



New talents: two students choose LIFE SYNFLUOR for their thesis

When scientific research meets the talent of youth, extraordinary opportunities arise.

LIFE SYNFLUOR, besides being a project based on **technological innovation**, is a path of growth for the new generations of chemists approaching this world. Evidence of

this is provided by **Mauro Schintu** and **Alessandra Murroni**, who recently graduated with a Bachelor's degree in Chemistry from the University of Cagliari, working on their thesis based on the research studies carried out, thanks to FLUORSID, at the **CeSAR** (Centro Servizi di Ateneo per la Ricerca) laboratories.

The recent graduates, guided by the expertise of **Luca Pala**, Research and Development Director, and **Claudio Cara**, Research Coordinator, were able to deepen the study of the LIFE SYNFLUOR process. Their research focused on the valorisation of the FSA (hexafluorosilicic acid), each targeting a specific field of application, thus contributing to the development of the project and becoming part of this sustainable journey.

Alessandra Murrone chose LIFE SYNFLUOR as the focus of her academic paper entitled: ***"Synthesis and characterization of highly dispersible precipitated silica from hexafluorosilicic acid for application as filler in tires"***, exploring key aspects of research and industrial development related to the project. "My work mainly focused on optimising the method of synthesis of highly dispersible silica to be used as a filler in tyres from hexafluorosilicic acid (FSA)" - explains Alessandra, who continues - "FSA is a waste product of the phosphate fertiliser industry, which can be used as a source of fluorine for the production of hydrofluoric acid and synthetic fluorspar, going through the synthesis of the silica itself, thus placing the whole project within a circular economy perspective and a valid raw material sourcing".

Mauro Schintu also explored the potential of the patented FLUORSID process for the reuse of industrial by-products, discussing a thesis entitled: ***"Valorization of hexafluorosilicic acid to obtain nanometric silica and calcium fluoride"***. "I am very proud to have been involved, even if only for a few months, in the development of LIFE SYNFLUOR" - said Schintu, who concluded - "A project born in Sardinia that can enhance our territory



through implementation of production models based on the circular economy which is, in my opinion, a crucial aspect".

Research projects can and must become a bridge between the academic world and industry, bringing new generations of chemists closer to an increasingly sustainability-focused method of study, contributing to the protection of the environment and promoting increasingly responsible Research and Development activities.