

Enzyme immobilization based on sol-gel technology for pesticides determination

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Environmental risks associated with pesticide use arise from both their toxicity and their tendency move with water. Because of increasing concerns over agricultural worker health and its potential environmental impacts, there is a growing interest to develop novel analytical methods capable of performing rapid detection of these compounds in the field.

The pesticides inhibition of biocatalytic properties of enzymes immobilized using sol-gel technology was studied using luminescence transduction strategies.

Based on the change in luminescent behaviour of enzymatic activity induced by the pesticides simple methods for investigation of the pesticides determination have been developed.