

Figure 1

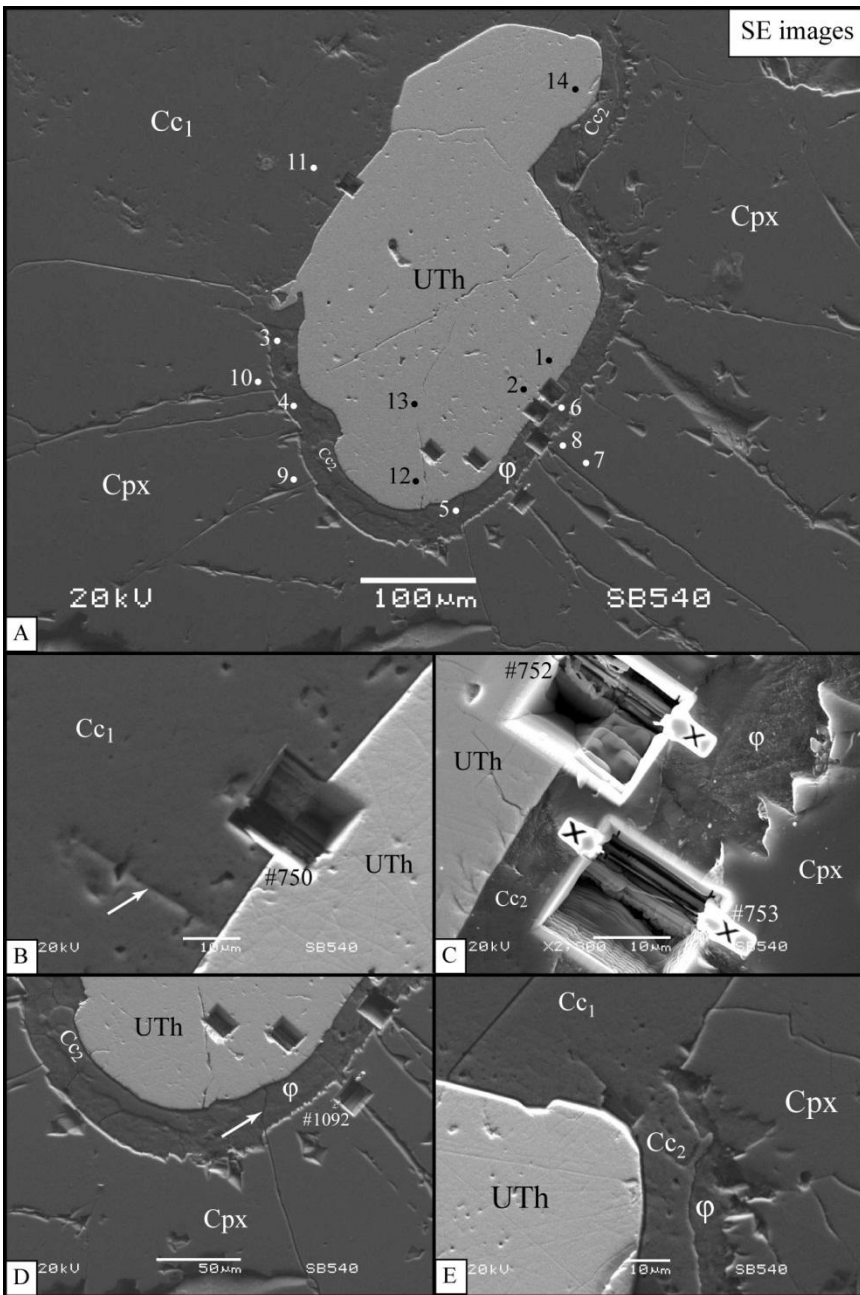


Figure 2

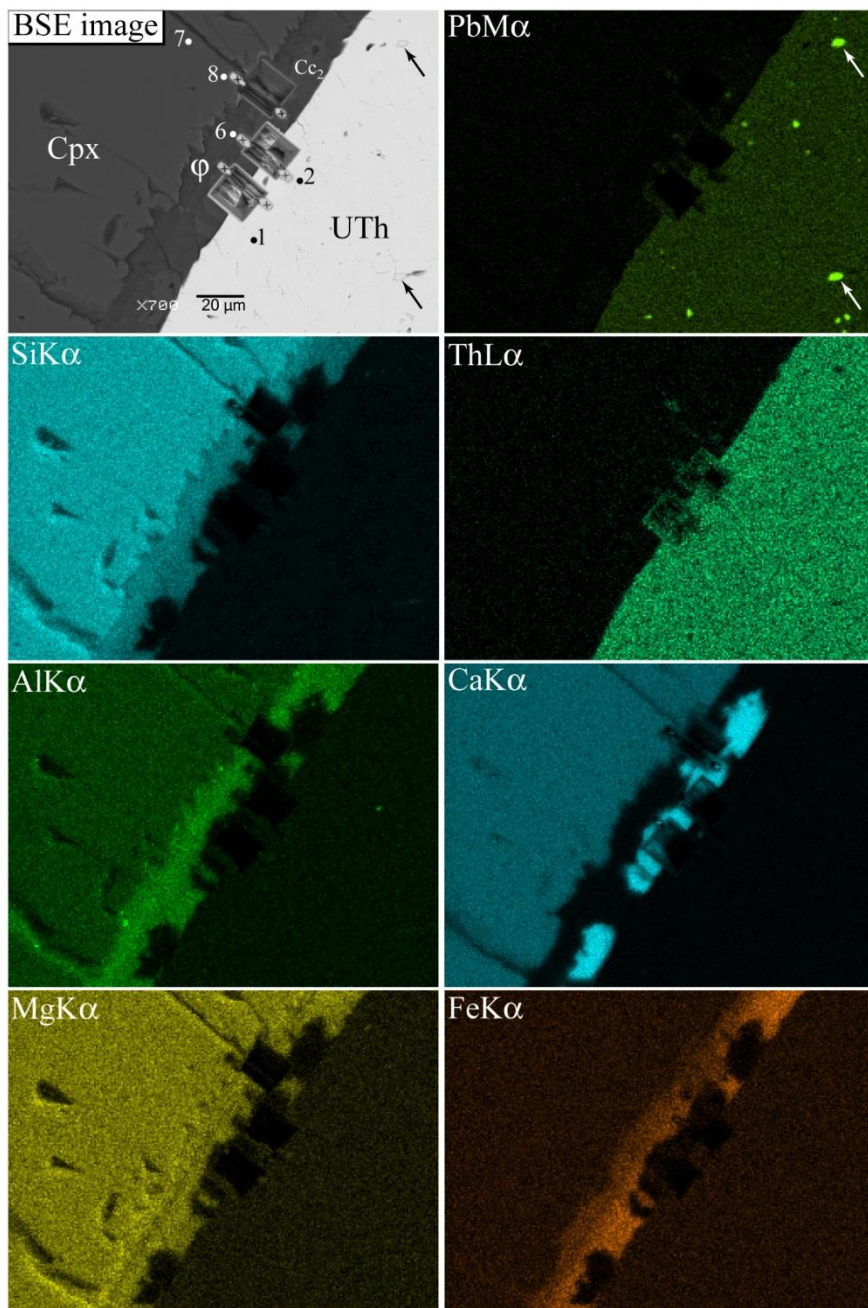


Figure 3

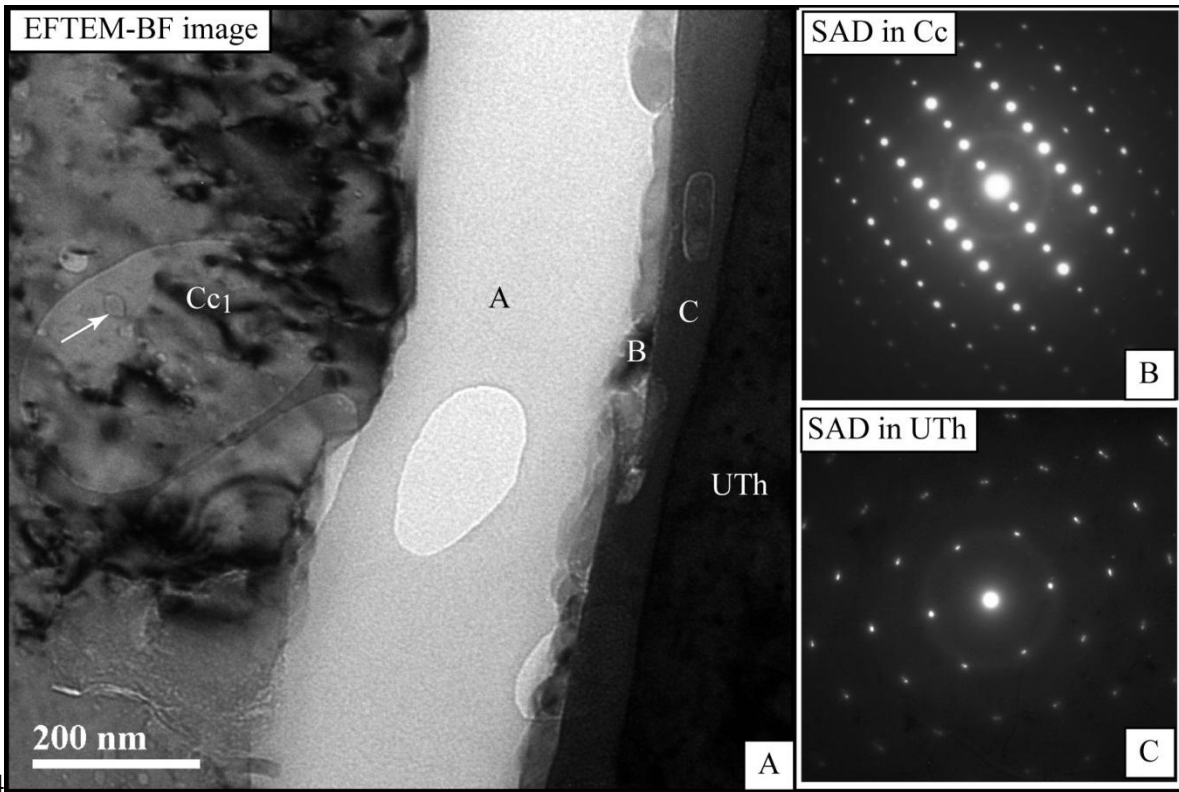


Figure 4

Figure 5 is a composite image showing elemental maps and EDX analysis. The top row displays an EFTEM-BF image of a cross-section with regions A, B, C, D, and UTh. To its right is a map of Uranium (U) and a corresponding EDX analysis spectrum labeled 'In zone A'. The bottom row displays an EFTEM-BF image of the same cross-section with regions A, B, C, D, and UTh. To its right is a map of Thorium (Th) and a corresponding EDX analysis spectrum labeled 'In zone C'. Scale bars of 100 nm are provided for the EFTEM-BF images. The EDX spectra show peaks for various elements including O, Ga, Si, Pb, U, Ca, Cu, Th, and U.

