

## Code B\_2742

<b>Department</b>	Civil - Environmental Engineering and Architecture
<b>UniCa reference person</b>	Gianluigi Farru
<b>Project title in English</b>	Exploring Hydrothermal Carbonization (HTC) for Enhanced Organic Waste Valorization
<b>Project title in Italian</b>	Valorizzazione dei Rifiuti Organici mediante Carbonizzazione Idrotermica (HTC)
<b>Subject area of reference (World University Ranking)</b>	ENGINEERING AND TECHNOLOGY
<b>Project summary and VPS' profile</b>	<p>The Visiting Professor (VP) will conduct research and education on Hydrothermal Carbonization (HTC). HTC is a promising solution for improving organic waste valorization, aligning perfectly with the imperative for sustainable development.</p> <p>Bio-waste holds enormous potential in the journey toward a circular economy, offering opportunities to recover value-added products and energy. The VP's primary task is to explore HTC's transformative potential. This technology efficiently converts waste biomass into solid carbonaceous materials and process water, with applications in energy, environmental solutions, soil enrichment, and nutrient recovery.</p> <p>Within the realm of HTC, the VP will investigate valorization options for both hydrochar and process water for the recovery of energy and materials through process optimization.</p> <p>This comprehensive approach promises to revolutionize waste and resource management, contributing significantly to global sustainability goals. The VP's engagement extends beyond research, as they will impart their expertise through seminars tailored to Master's Degree students in Environmental Land and Engineering and doctoral candidates in the PhD program of Earth and Environmental Sciences and Technologies, offering invaluable insights into waste valorization methodologies and preparing future leaders in the field.</p>
<b>Proposed length of stay</b>	Short visit of 6 days
<b>Expected period of activity</b>	May 2024
<b>Academic position of the VPS'</b>	Professor
<b>Course of Study</b>	Laurea triennale (1st cycle University Degree), Laurea magistrale (2nd cycle University Degree), Dottorato di ricerca (PhD Course)
<b>Language of instruction</b>	English

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