

Supporting Information

Sodium Tungsten Oxide Bronze Nanowires Bundles in Adsorption of Methylene Blue Dye under UV and Visible Light Exposure

Kunyat Thummavichai ^{1,2,*}, Le Anh Thi ³, Swee-Yong Pung ³, Oluwafunmilola Ola ⁴, Mian Zahid Hussain ², Yu Chen ², Fang Xu ⁴, Wenting Chen ¹, Nannan Wang ^{1,*} and Yanqiu Zhu ^{2,*}

¹ Key Laboratory of New Processing Technology for Nonferrous Metals and Materials, School of Resources, Environment and Materials, Guangxi University, Guangxi 530004, China; 2826197790@qq.com

² College of Engineering, Mathematics and Physical Sciences, University of Exeter, Exeter EX4 4PY, UK; mh673@exeter.ac.uk (M.Z.H.); yc465@exeter.ac.uk (Y.C.)

³ School of Materials and Mineral Resources Engineering, Engineering Campus, Universiti Sains Malaysia, Penang 11800, Malaysia; leanhthi@student.usm.my (L.A.T.); sypung@usm.my (S.-Y.P.)

⁴ Advanced Materials Group, Faculty of Engineering, The University of Nottingham, Nottingham NG7 2RD, UK; Oluwafunmilola.Ola1@nottingham.ac.uk (O.O.); fang.xu@nottingham.ac.uk (F.X.)

* Correspondence: kt302@exeter.ac.uk (K.T.); wangnannan@gxu.edu.cn (N.W.); Y.Zhu@exeter.ac.uk (Y.Z.)

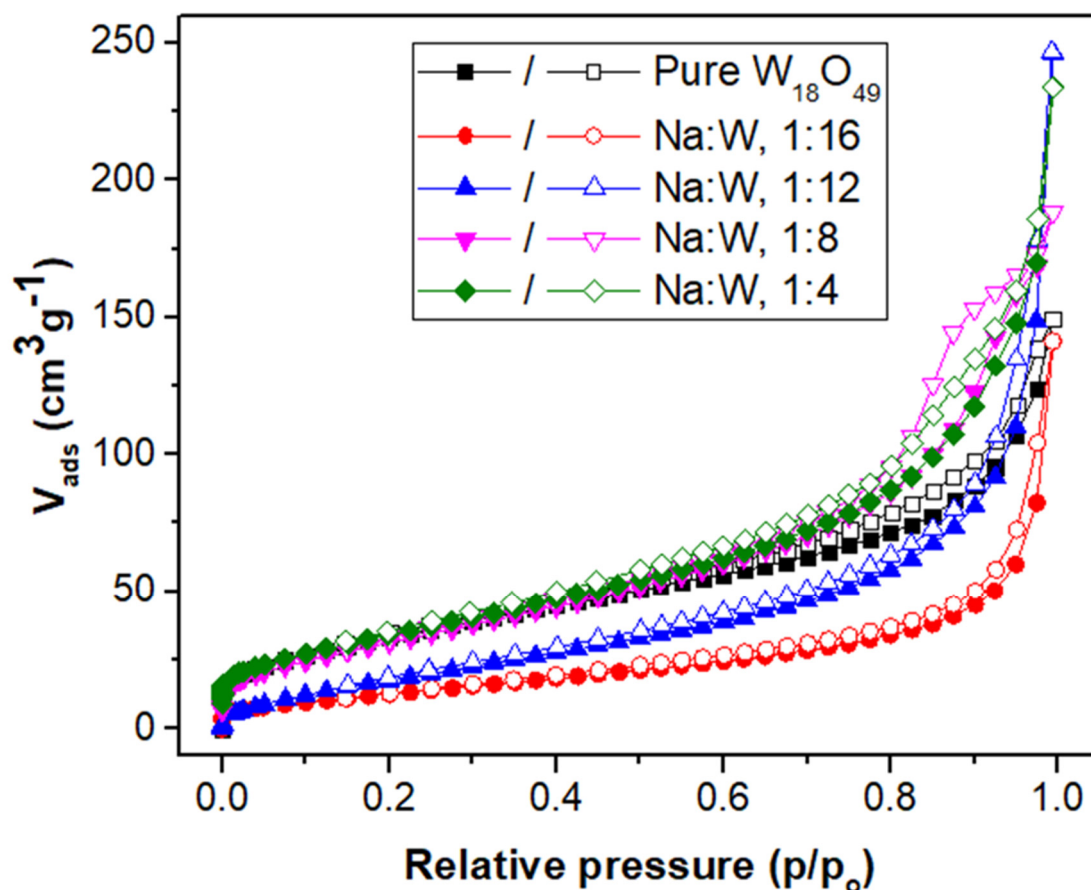


Figure S1. Nitrogen sorption isotherms at 77 K for pure $W_{18}O_{49}$ and Na_xWO_3 samples prepared at dopant ratios of 1:16, 1:12, 1:8 and 1:4.

