

# Production of Protease using Cold Temperature Fermentation Process

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## Abstract

Psychrophilic micro-organisms have the largest distribution on earth and they are widely adaptive to the nature produce wide varieties of cold – adaptive enzyme. Many organisms including *Pseudoalteromonas*, *Aspergillus*, *Aeromonas*, *Moraxella* are known to produce enzyme such as lipases, protease and amylases. Protease from a special class of enzyme that is extensively useful in many industries. Extracellular protease produce by Antarctic marine *Pseudoalteromonas* species have been reported. Protease is enzyme that breaks peptide bond to produce amino acid and other simpler peptides. It can be isolated from a variety of sources such as plant, animal and microbial (Fungi and bacteria). Its application is very broad and has been used in many fields for year and is mainly used in food and detergent industries. The protease used in detergent industry must have a wide specificity spectrum towards a variety of substrate, as it must be able to clean up a variety of dirt left over such as food, blood and others. It must resist against oxidizing and chelating agent which are other component of the detergent. Protease must also be stable and active at higher temperature and pH. The most important parameter of protease in order to able to be used in detergent industry is the range of its pH value.

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## Biography

The Mukteshwar Dhabale is now doing his master in medicine at Guangzhou University of Chinese Medicine. His research

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