

Supporting Information

Smart Chitosan Schiff Base Ferrite: A Dual-Action Photocatalyst for Dye Degradation and Antimicrobial Defense

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Fig. S1: EDAX analysis of SBXIII

Fig. S2: EDAX analysis of SBXIII@NiFe

Fig. S3: XRD graphs of SBXIII@NiFe before and after photodegradation

Fig.S4: FTIR graphs of SBXIII@NiFe before and after photodegradation

Fig. S5: XPS graphs of SBXIII@NiFe before and after photodegradation

Fig. S6: Antibacterial activity plates of SBXIII@NiFe and SBXIII@NiFe showing different zone of inhibition (mm)

Fig. S7: VSM analysis of Nickel Ferrite (NiFe)

Fig. S8: Photocatalytic degradation of Tetracycline drug.

Fig. S9: TEM images of synthesized photocatalyst

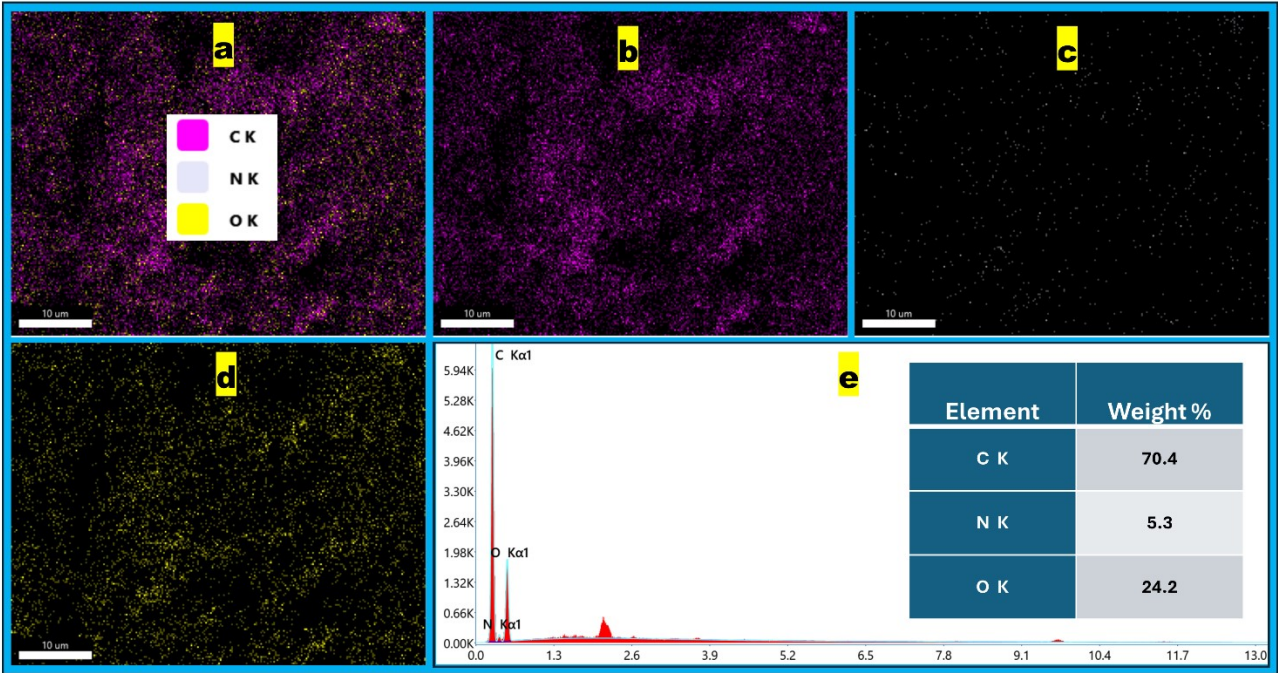


Fig. S1: EDAX analysis of SBXIII showing elements like C, N, O present in Chitosan Schiff-Base

