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# MSC PROJECT

## CHARACTERIZATION OF ENZYMATIC DEGRADATION OF SELECTED PHARMACEUTICALS

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Pharem Biotech is a biotech company located in Södertälje, which is focusing on environmental biotech. The idea is to provide products and technologies for removing environmental hazardous substances in our everyday life. The products can be applied in areas from the private customer up to the global corporate perspective with focus on areas surrounding sewage applications.

### Project background

Many of the organic compounds used in everyday life are hazardous for the environment and public health. As a few examples can be mentioned hormonal substances that affect the development of animals, normal pain killers that reduce bird populations and flame protectant substances that accumulates and disturb chemical pathways in organisms.

Pharem Biotech have developed a product using biological active compounds that degrade these hazardous substances. Important step of the process is to guarantee a reliable and steady production optimization of these biological compounds. To fulfill the prerequisites of the product on the production step to guarantee that the end product reach the standards needed for the project.

### Project goal

According with the company focus on pharmaceutical bioremediation, the overall goal of the project will be the characterization of enzymes able to degrade pharmaceuticals compounds. The project will be divided in three different phases:

- Enzyme in selection
- Screening of enzymatic activity towards pharmaceuticals
- Enzymatic kinetic characterization

### Contact

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