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# Synthesis of chitosan based magnetic molecularly imprinted polymers for selective separation and spectrophotometric determination of histamine in tuna fish

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## Highlights

- Magnetic chitosan based MIPs were used for SPE of His
- Adsorption capacity of MIPs was improved using chitosan as a functional monomer
- Adsorption kinetic and adsorption isotherms were investigated
- His was preconcentrated on this sorbent and determined
- spectrophotometrically.

## Abstract

A novel chitosan molecularly imprinted polymers (CHI/MIPs) coated on Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles (MNPs) for selective solid phase extraction (SPE) of histamine (His) was synthesized by cross-linking of CHI with (3-Glycidyloxypropyl) trimethoxysilane (GPTMS) in the presence of His as the template molecule, and GPTMS/MNPS. Synthesized sorbent was

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