

## David Erola

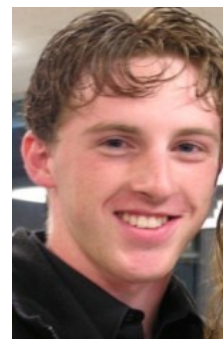
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Chemistry/3M

## *Influence of a Background Matrix on the Enzymatic Activity of Immobilized Lipase*

Proteins, as enzyme catalysts, have been found to be useful in many different biological and chemical applications. Lipase proteins, for example, are naturally found in the human digestive system and break down the fats that we consume. Alternatively when isolated in a lab reaction, the lipase proteins can be used to perform hydrolysis reactions *in vitro*.

In order to efficiently utilize enzymes in an industrial-sized reaction setting, the proteins can be attached to a larger mass - immobilizing them - in order to more easily separate them back out after a reaction. This fact coupled with the sustainability of enzymatic reagents makes this a valued technique. My research analyzed various background conditions relating to the immobilization of *Candida antarctica* lipase-B onto Emphaze beads in order to maximize its enzymatic activity.



Poster Number:

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