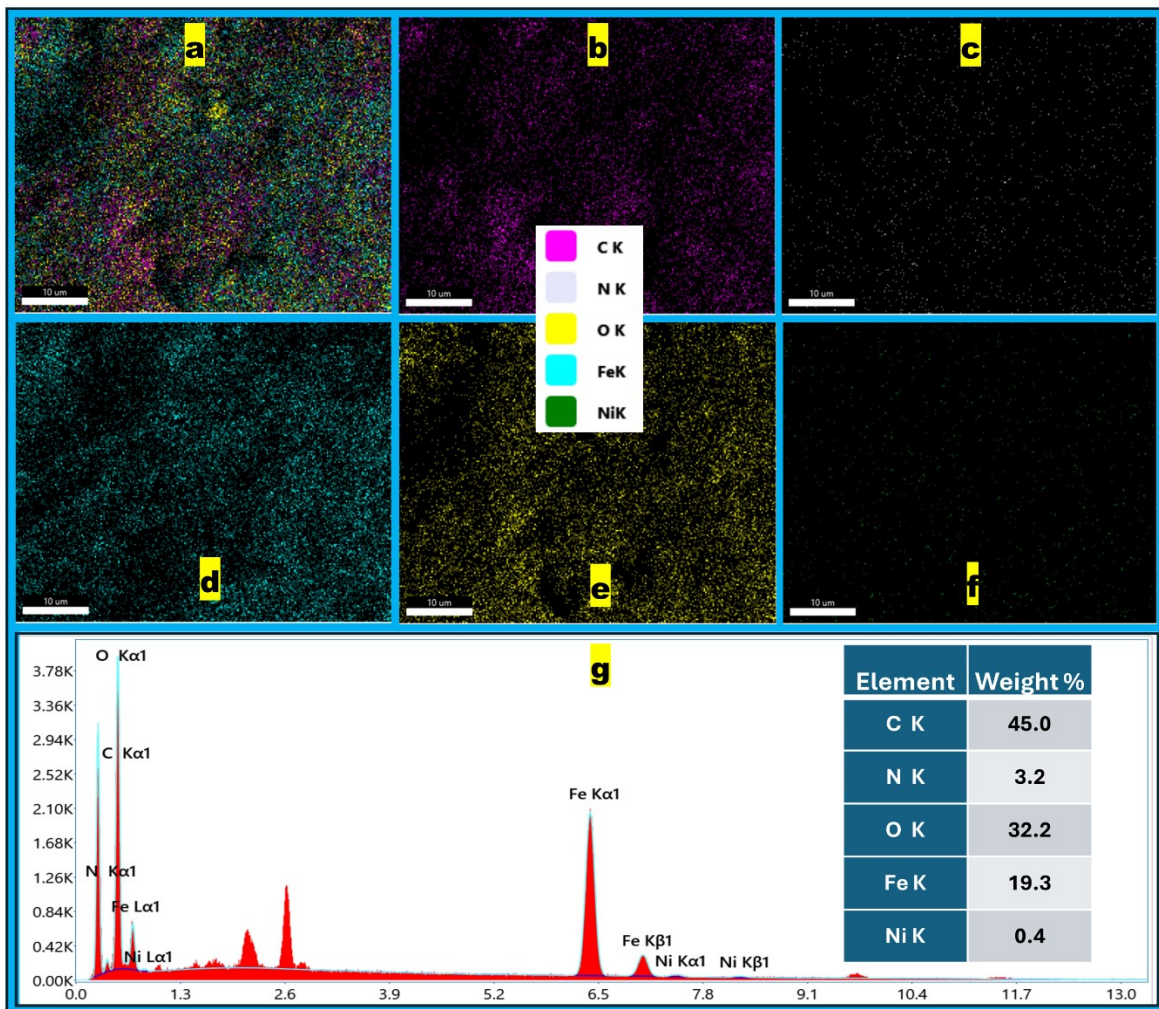


Fig. S2: EDAX analysis of SBXIII@NiFe showing elements like C, N, O, Fe and Ni present in Chitosan Schiff-Base Nanocomposite

