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Facile synthesis of magnetic iron oxide nanoparticles using inedible *Cynometra ramiflora* fruit extract waste and their photocatalytic degradation of methylene blue dye

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Graphical Abstract

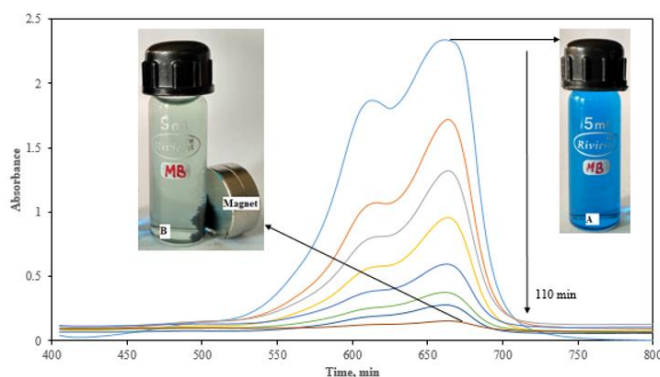
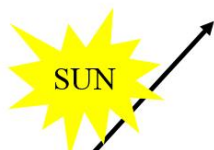
Cynometra ramiflora fruit



FeCl_2 & FeCl_3



Magnetic iron oxide nanoparticles



Photocatalytic degradation of Methylene blue dye

Highlights:

- For the first time, magnetic iron oxide nanoparticles were synthesised from the fruit extract of *Cynometra ramiflora*, an inedible fruit waste
- The surface area of the iron oxide nanoparticles was determined as 107.97 m²/g by BET analysis.
- The zero point charge of the nanoparticles was estimated as 8.1.

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