

#### **P-14: Innovation in Biocatalysis: Toolbox for Sustainable Bio-Based Production**

The main requirement for the successful implementation of bioeconomics is strategic, interdisciplinary cooperation between specialists in chemistry, biotechnology, micro and macrobiology, and engineering. Only by focusing the expertise from these areas – both in educating STEM teachers and throughout the entire value-chain of the chemical and pharmaceutical industries – can the optimal integration of biotechnological and (increasingly eco-friendly) chemical processes be achieved and sustainable production ensured.

This project aims to create a network for dynamic and innovative biocatalysis. From the perspective of applied research, new transdisciplinary concepts will be developed and access to the basic scientific principles will be set up for all stakeholders in the value chain. In addition to developing methods and applications, educational content for the tertiary level will be adapted to incorporate the bio-based technology shift; economic and social implications will also be examined and communicated within the community and to a larger audience.