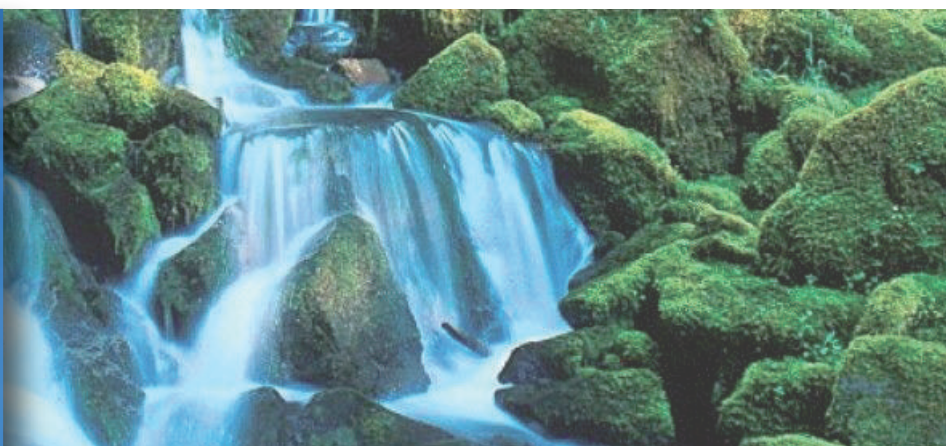


Sustainable and Scalable Biocatalytic Cascade Reactions Training Network



PROJECT DETAILS

Funding Programme:
 Horizon 2020
Sub-Programme:
 Marie Skłodowska-Curie
 Innovative Training Networks
Funding Scheme:
 European Industrial
 Doctorates
Project Reference:
 634200;
 UE-15-BIOCASCADES-634200
Project Duration:
 48 months (From 2015-01-01
 to 2018-12-31)
Total Project Value:
 € 2.787.956'64
EU Grant-Aid:
 € 2.787.956'64
Funding to UniOvi:
 € 123.936'48

PROJECT DESCRIPTION

In BIOCASCADES, nine early-stage researchers (ESRs) will investigate the development of sustainable (chemo)enzymatic cascade reactions under the 'green chemistry' philosophy. The proposed BIOCASCADES project combines different techniques such as compartmentalization, protein engineering and reaction engineering in order to develop commercially viable and environmentally benign one pot reactions. By avoiding intermediate downstream and purification-steps, cascade reactions minimize production costs, energy demand and waste production and are thus expected to make a major contribution for the development of sustainable and efficient production processes.

Small- and medium sized enterprises (SMEs) are emerging as main drivers of European Research. They are dynamic, explore new areas and create new ideas, while large companies rely more and more on outsourcing research or involving SMEs by joint ventures. However, small companies are not strong enough as stand-alone enterprises, which requires them to form networks with other SMEs and academia. This creates a strong demand for young researchers who can move freely in an international and interdisciplinary environment. In a tailor-made training program BIOCASCADES aims to provide the nine early stage researchers with specific scientific and transferable skills for careers in the highly dynamic European biotechnology sector. Training at leading laboratories of biocatalysis will develop their scientific skills, while secondments to the industry and specific workshops will develop their entrepreneurship. The graduates of this doctorate program will be highly qualified for collaborative research between European academia and industry.

The consortium is formed by leading academic laboratories from biocatalysis and protein engineering together with a network of four innovative biotech companies. By combining their versatile expertise, the consortium can achieve a success that would not be possible in isolated projects.

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