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Topic Of Research: Fabrication of Adsorbents for the Remediation of Toxic Pollutants from Water

## **Findings:**

### Adsorbents fabricated for the remediation of pollutants

Chapter 1 is Introduction. Chapter 2, reviewed about various domain of adsorbents. In chapter 3, we have synthesized environmental and budget friendly TiO<sub>2</sub> nano-sorbent based on *Ananas comosus* leaves extract by sol gel strategy, and its subsequent usage for scavenging Victoria blue dye from aqueous phase. In chapter 4, there is fabrication of the efficient and cost-effective magnetic biochar adsorbent derived from waste *Pyrus pyrofolia* peels via Impregnation-pyrolysis method rendering its activation by impregnating it to the solution of ferric chloride solution and afterward used to eliminate the cationic dye Methylene blue (MB) from the aqueous solution: In Chapter 5, there synthesis of polymeric composite adsorbent was undertaken by sol gel method for the abatement of Cu (II) ions from aqueous solution. In Chapter 6, there is fabrication of budget friendly, effective adsorbent from waste *Ziziphus jujube* seed powder modified chemically by ZnCl<sub>2</sub> to remove hazardous Cd<sup>2+</sup> from wastewater.