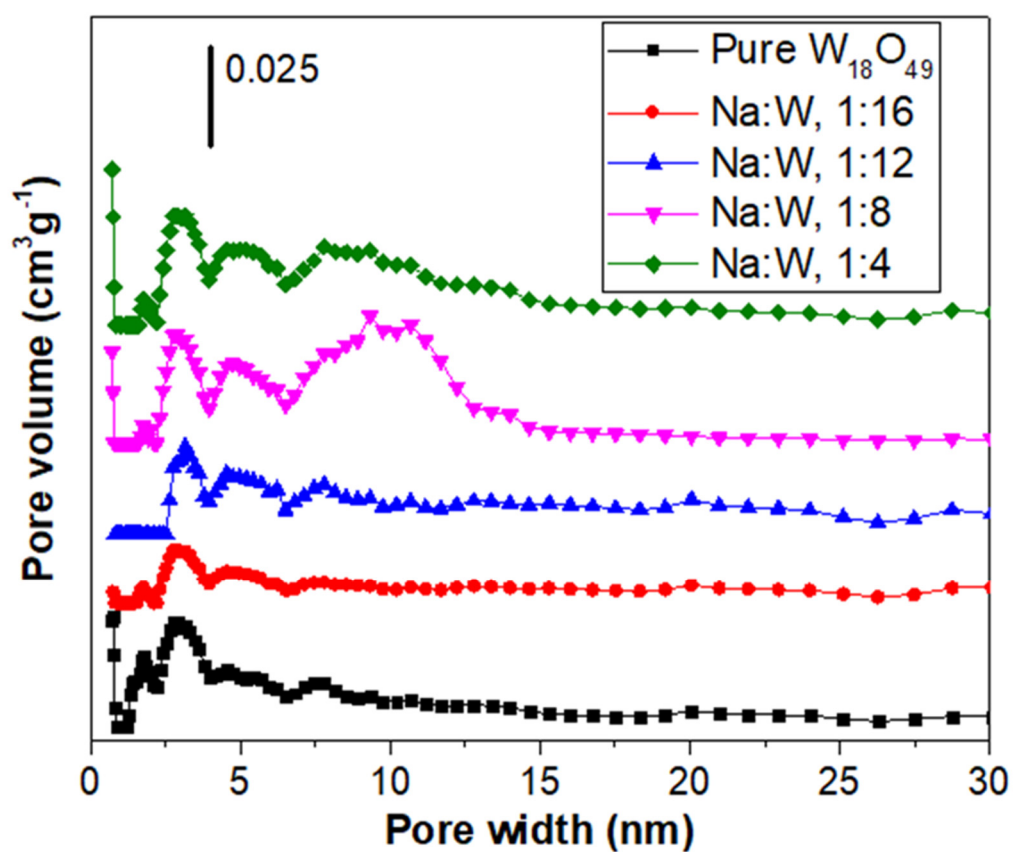


Figure S2. NLDFT Pore size distributions for pure $W_{18}O_{49}$ and Na_yWO_3 samples prepared at dopant ratios of 1:16, 1:12, 1:8 and 1:4.

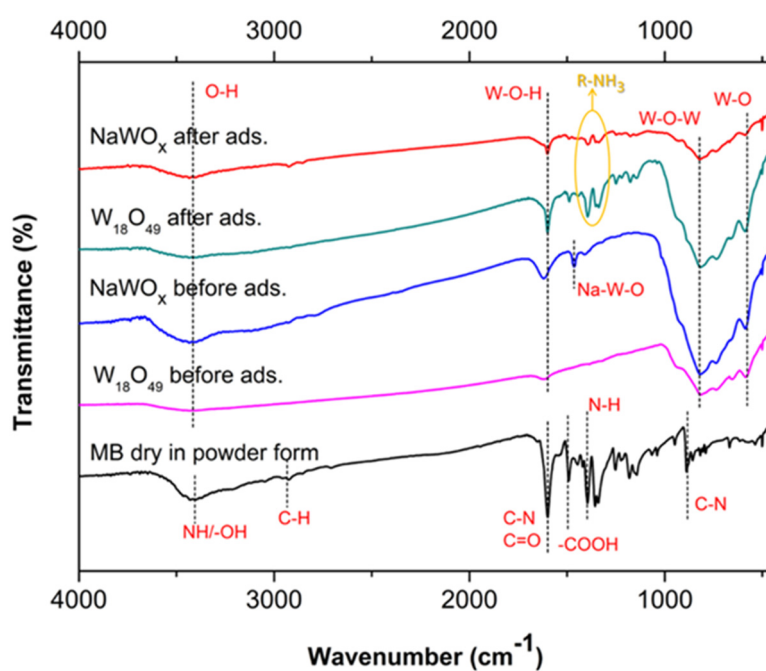


Figure S3. FTIR spectra of the MB dye in powder form, $W_{18}O_{49}$ and Na_yWO_3 (1:8) before adsorption, $W_{18}O_{49}$ and Na_yWO_3 (1:8) after adsorption of MB under dark conditions.