

The application of microbial enzymes in biotechnology

Olaitan Owoyemi

Achievers University Owo, Nigeria



Abstract

Microbial enzymes are biocatalysts that play an important role in metabolic and biochemical reactions. They have been paid more attention due to their active and stable nature than enzymes from plants and animal sources. Microbial enzymes are of great importance in the development of various biotechnological and industrial bioprocesses. Current applications are focused on many different markets including pulp and paper, leather, detergents and textiles, pharmaceuticals, chemical, food and beverages, biofuels, animal feed and personal care, among others. Today there is a need for new, improved and more versatile enzymes in order to develop more novel, sustainable and economically competitive production processes. Microbial diversity and modern molecular techniques, such as metagenomics and genomics, are being used to discover new microbial enzymes whose catalytic properties can be improved and modified by different strategies based on rational, semi-rational and random directed evolution. Most industrial enzymes are recombinant forms produced in bacteria and fungi such as lipase, lactase, aminopeptidase, acid proteinases, cellulases, chitinases, glucose oxidases are enzymes naturally produced from bacteria and fungi microorganisms.

Speaker Publications:

1. "Comparative evaluation of bacterial and fungal diseases associated with Sugarcane"; April 2019
DOI: 10.13140/RG.2.2.20226.32964
2. "Women in purgatory: The case of Nigerian women in the boardrooms"; January 2012

[24th European Biotechnology Congress](#); September 23-24, 2020, Webinar

Abstract Citation:

Olaitan Owoyemi, The application of microbial enzymes in biotechnology, Euro Biotechnology 2020, 24th European Biotechnology Congress; September 23-24, 2020 Webinar

<https://www.biotechnologycongress.com/europe/speaker/2020/olaitan-owoyemi-achievers-university-owo-nigeria>



Biography:

He is a Microbiologist with wide interests on the areas of research and products like development, biotechnology, bioremediation, food and industrial Microbiology with disciplinary research experience in microbiology. He is resilient and detail-oriented. He has technical expertise in hematology, cell culture, microscopy, Skilled in scientific writing. Member British Society of antimicrobial chemotherapy (BSAC), Member American society of microbiology.