

## Accepted Manuscript

Title: Gold Nanoprobe for Inhibition and Reactivation of Acetylcholinesterase: An Application to Detection of Organophosphorus Pesticides

Authors: Manmohan L. Satnami, Jyoti Korram, Rekha Nagwanshi, Sandeep K. Vaishnav, Indrapal Karbhal, Hitesh K. Dewangan, Kallol K. Ghosh



PII: S0925-4005(18)30679-8  
DOI: <https://doi.org/10.1016/j.snb.2018.03.181>  
Reference: SNB 24466

To appear in: *Sensors and Actuators B*

Received date: 13-11-2017  
Revised date: 23-2-2018  
Accepted date: 29-3-2018

Please cite this article as: Manmohan L.Satnami, Jyoti Korram, Rekha Nagwanshi, Sandeep K.Vaishnav, Indrapal Karbhal, Hitesh K.Dewangan, Kallol K.Ghosh, Gold Nanoprobe for Inhibition and Reactivation of Acetylcholinesterase: An Application to Detection of Organophosphorus Pesticides, *Sensors and Actuators B: Chemical* <https://doi.org/10.1016/j.snb.2018.03.181>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

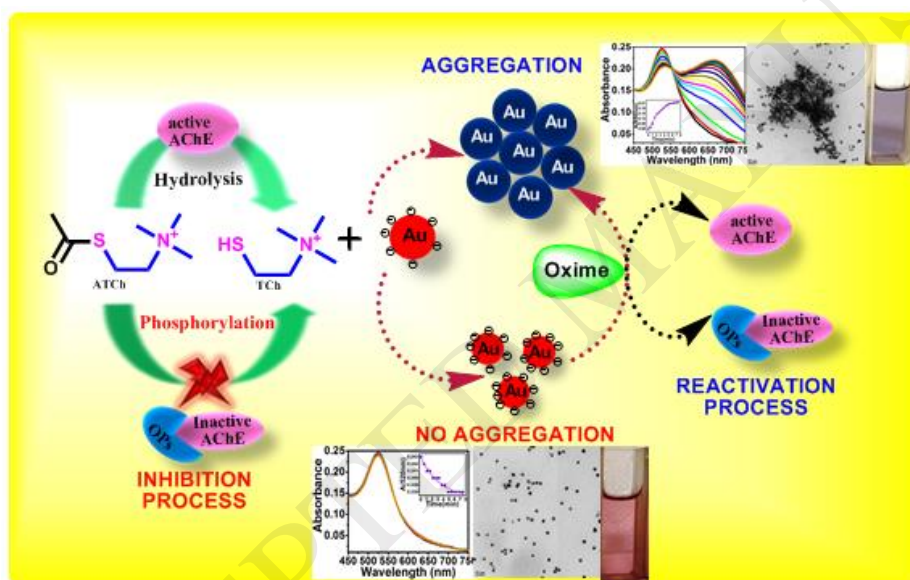
# Gold Nanoprobe for Inhibition and Reactivation of Acetylcholinesterase: An Application to Detection of Organophosphorus Pesticides

Manmohan L. Satnami<sup>a\*</sup>, Jyoti Korram<sup>a</sup>, Rekha Nagwanshi<sup>b</sup>, Sandeep K. Vaishnav<sup>a</sup>, Indrapal Karbhal<sup>a</sup>, Hitesh K. Dewangan<sup>a</sup>, and Kallol K. Ghosh<sup>a</sup>

<sup>a</sup>School of Studies in Chemistry Pt. Ravishankar Shukla University, Raipur (C. G.), India-492010

<sup>b</sup>Department of Chemistry Govt. Madhav Science P. G. College, Ujjain (M.P.), India-456010  
[manmohanchem@gmail.com](mailto:manmohanchem@gmail.com)

## Graphical Abstract



## Highlights:

- Inhibition and their reactivation of AChE has been monitored using gold nanoprobe.
- TCh induced aggregation of AuNP is colorimetric tool for AChE activity.
- Reactivation potency of oxime, quarternized oxime and SHA has been investigated.
- An in-situ detection of OP pesticides in real water samples have been achieved.

## Abstract

Download English Version:

<https://daneshyari.com/en/article/7139468>

Download Persian Version:

<https://daneshyari.com/article/7139468>

[Daneshyari.com](https://daneshyari.com)