Figure 5



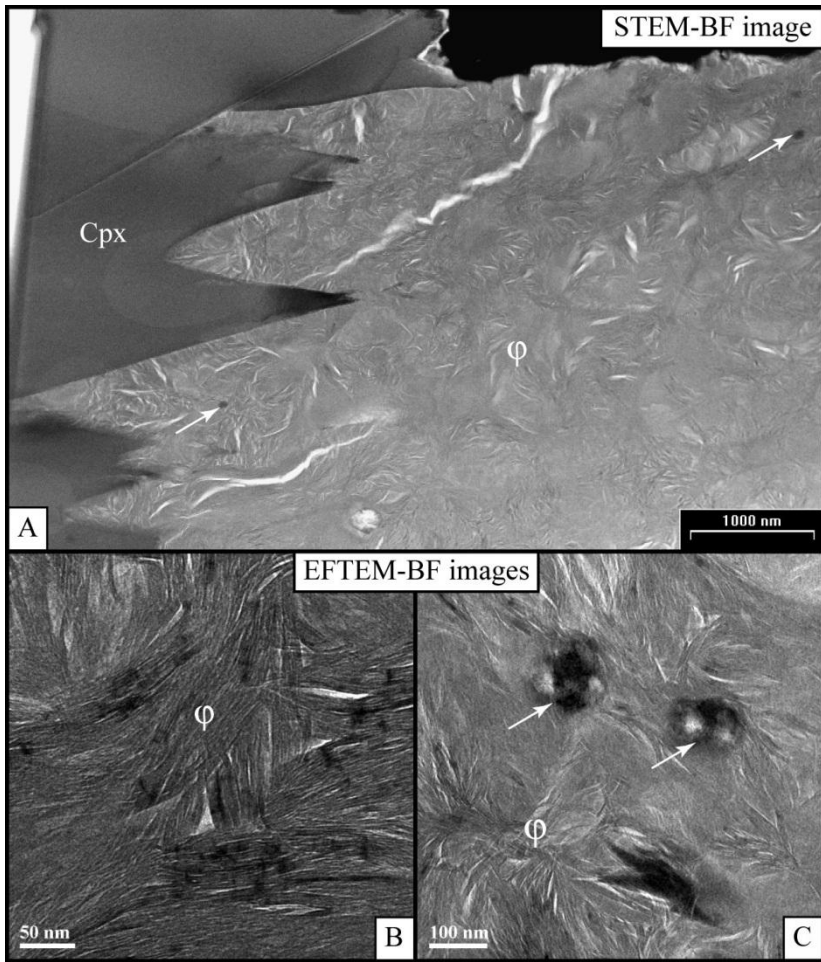


Figure 6

