Supportive information

h-BN nanosheet-modified Ag_2WO_4 nanocomposite for improved photocatalytic dye removal: insights into catalyst stability and reusability

Bachir Yaou Balarabe [a*], Prasenjit Maity [a*], Antonio Carlos S.C. Teixeira [b], Samuel Ayodele Iwarere [c]

[a] *School of Engineering and Technology, National Forensic Sciences University, Sector-09, Gandhinagar –382007, India*

[b] *Research Group in Advanced Oxidation Processes (AdOx), Chemical Systems Engineering Center, Department of Chemical Engineering, Escola Politécnica, University of São Paulo, Av. Prof. Luciano Gualberto, tr. 3, 380, São Paulo, SP, Brazil*

[c] *Department of Chemical Engineering, Faculty of Engineering, Built Environment and Information Technology, University of Pretoria, Private Bag X20 Hatfield, Pretoria 0028, South Africa*

E-mail: yaoubalarabe@gmail.com (B. Y. B); *prasenjit.maity@nfsu.ac.in* (P. M) (orcid.org/0000–0003–2319–7435)

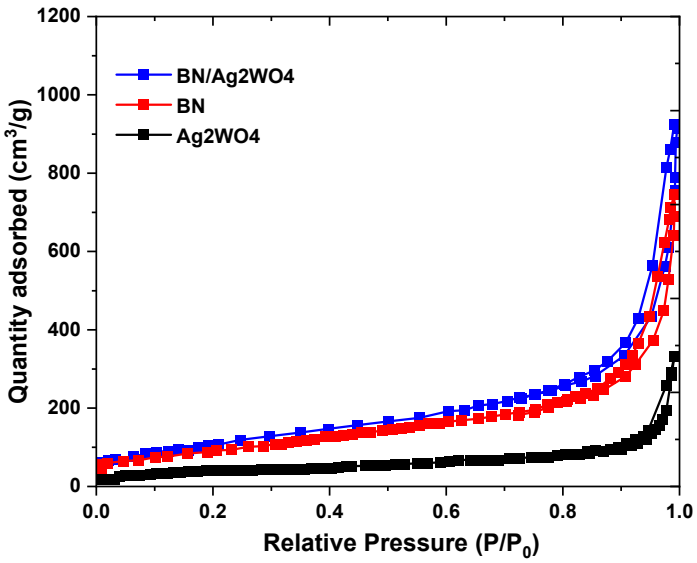

Figure S1. Nitrogen adsorption-desorption isotherms and the BET surface area of BN, Ag2WO4, and BN/Ag2WO4 nanocomposites.

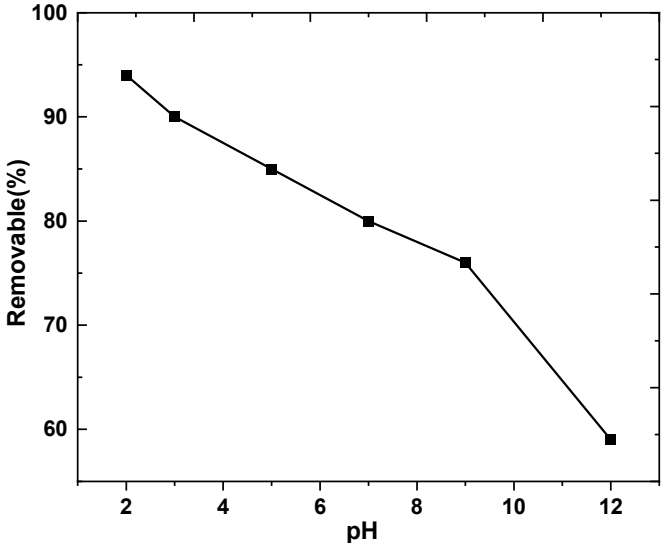

Figure S2. Photodegradation of indigo carmine based on pH

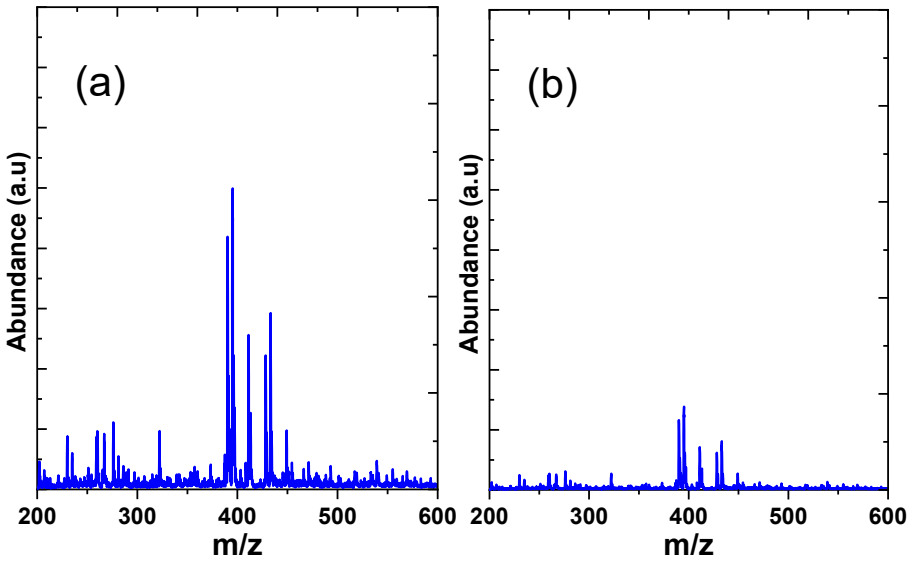

Figure S3. Mass Spectrometry analysis of the (a)-untreated samples and (b)-treated sample by BN/Ag_2WO_4nanocomposites.

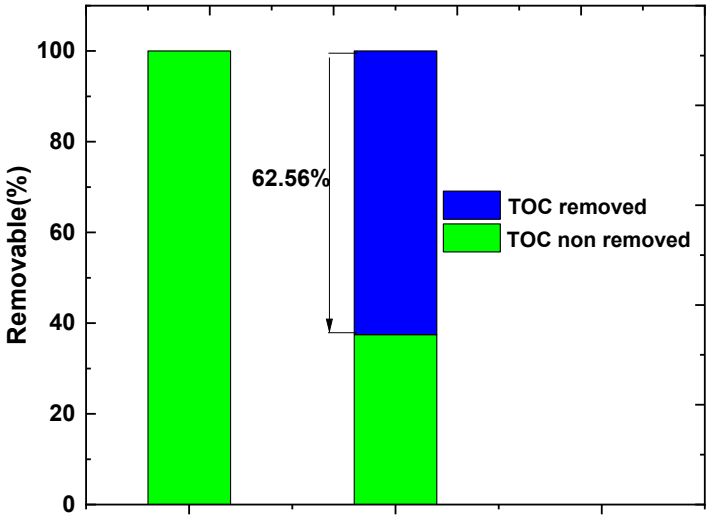

Figure S4. Total Organic Carbon (TOC) analysis of the treated samples by BN/Ag_2WO_4nanocomposites after 1hour.