikeledi

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