

N°1428 / PC

TOPIC(s) : Enzyme production, immobilization / Industrial biocatalysis

EziG®: A Universal Immobilisation Technology for Enhanced Biocatalytic Processes

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PURPOSE OF THE ABSTRACT

Immobilised enzymes have emerged as a critical tool in industrial biocatalysis, providing a range of benefits such as biocatalyst reusability, streamlined downstream processing, and foremost improved enzyme stability. The optimal choice of immobilisation support materials, however, is often a time-consuming and expensive process. In this poster presentation, we introduce our advanced EziG® technology – a universal immobilisation matrix that offers a simple and cost-effective solution for a wide range of biocatalytic applications. EziG® is designed to achieve superior enzyme loadings, high activities, and stabilities with a wide range of enzymes, making it an efficient solution for immobilised enzyme-based processes, helping to meet the growing demand for sustainable industrial processes. At EnginZyme, we have successfully used EziG® to develop new process solutions for the production of in-demand chemicals ranging from pharmaceutical intermediates to food and cosmetic ingredients. Here, we will showcase the versatility, efficiency, and reliability of EziG®-based biocatalytic processes, highlighting their optimisation and scale-up with a case study as an example.

FIGURES

FIGURE 1

FIGURE 2

KEYWORDS

Enzyme immobilisation | Flow biocatalysis | Industrial biocatalysis

BIBLIOGRAPHY