

# Removal of Mn (II) by Sodium Alginate/Graphene Oxide Composite Double-Network Hydrogel Beads from Aqueous Solutions

Xiuzhen Yang<sup>1</sup>, Tengzhi Zhou<sup>1</sup>, Bozhi Ren<sup>1</sup>, Andrew Hursthouse<sup>1,2</sup>, Yuezhou Zhang<sup>3\*</sup>

<sup>1</sup> College of Civil Engineering, Hunan University of Science and Technology, Xiangtan 411201, China  
yxzhy1102@126.com; zhoutenzhi123@163.com(T.Z.); renbozhi@126.com(B.R.)

<sup>2</sup> School of Science & Sport, University of the West of Scotland, Paisley PA1 2BE, UK;  
andrew.hursthouse@uws.ac.uk

<sup>3</sup> Pharmaceutical Sciences Laboratory, Faculty of Sciences and Engineering, Åbo Akademi University, FI-20520, Turku, Finland

\* Correspondence: e-mail: zyuezhou@126.com; Tel.: +86-18073165540

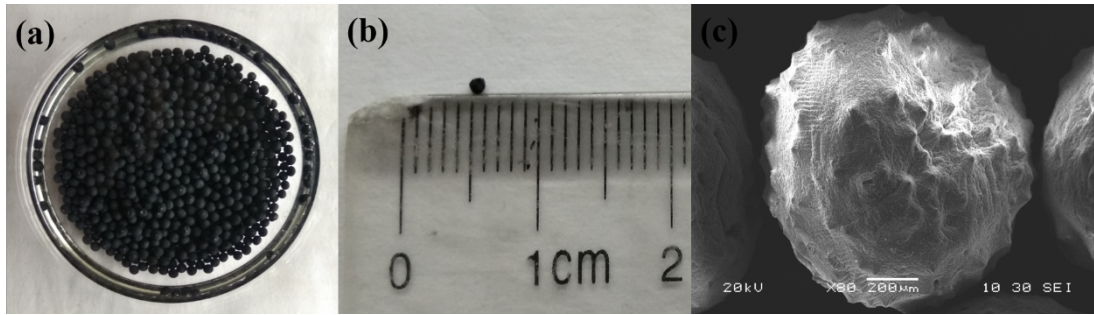


Fig.S1 The overview and individual structural feature of GAD

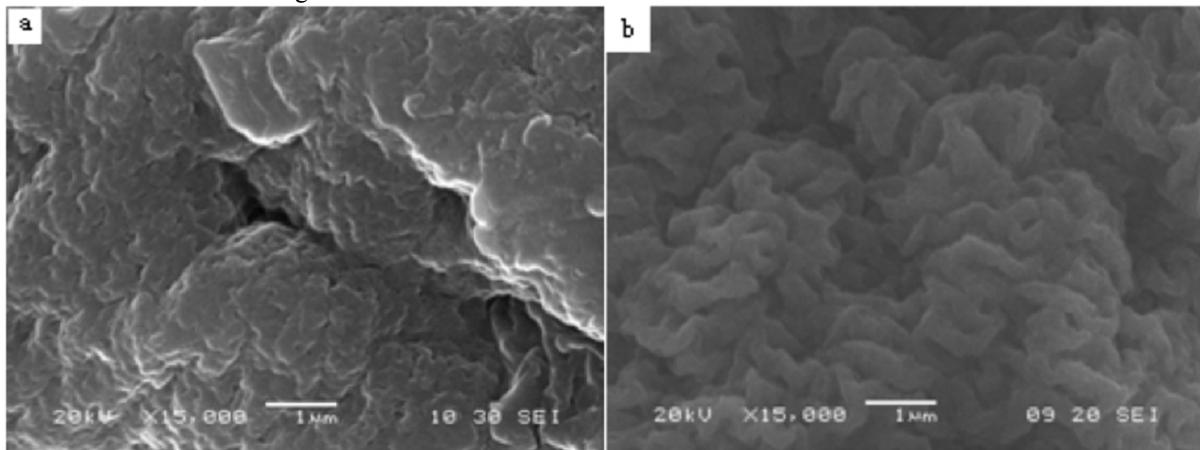


Fig.S2 SEM of a) the typical morphology of single network of Sodium Alginate and b) the morphology of Sodium Alginate/Graphene Oxide composite in this study