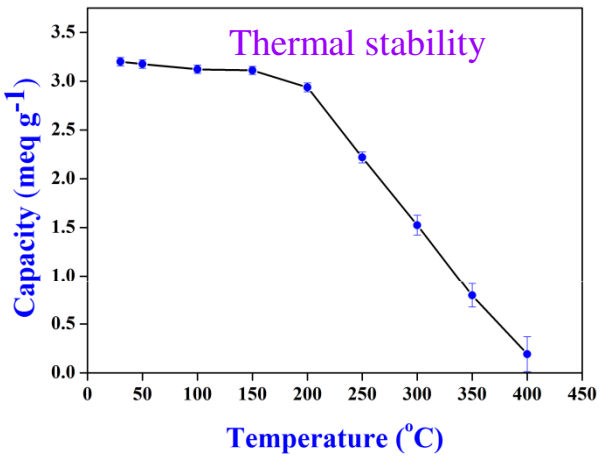
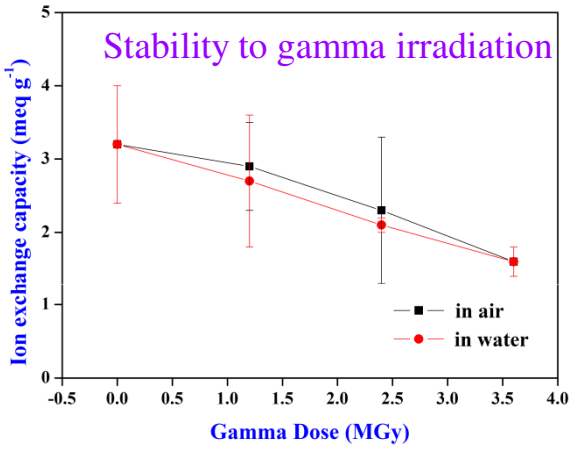
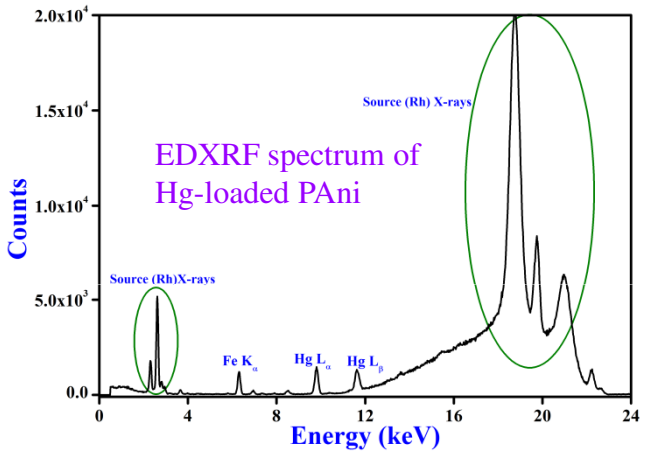
Synthesis, characterization and applications of polyaniline (PAni)

- Synthesis: Polymerization of aniline using $(NH_4)_2S_2O_8$ in HCl
- Ion exchange capacity: 3.25 ± 0.084 meq g^{-1}







- PAni regains ~ 90% of the original capacity on heating up to 200°C.
- PAni was stable towards gamma irradiation upto 3.6 MGy.
- Preconcentration of Hg(II) on PAni improved the EDXRF detection limit by 4 x 10^3.

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