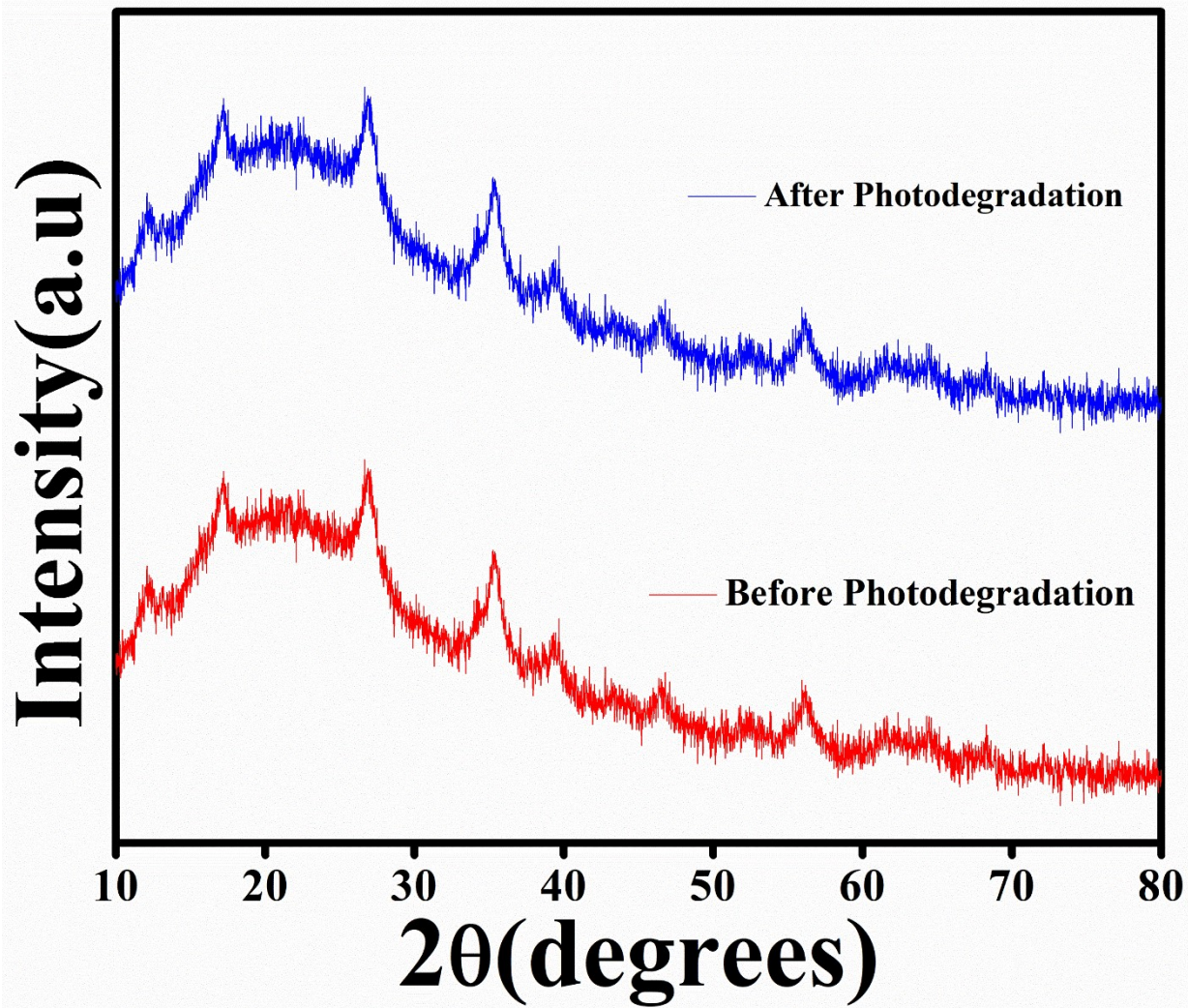


Fig. S3: XRD graphs of SBXIII@NiFe before and after photodegradation