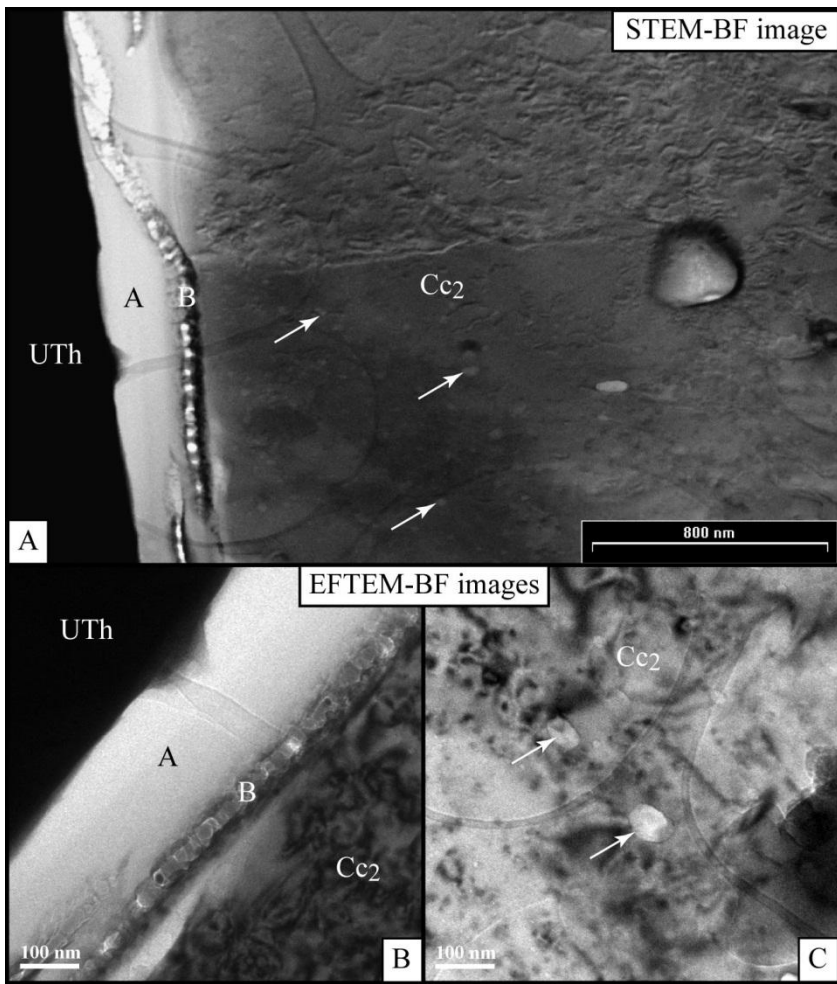


Figure 7

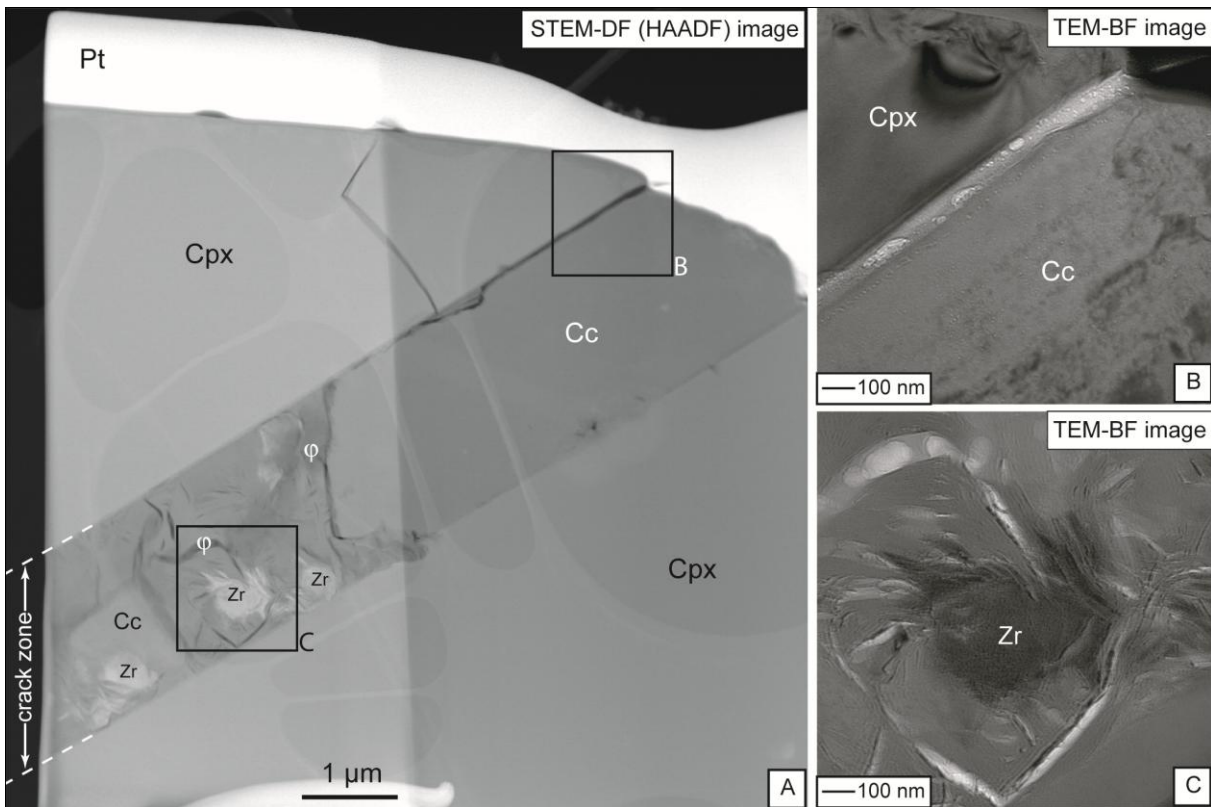


