New lipases and proteases

SYNOPSIS

Enzymatic processing of lipids and oils is becoming an important area of research. Hydrolytic enzymes, such as lipases and proteases are being sought after as the biocatalysts of the future. Synthetic reactions to create new compounds that have novel properties may be achieved through biocatalysis. Some of these compounds can improve or even replace on existing products that were produced by inorganic catalysis or being fractionated from un-renewable resources, such as petroleum. The authors focused on lipases and proteases as the most critical enzymes. Proteases are already widely used in industry and there is always the possibility for new enzymes to be used in existing and new applications. Lipases have an exciting potential for advancing the bioprocessing industry, in particular oleochemicals. Thermostable enzymes are always sought by the industries. Whereas solvent tolerant enzymes are becoming the vogue in view of their ability to function in a low aqueous medium, suitable for synthetic reactions.

The research in this book involves a broad range of the biotechnology scope. However, the focus of this book is on the search and acquisition, isolation and purification and the characterization of these enzymes. However, derivatised enzymes must also be taken into consideration. The authors' laboratory is involved in the development and application of immobilized and modified enzymes. These designer enzymes may prove to be the new enzymes that would really expand the potential applications of enzymes in industries.

Keyword: Lipase; Proteases