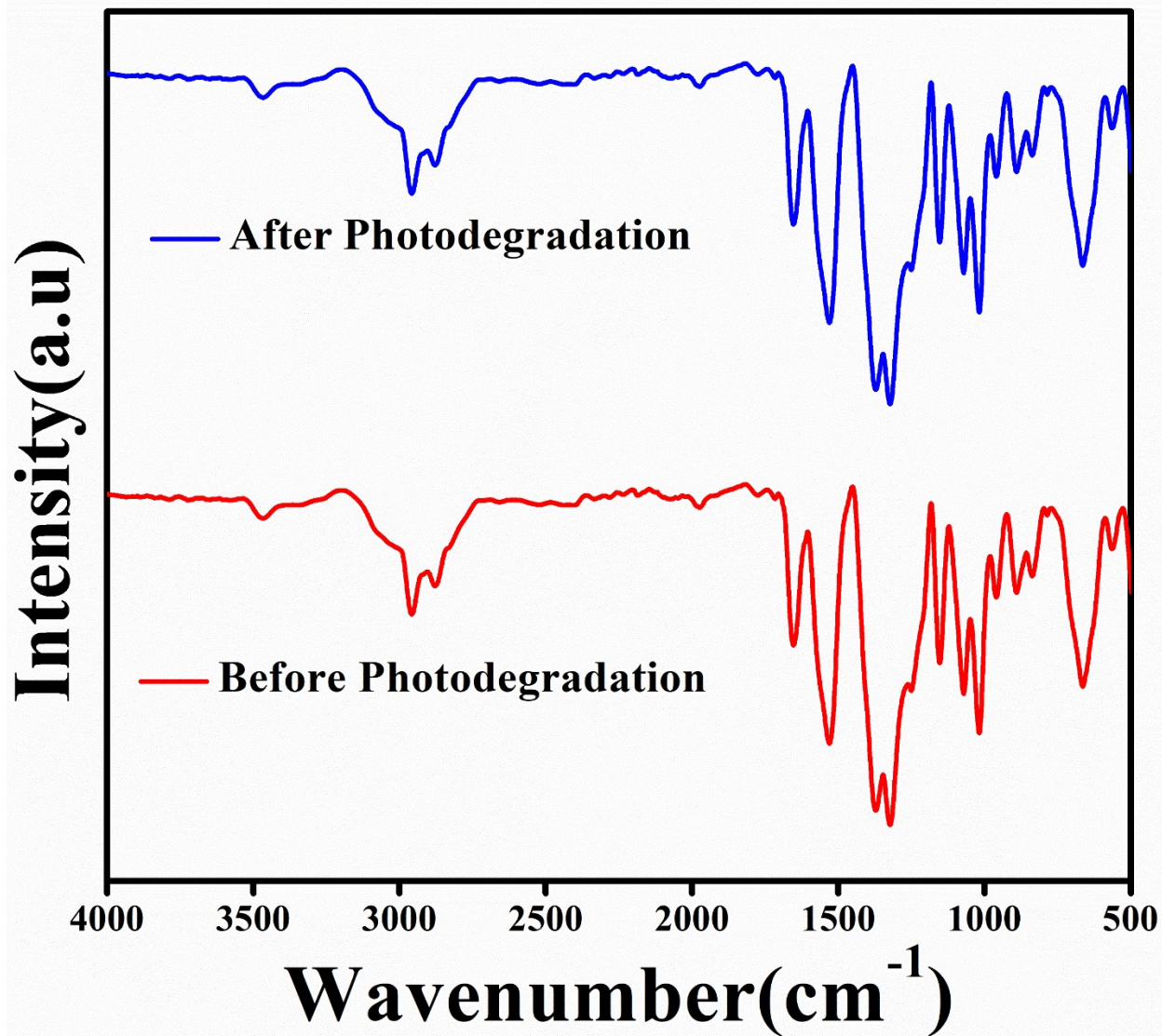


Fig. S4: FTIR graphs of SBXIII@NiFe before and after photodegradation

