During the course of my fifth semester, I had taken a keen interest into the subject “Industrial Enzymology”, which involved the study of the various roles enzymes play in different industries. It is there I realized enzymes in the 21st century no longer fit into the traditional definitions of catalysts that just operate in living organisms just to aid a process. They are used to obtain some of the products that we avail to on a day to basis. According to me, the most important characteristic of enzymes that set them apart from any other molecules is the celerity with which reactions proceed in their presence. Since, their site of action is extremely specific I was amazed to find out, that they also play an important role in enhancement of particular flavours due to this very property. For example, we can obtain different flavours of cheese by varying the length of the fatty acid chain the enzyme lipase cleaves. This ability to induce flavours by enzymes is not restricted to dairy industries alone, as I quickly realised during my project component when I had to study the various activities of Beta Glycosidases in wine making. Here I obtained the enzyme from two different microbial sources and had to take two factors into account, the first being the pH, and the second being temperature to determine models of operate and determine which model works more efficiently compared to the other. This project enabled me to understand how the same enzyme obtained from different microbial sources even though having the same properties, can generate different types of terpenes, which can impart different aromas and flavours to wine. The above mentioned nature of enzymes increases our accessibility to myriads of different variations of products which would otherwise not be possible to obtain. For example, we can procreate different flavours, textures of wine by using different sources of enzymes. This particular property of enzymes really appeals to me.

It was during my Internship at The Indian Institute of Chemical Biology, Kolkata under Professor Dr P. Jaisankar that I had worked on a similar enzyme property where in I had handled the extraction, validation and standardisation of a particular catalytic enzyme from a natural source and really fuelled my interest in pursuing this field in particular.

There is no doubt that Novozymes, a global biotechnology company who’s unmatched laurels in the field of enzymology is the ideal place where in I can grow and better myself. Being one of the world’s leading producer of enzymes and having produced the world’s first fat splitting enzyme for detergents-Lipolase, Novozymes has leads innovations throughout the world. I am confident that by working at Novozyme, I would not only learn but also be able to provide back as a dedicated resource and researcher.