Figure 8

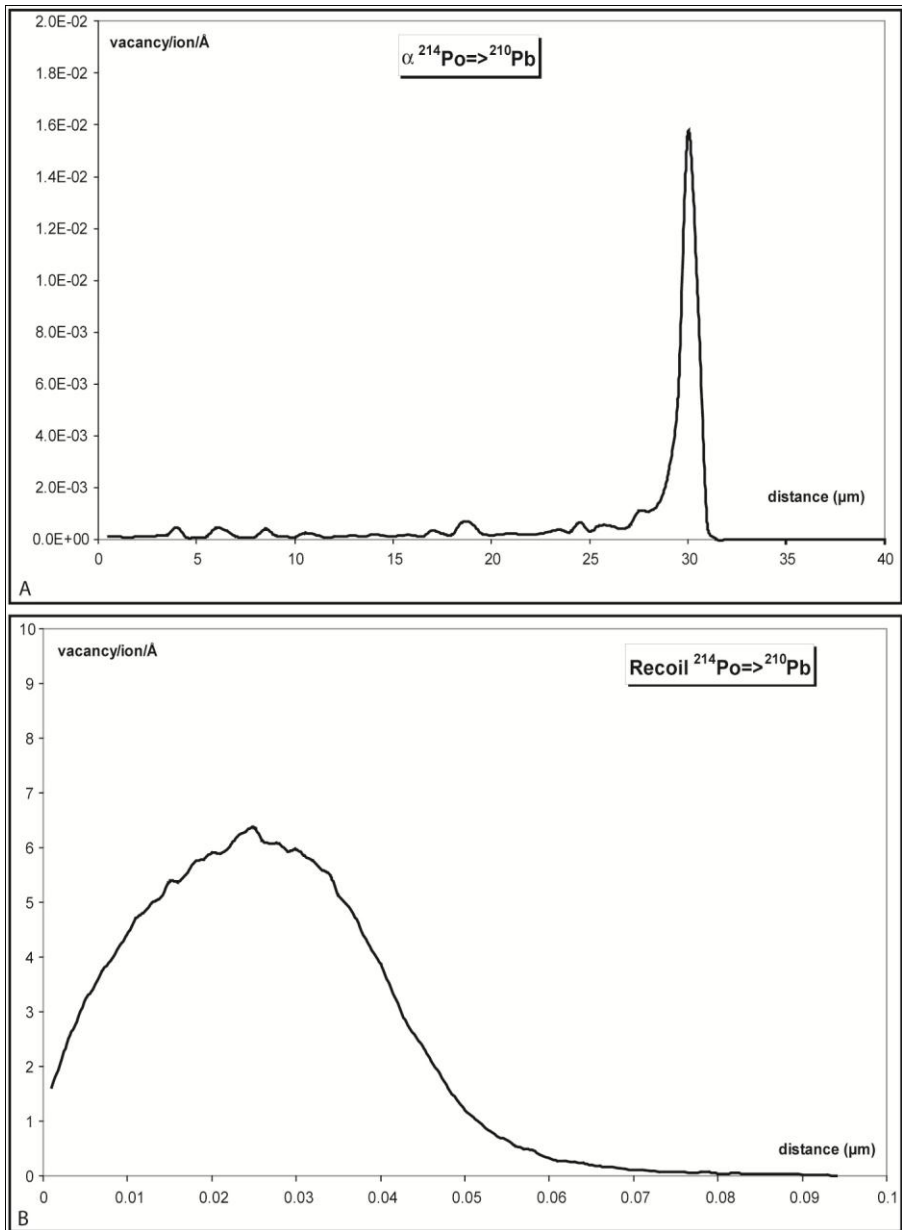


Figure 9