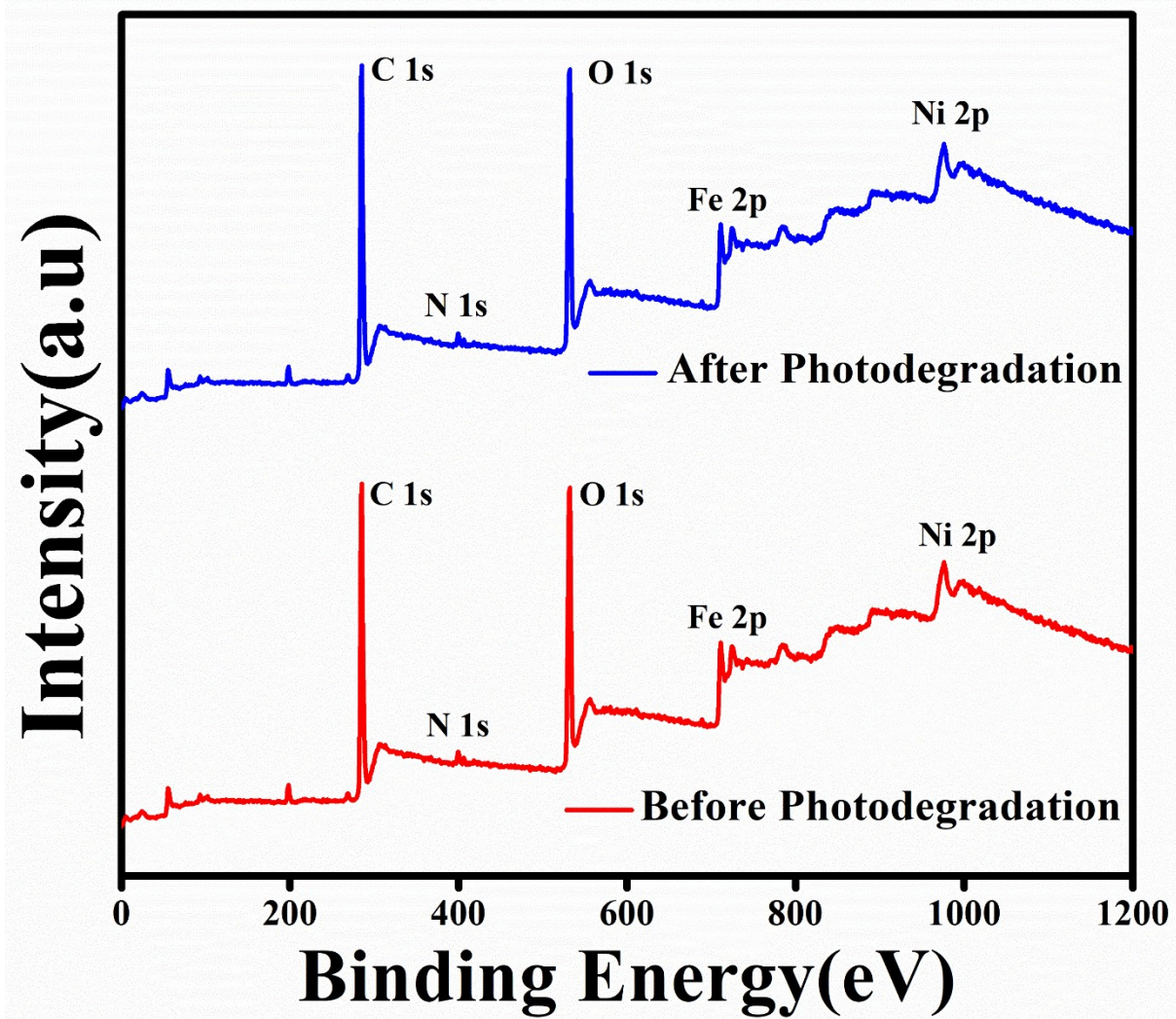


Fig. S5: XPS graphs of SBXIII@NiFe before and after