Supporting Information

Microwave-assisted synthesis of a thermally stable Zn-containing aluminophosphate with ERI-zeotype structure templated by diquaternary alkylammonium

Yan Xu, a,b Yuchen Qiu, a Yide Han, b Qiming Sun, a Rui Ge, a Xiaowei Song*, a

a State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry, Jilin University, Changchun 130012, China

b Department of Chemistry, College of Science, Northeastern University, Shenyang 110819, China

Corresponding Author:
Dr. Xiaowei Song
E-mail: xiaoweisong@jlu.edu.cn
Fax: +86-431-85168582
Tel: +86-431-85168582
Figure S1. $^1$H NMR spectrum of (a) SDA molecules and (b) SDA molecules extracted after dissolving the ZnAPO-ERI-MW framework.

Figure S2. $^{13}$C NMR spectrum of (a) SDA molecules and (b) SDA molecules extracted after dissolving the ZnAPO-ERI-MW framework.

Figure S3. TG curves of ZnAPO-ERI-MW and ZnAPO-ERI-CV.
Figure S4. FT-IR spectra of AlPO₄-ERI, ZnAPO-ERI-CV and ZnAPO-ERI-MW (Note: there is a significant broadening and small red shift in the T-O-T asymmetric stretching region (1030–1220 cm⁻¹) of the ZnAPO-ERI-CV and ZnAPO-ERI-MW spectra compared to the spectra of AlPO₄-ERI, which indicates that Zn is successfully involved in the aluminophosphate lattice).