



Contribution ID: 76 Contribution code: **PSB-32**

Type: **Poster**

New cosmogenic nuclide dating laboratory in CENIEH, Spain

Wednesday, 23 October 2024 17:15 (20 minutes)

CENIEH, located in Burgos, northern Spain, is dedicated to human evolution research worldwide, including Atapuerca, a world heritage archaeological site where among the oldest human fossils in Europe has been discovered. To support the needs of characterising geological and sedimentological context of archaeological sites, the institute also features a wide range of geological analysis (e.g., laser diffraction grain size analyser, XRD/XRF, SEM, digital mapping) and geochronology laboratories, such as palaeomagnetism, OSL, ESR and U-series dating. In 2020, cosmogenic nuclide dating research line has been launched to strengthen the existing geochronological capabilities in the centre, particularly, for timescales at early-mid Pleistocene and beyond. To date, we have established a procedure for routine target preparation for ^{10}Be and ^{26}Al from quartz. The current projects include landscape studies in Iberian Peninsula and elsewhere, as well as human evolution studies from Africa to Europe to Asia. In this paper, we present the general setup of the laboratory and procedure, the capacity and quality control, and current projects.

Student Submission

No

Primary author: Dr PADILLA, Santiago (CENIEH)

Co-authors: Dr FUJIOKA, Toshiyuki (CENIEH); Ms MIGHENS, Leticia (CENIEH); Dr JIMENEZ, Fernando (CENIEH); Dr SARRO, Isabel (CENIEH); Dr PARES, Josep (CENIEH)

Presenter: Dr PADILLA, Santiago (CENIEH)

Session Classification: Poster Session B

Track Classification: New and Upgraded Facilities