photodegradation

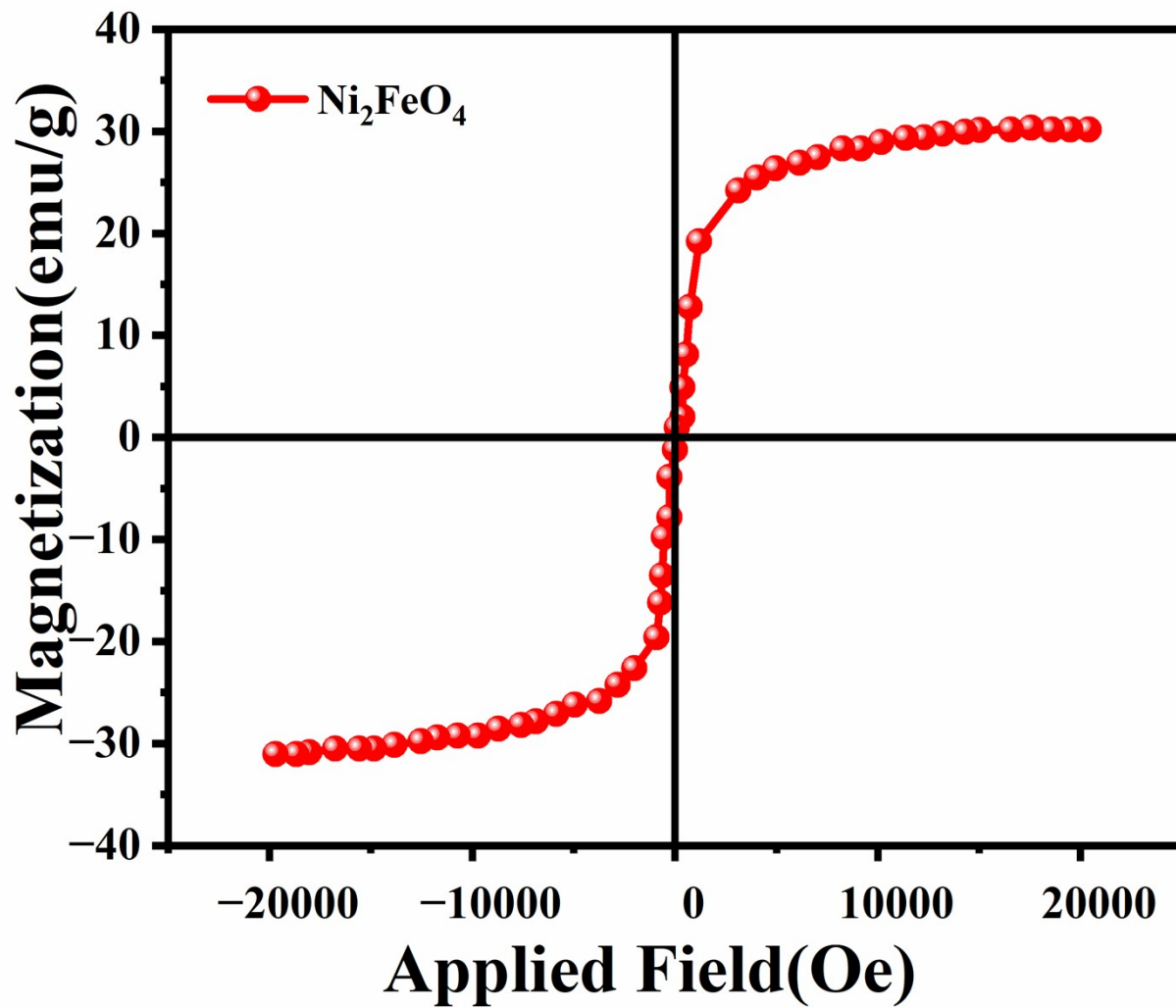


Fig. S6: VSM analysis of Nickel Ferrite (NiFe)

