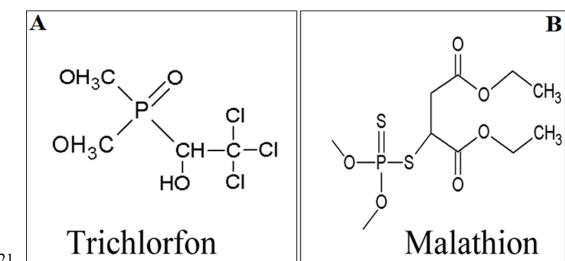
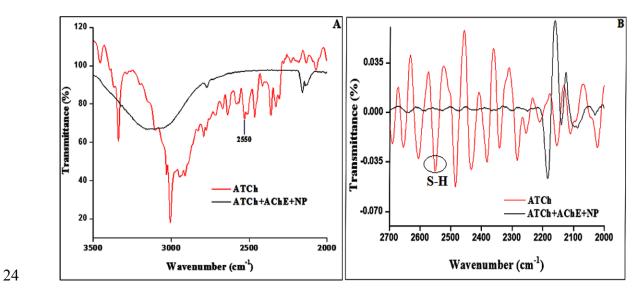
1	Electronic Supplementary Information (ESI)			
2	Developing acetylcholinesterase based inhibition assay by modulated synthesis			
3	of silver nanoparticles: Application for sensing of organophosphorus			
4	pesticides			
5				
6	D. Nanda Kumar ¹ , A. Rajeshwari ¹ , S. A. Alex ¹ , M. Sahu ² , A.M. Raichur ² , N.			
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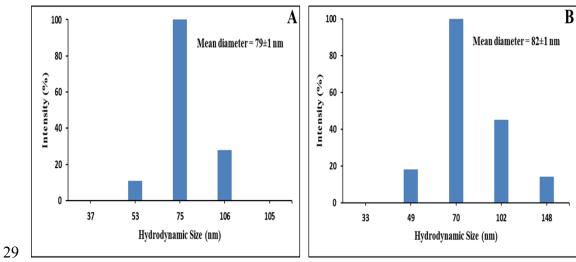


20 Fig. S1. Chemical structures of A) Trichlorfon and B) Malathion

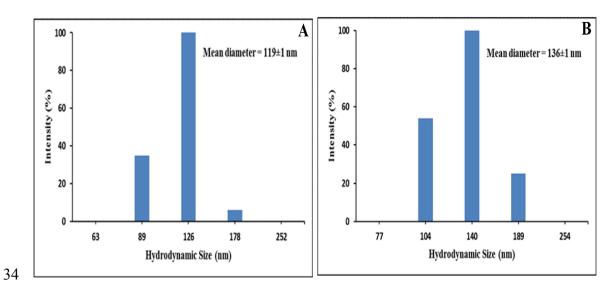
Fig. S2. A) FT-IR spectra of acetylthiocholine before and after interaction with citrate cappedAgNPs and B) its secondary derivative spectra.



26 Fig. S3. Particle size distribution of AgNPs formed in the system containing AgNO₃ (1 mM), Na₃C₆H₅O₇ (1 %), NaBH₄ (10 mM) A) AChE (100 mU mL⁻¹) alone and B) ATCh (0.1 mM) 27 alone. 28

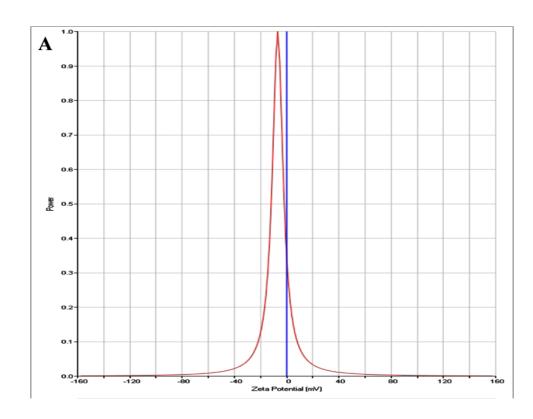


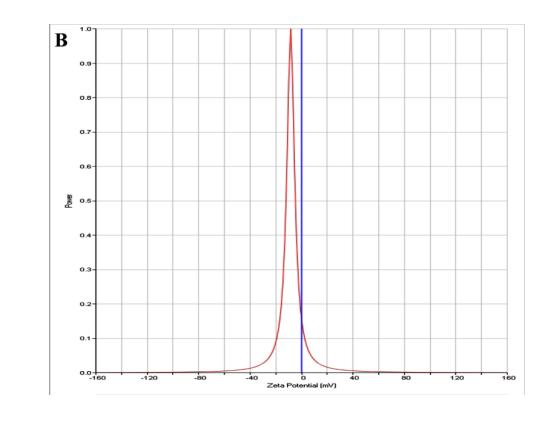
30 Fig. S4. Particle size distribution of AgNPs formed in the system containing AgNO₃ (1 mM), 31 Na₃C₆H₅O₇ (1 %), NaBH₄ (10 mM), AChE (100 mU mL⁻¹), ATCh (0.1 mM) with **A**) trichlorfon 32 (1 nM) and **B**) malathion (1 nM).



35 Fig. S5. Zeta potential value of AgNPs formed in the system containing AgNO₃ (1 mM), 36 Na₃C₆H₅O₇ (1 %), NaBH₄ (10 mM), AChE (100 mU mL⁻¹) and ATCh (0.1 mM) with A) 37 trichlorfon (1 nM) and B) malathion (1 nM) respectively.

38





Sample	A0 (unspiked Real samples)	A0 (Milli-Q water)	Standard error
Agricultural runoff water	0.367	0.401	0.017
Apple	0.369	0.401	0.016
Cabbage	0.359	0.401	0.021

Table S1. Effect of interferences in unspiked real samples in comparison with Milli-Q water.