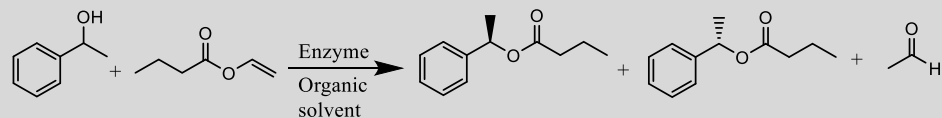


## OLD PROJECTS

We were interested in elucidating the mechanism of catalysis of serine proteases in non-aqueous media (organic solvents). Enzymes are highly efficient and enantioselective catalysts, and in organic solvents they can be used to synthesize biorelevant compounds. The enantioselectivity exhibited by most of these enzymes was of particular interest for us. But the problem was that their enantioselectivity was unpredictable: it depended on the substrate's structure and on the type of organic solvent chosen for the reaction. A typical reaction catalyzed by serine proteases suspended in organic solvents is the following:



This study yielded several publications, and to understand the enzyme's mechanism we looked at their secondary and tertiary structure, their flexibility and aggregation in organic solvents.