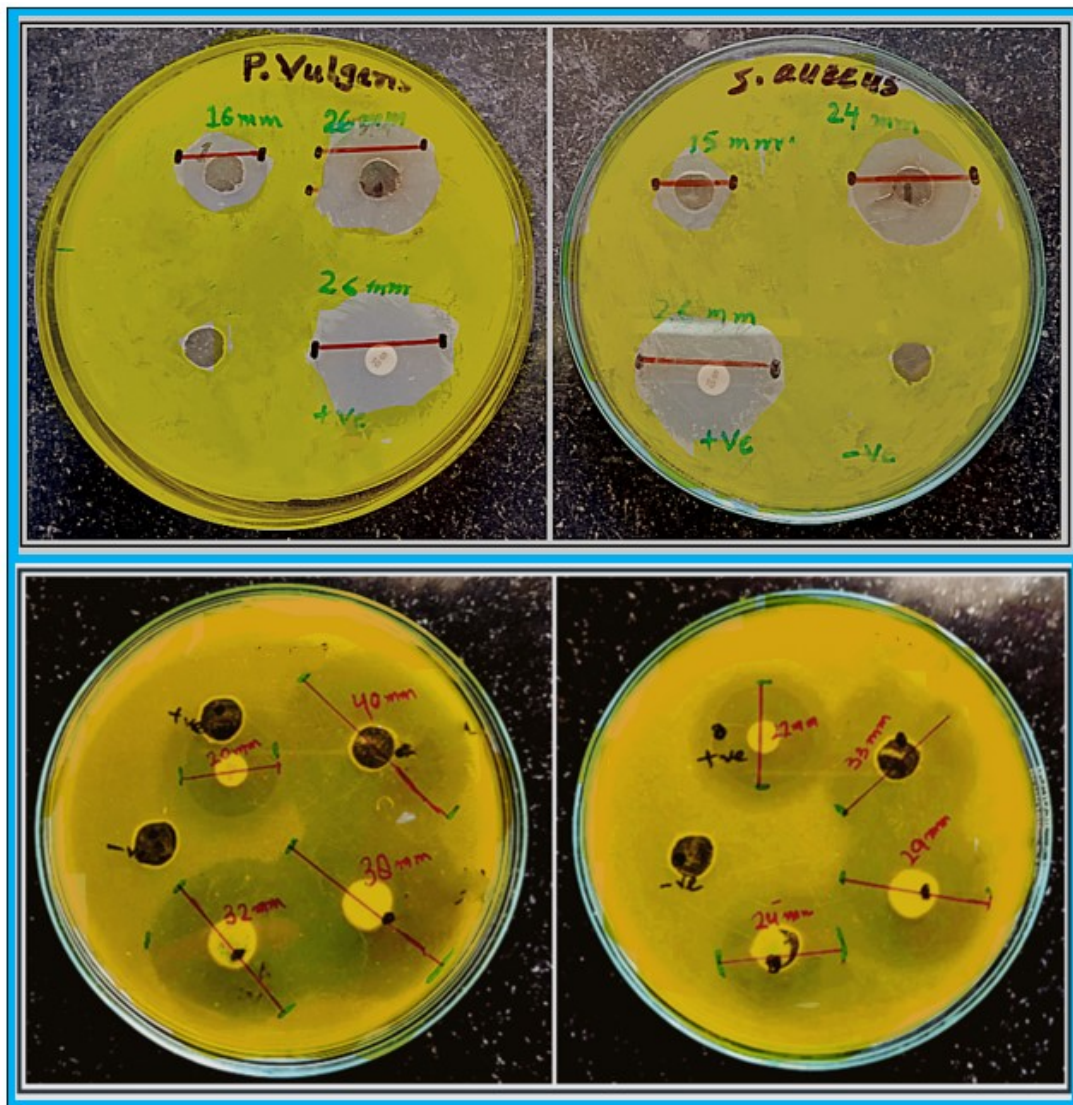


Fig. S7: Antibacterial activity plates of SBXIII@NiFe and SBXIII@NiFe showing different zone of inhibition (mm)

