Tracer Chromatographic Study of C8 Aromatics over Nanostacked MFI Zeolite

김해련, 유선미, 박상언*
인하대학교
(separk@inha.ac.kr*)

The C8 aromatics are important raw materials for petrochemicals. Especially p-xylene is the most important isomer for terephthalic acid production. So, p-xylene separation from C8 aromatics is one of the most important industrial processes. In this work we investigate the adsorption behavior of C8 aromatics like xylene isomers (p-, o-, and m-xylenes) and ethylbenzene onto the assembled MFI zeolite compared with conventional TS-1. The b-axis oriented assembly of MFI crystals showed higher separation factor onto p-xylene and ethylbenzene among C8 aromatics due to strong interaction with the straight channel in the stacked morphology, which were evaluated with higher Henry constant measured by Tracer chromatography.