Synthesis of Drugs, Saccharified Fatty Esters and 4-Methoxy Cinnamoyl Glycerol by Enzymes

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Within the wide-class of enzymes catalyzing the hydrolysis of various esters, one differentiates between lipase and esterase on the basis of their relative preferential substrate specificity, though all lipases as well as the majority of esterase share the α/β hydrolase fold. The synthesis of drugs, drugs intermediates, saccharide-fatty acid esters and sun screen compounds by pig liver esterase and pig pancreatic lipase carried out in the laboratory has been reviewed and their selectivity in the synthesis of compounds compared. A new route of synthesis of paracetamol, a common analgesic drug using esterase and lipase to overcome the complicated steps starting p-aminophenol, which is unstable compound. To get a better yield than chemical method a new route for enzymatic synthesis of 4-methoxy cinnamoyl glycerol (U-V protection compound has been carried out and all the methods are eco-friendly.

Biography

A. Nag has completed his Ph.D degree from Jadavpur University (Kolkata). He has got three years industrial and twenty five years teaching experiences in Indian Institute Technology, Kharagpur premier and renowned institute in India. He was Visiting Professor in Taiwan and Italy universities. He is the author of seven books, seventy research papers and guided seven research scholars.