

### Use of peptide moiety for the selective adsorption of BPA

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Endocrine disrupting chemicals (EDCs) can cause adverse effects on humans. Bisphenol A (BPA) is one of the highest volume EDCs produced worldwide over 8 billion pounds. So, the increased attention to reduce BPA in the aquatic environment has been drawn in recent years. Physical and chemical treatment technologies such as adsorption and ozonation have been investigated for the removal of BPA. The adsorption by activated carbons is generally considered to be one of the most efficient methods to control organic contaminants in water. However, the selective removal of specific chemical component is hardly implemented in activated carbon-based sorbent. In the present study, 7-mer peptide screened by biopanning protocol was used as a moiety in microbe-based or protein-based adsorbents capable of selectively removing BPA from water environment. The BPA removal efficiency in each biosorbent is assessed in sample aquatic environment.