

**The CEDAD research infrastructure at the University of Salento:  
25 years of research In Material Science, Environment and Cultural Heritage**

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The CEDAD-Centre of Applied Physics, Dating and Diagnostics was established at the University of Salento starting from 1999 in the frame of the Catania-Lecce research program funded by the Italian Ministry of Research and Education.

The Tandetron Lab was the first laboratory equipped with a 3 MV accelerator manufactured by HVEE in the Netherlands upgraded for  $^{14}\text{C}$  Accelerator Mass Spectrometry. This has been the core of the first Italian center for research and service in radiocarbon dating.

Since then, while fulfilling the initial mission of serving as national  $^{14}\text{C}$  dating facility, the Tandetron accelerator has undergone relevant upgrades with the installation of five more beamlines and CEDAD included other laboratories and facilities for materials characterization by accelerator-based, optical and chemical techniques. Recently, the CEDAD facilities included SEM and TEM laboratories and are associated to CERIC-ERIC European International Consortium.

In the talk the potentialities of the CEDAD laboratories and the current important project in progress along with an overview of studies carried out at CEDAD in the field of material science, environment and cultural heritage will be shown.