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Facile preparation of 3D regenerated cellulose/graphene oxide composite aerogel with high-efficiency adsorption towards Methylene blue

Fang Ren¹, Zhen Li¹, Wen-Zhen Tan¹, Xiao-Hui Liu¹, Zhen-Feng Sun¹,

Peng-Gang Ren^{1,*}, Ding-Xiang Yan^{2,*}

1. Faculty of Printing, Packaging Engineering and Digital Media Technology, Xi'an University of Technology, Xi'an Shanxi 710048, People's Republic of China

Fax: +86-29-8231-2139; Email: rengpg@126.com

2. College of Polymer Science and Engineering, State Key Laboratory of Polymer Materials Engineering, Sichuan University, Chengdu 610065, People's Republic of China

Fax: +86-28-8540-5402; Email: yandingxiang@scu.edu.cn

Highlight

1. RCE/GO composite aerogel was easily prepared via a novel and feasible method.
2. RCE/GO exhibits good adsorption of MB dye due to the presence of GO.
3. The adsorption was driven by electrostatic interactions and followed pseudo-second-order kinetic and Langmuir isotherm model.

Abstract: Composite aerogels consisting of graphene oxide (GO) and regenerated cellulose (RCE) were prepared via a solution mixing-regeneration and freeze-drying process. The prepared RCE/GO composites aerogel exhibited 3D network thin-walled pore structure with large specific surface area, also favorable compression recovery

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