

A CHEMICAL EQUATION FOR CUTTING EDGE RESEARCH

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Biocatalysis. Most enzymes are proteins that are highly specific and efficient catalysts, however, their application in chemistry is limited because of enzyme instability, high price, and low availability. Some of these limitations can be overcome by binding enzymes to solid materials. Such bound enzymes are also more stable to heat or organic solvents, and the enzyme catalysts can be recycled to reduce the cost of their usage. At this mentorship site, the students will learn to bind enzymes at novel solid surfaces. Microcalorimetry, fluorescence spectroscopy and gel electrophoresis methods will be used to quantitate the enzyme behavior after immobilization.

If you love chemistry, you will enjoy preparing new materials, and experimenting with new substances. We invite you to spend three weeks in high-tech laboratories assisting our team of researchers!