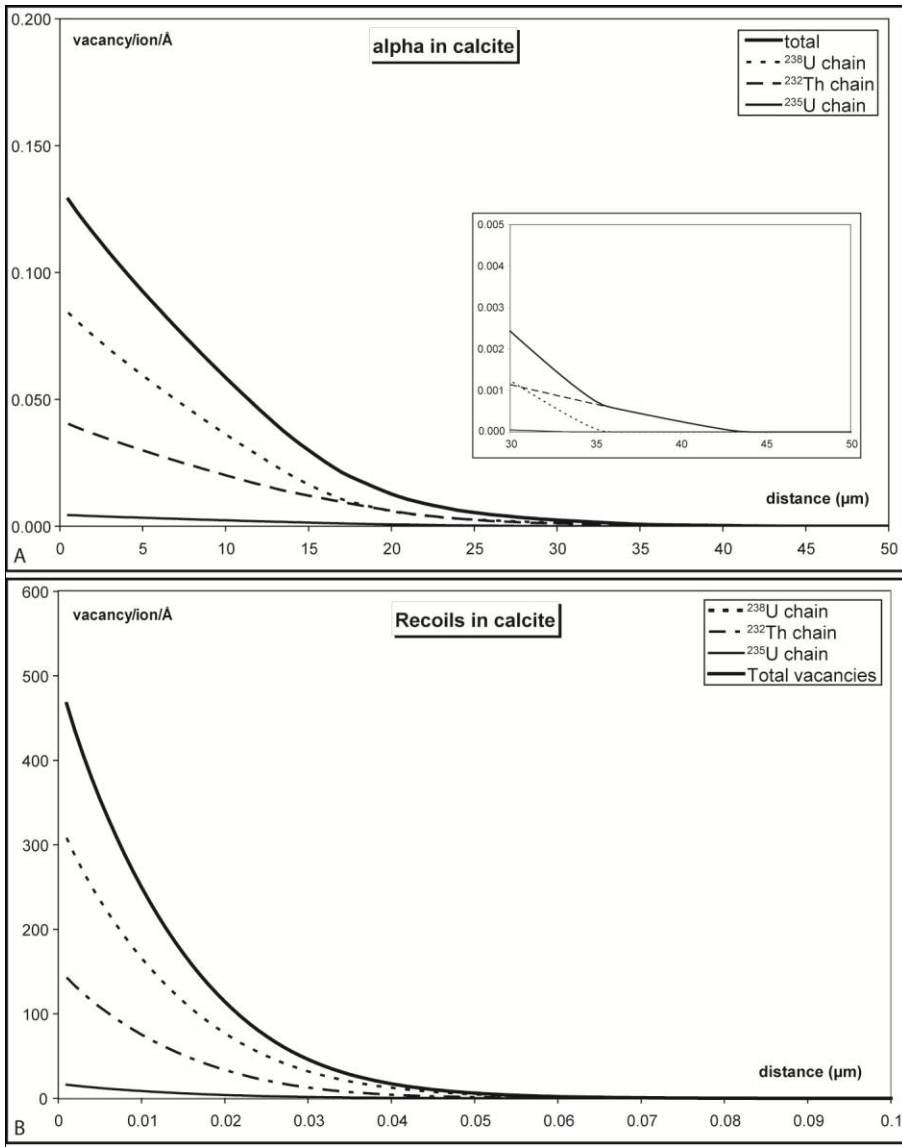


Figure 10

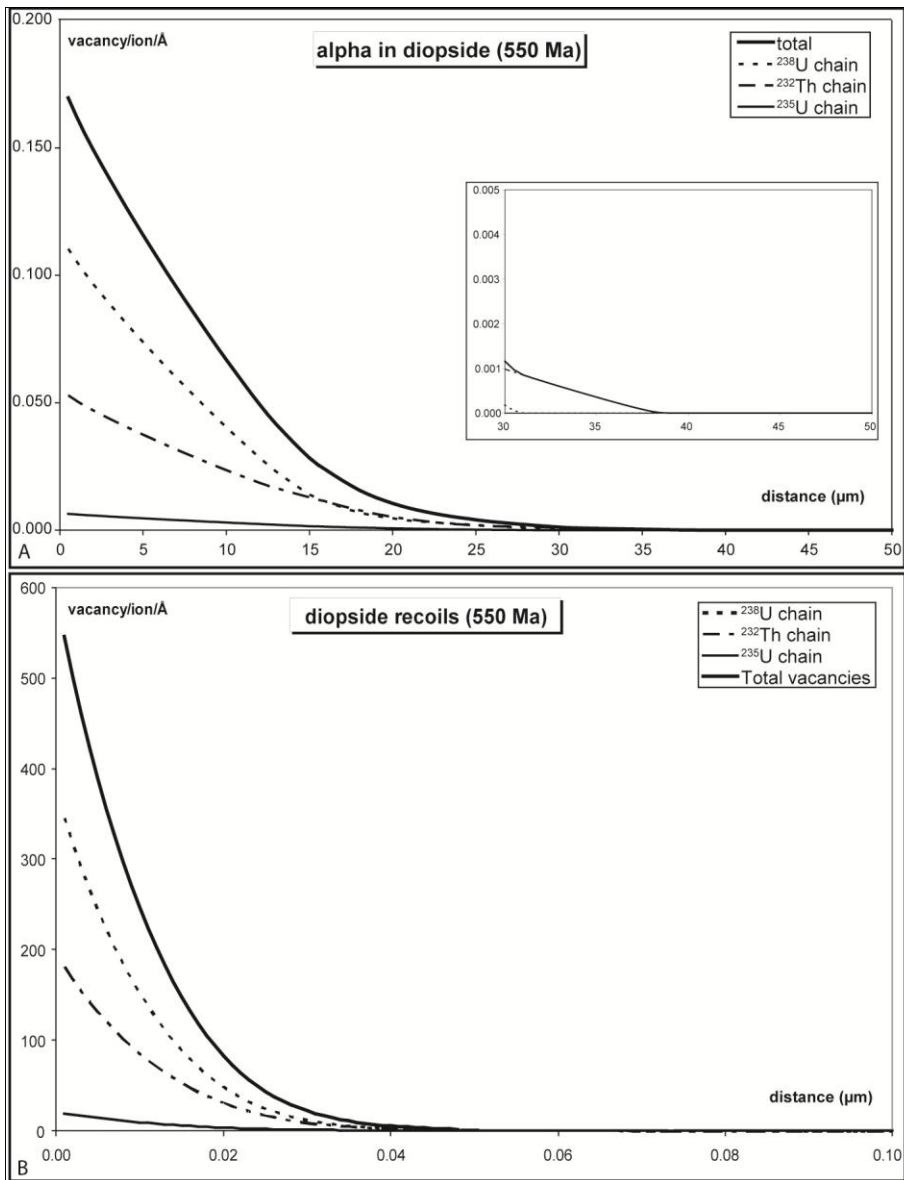