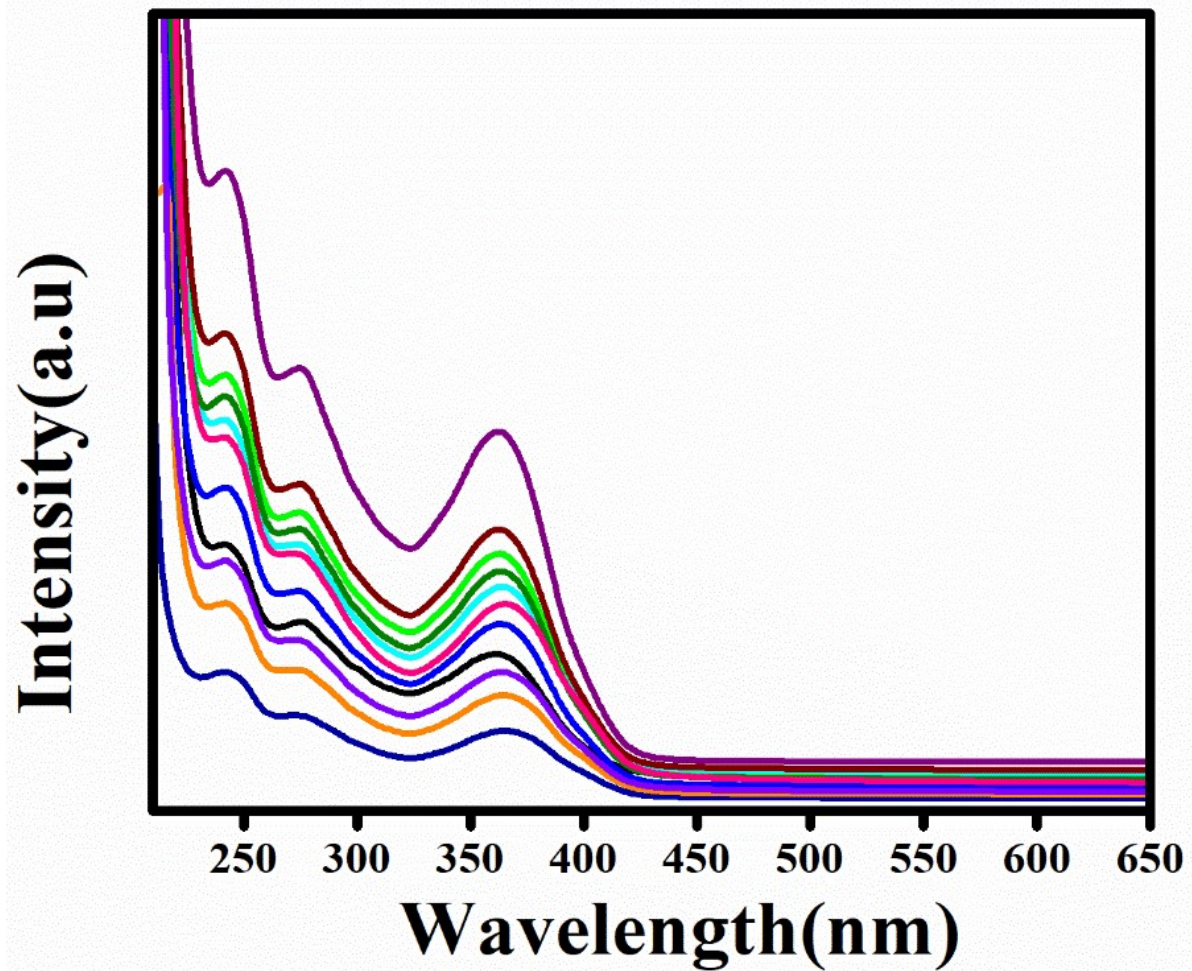


Fig. S8: Photocatalytic degradation of Tetracycline drug.

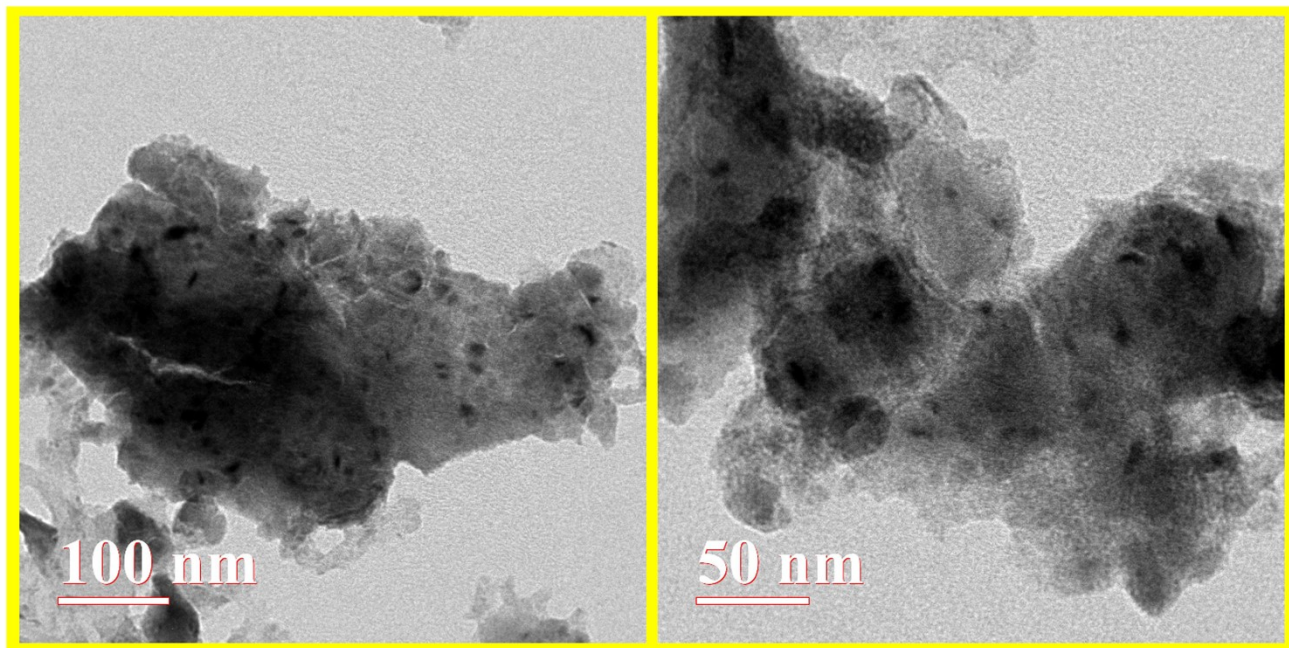


Fig. S9: TEM images of synthesized photocatalyst