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The Centre of Applied Physics, Dating and Diagnostics (CEDAD) at the University of Salento: 25 years and still growing

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The CEDAD-Centre of Applied Physics, Dating and Diagnostics was established at the University of Salento in 1999 in the frame of a large scale research project funded by the Italian Ministry of Research and Education. The first core of the centre was a 3 MV Tandetron accelerator (Mod. HVEE 4130HC) initially equipped with only one high energy ion implantation beamline which was then upgraded for Accelerator Mass Spectrometry ¹⁴C dating becoming the first Italian center for research and service in radiocarbon dating. Since then, while fulfilling its initial mission of serving as national ¹⁴C dating facility, it had undergone relevant upgrades with the installation of five more beamlines. Currently the facility hosts six beamlines for ion irradiation, in vacuum and in air Ion Beam Analysis, AMS of rare nuclides and a nuclear microprobe. An hybrid ion source accepting both solid and gas samples is also in operation and is used to feed the original AMS ¹⁴C beamline. A general overview of the current status of the facility is presented in terms of instrumental developments and research projects in fields spanning from archaeology and geochronology to forensic and environmental sciences.

Student Submission

No

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