

Industrial enzymes in bioindustrial sector development: An Indian perspective

Abstract

The bioindustrial and information technology sectors have been the two most-decisive factors for the rising Indian economy over the last 15 years. India is the second fastest growing economy in the world, with a gross domestic product (GDP) of 9.2 per cent in 2006-2007. Industrial enzymes production and marketing predominantly cover the developments incurred in the bioindustrial sector. In 2006-2007, the bioindustrial sector made an impressive turnover of Rs. 3950m, with a growth rate of 5.33 per cent. India imports about 70 per cent of the total enzyme consumption. Pharmaceutical enzymes are the representatives of industrial enzymes' demand in India and cover almost 50 per cent of the total enzyme demand, followed by detergent enzymes (20 per cent) and textile enzymes (20 per cent). The global market for enzymes was estimated to be about \$ 2bn in 2004 in tune with an average annual growth rate of 3.3 per cent. This article touches upon the importance of major industrial enzymes in the development of the bioindustrial sector in India. Also, applications of enzymes, manufacturing industries and major suppliers or distributors of enzymes have been discussed.