

Profile

Reconstruction of terrestrial paleoclimate change in the last 500 ky using high resolution cave speleothem records. Applying high-resolution geochemical and mineralogical tools (U-Th dating, C, O isotopes, clumped isotopes, Sr and Nd isotopes, Ion probe, MC-ICP-MS, Scanning Electron Microscope) to the understanding of: karst processes from rainfall source (the oceans) to sinks (caves); the use of isotope geochemical tracers as paleoclimate proxies for glacial-interglacial changes in the northern and southern hemispheres; using speleothems as recorders of paleohydrology in the Middle East and North Africa and desert boundary migration; The link between cultures, human habitation, technology to climate and environment in the Levant; Earthquake seismicity recorded by fractured speleothems. Geo-archeology: U-Th dating of archaeological events; Climate change and modern human migration 'out of Africa'. Isotope Geochemistry of Eastern Mediterranean sapropels,

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