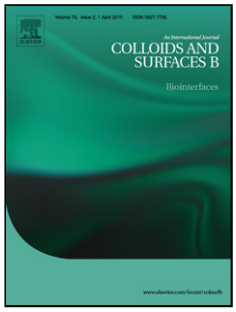

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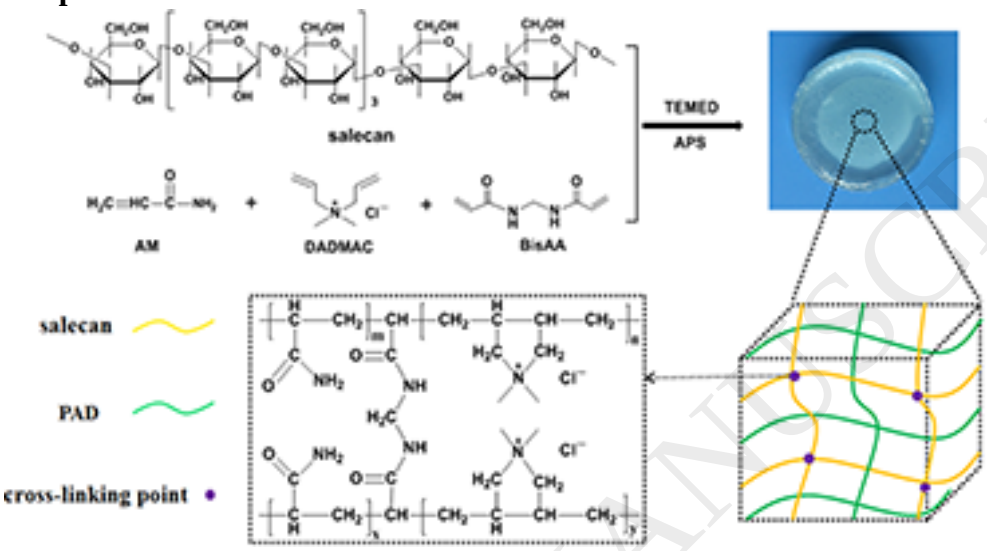
Polysaccharide-based cationic hydrogels for dye adsorption

Xiaoliang Qi, Lipen Wu, Ting Su, Jianfa Zhang, Wei Dong*

Center for Molecular Metabolism, Nanjing University of Science & Technology, Nanjing 210094, China.

**Corresponding author: email: weidong@njust.edu.cn (W. Dong).*

Graphical abstract



Highlights:

- Salecan-containing cationic hydrogels were designed for adsorption of dye;
- Salecan-containing gels were prepared via radical polymerization technique;
- Effect of salecan content on the hydrogel properties were studied;
- Effect of salecan content on the adsorption behaviors were evaluated.

Abstract:

With advances in soft material design and engineering, naturally resourced polysaccharides have frequently been used to construct hydrogels because of their unique properties such as renewability, biodegradability and biocompatibility. In this work, we use a water-soluble microbial polysaccharide, salecan as a trapped natural polymer, poly(acrylamide-co-diallyldimethylammonium chloride) (PAD) as a