Supporting Information

Seawater Desalination by Using MOF-Incorporated Cu-Based Alginate Beads without Energy Consumption

Sang Joon Lee*, Taeseong Hann, and Sung Ho Park

Department of Mechanical Engineering, Pohang University of Science and Technology, 77 Cheongam-Ro, Nam-Gu, Pohang, Gyeongbuk, 790-784, South Korea

*Corresponding author: (82)-054-279-2169; <u>sjlee@postech.ac.kr</u>

Keywords

Seawater; desalination; metal-organic framework; adsorption; alginic acid

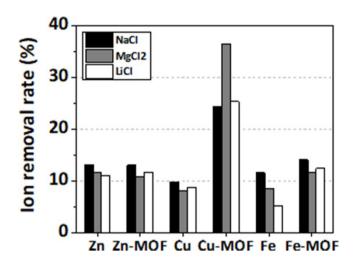


Figure S1. Comparison of the ion removal rates of three different metal ion-based alginate

beads and their MOF-incorporated beads.

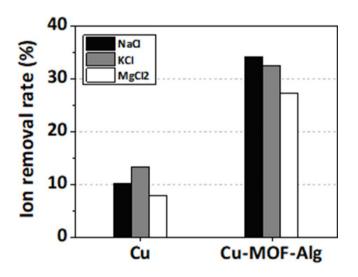


Figure S2. Comparison of the ion removal rates of the Cu–MOF–Alg beads for three different

salt ions.

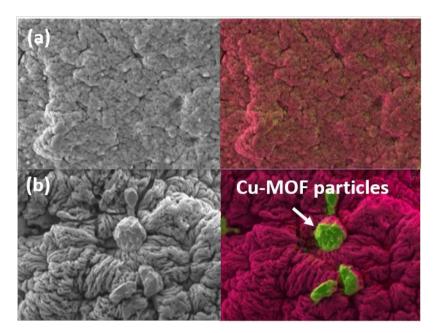


Figure S3. EDS mapping images of (a) Cu–Alg beads and (b) Cu–MOF–Alg beads.

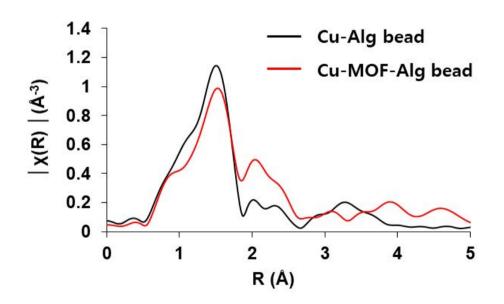


Figure S4. Comparison of EXAFS results of Cu-Alg and Cu-MOF-Alg beads