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## Development of green method for the defluoridation of groundwater

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Engineering of chitosan by praseodymium has been investigated to improve the adsorption properties as well as physical characteristics of chitosan. Modification of chitosan changes the original properties of chitosan so that it can be more suitable for adsorption of fluoride ions. In this study, chitosan-lanthanoids (Chi- La,Pr,Nd,Ce,Dy, Al, Ba, ) was synthesized by impregnation method. The Chi complex was characterized by scanning electron microscopic-energy dispersive X-ray spectroscopy (SEM-EDX), Fourier transform infrared (FTIR) and employed as an adsorbent for removal of fluorides ions from water in the batch system. The variables such as contact time, concentration of Pr, adsorbent dose, initial concentration of fluoride ions, and competitor anions were studied. Preparation low cost green defluorinating technique like preparation soil pot, Tea Bag, Brick use as removal flourine in drinking Water by used of Chitosan complex.

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