Figure 11



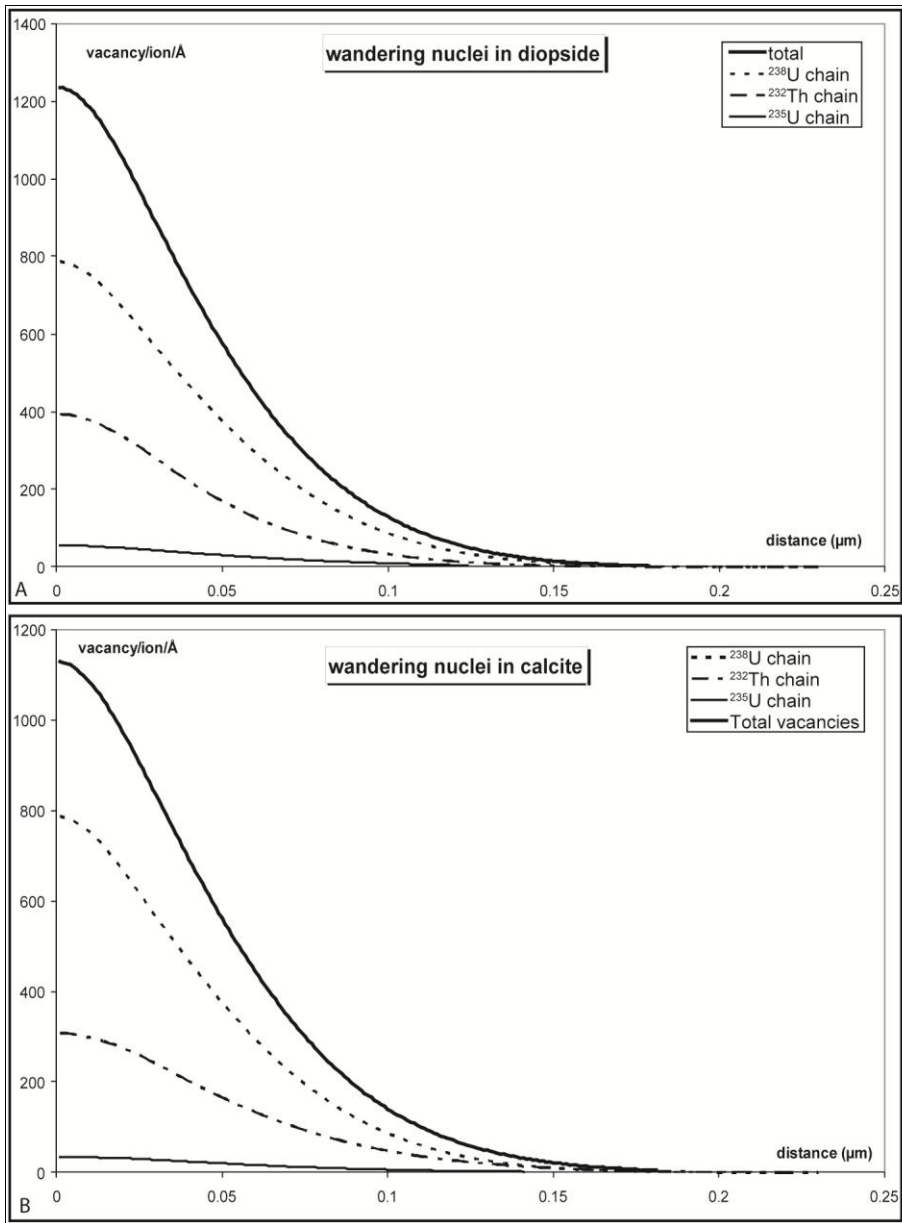


Figure 12