

Synthesis and characterization of UZM-12, a high-silica zeolite with the ERI topology

이주혁, 홍석봉*

포항공과대학교

(sbhong@postech.ac.kr*)

UZM-12 is a silica-rich ($\text{Si/Al} \geq 5.5$) zeolite with ERI topology first described by UOP scientists in 2006. This small-pore zeolite was reported to crystallize using Me₆-diquat-n with n=4-6 as organic structure-directing agents. Here we investigate the effects of the type of alkali cations and the length of the polymethylene bridging unit and the nature of the group on diquateryary alkyl ammonium ions on the synthesis of UZM-12. We also compare the methanol-to-olefin performance of H-UZM-12 with that obtained from H-SAPO-34.