

## Supplementary Information

# **Influence of Tethered Ions on Electric Polarization and Electrorheological Property of Polymerized Ionic Liquids**

**Fang He, Bo Wang, Jia Zhao, Xiaopeng Zhao, Jianbo Yin\***

Smart Materials Laboratory, Department of Applied Physics, Northwestern

Polytechnical University, Xi'an, 710129, People's Republic of China;

xgdhefang@mail.nwpu.edu.cn (F.H.); wangbo0304@iccas.ac.cn (B.W.);

zhaojia11@mail.nwpu.edu.cn (J.Z.); xpzhao@nwpu.edu.cn (X.P.Z.)

\* Corresponding author: jbyin@nwpu.edu.cn

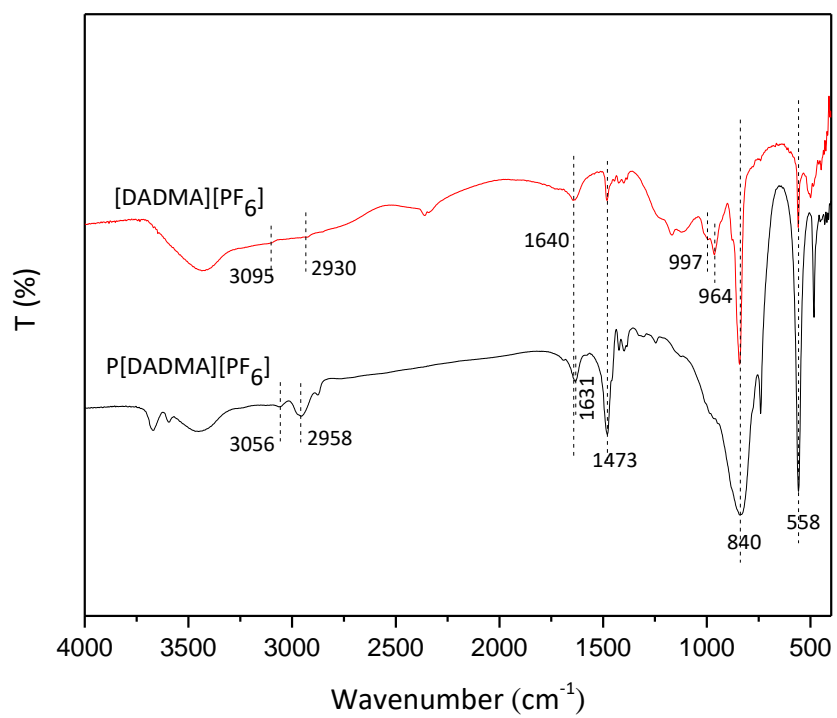


Figure S1. FT-IR spectra of [DADMA][PF<sub>6</sub>] and P[DADMA][PF<sub>6</sub>].

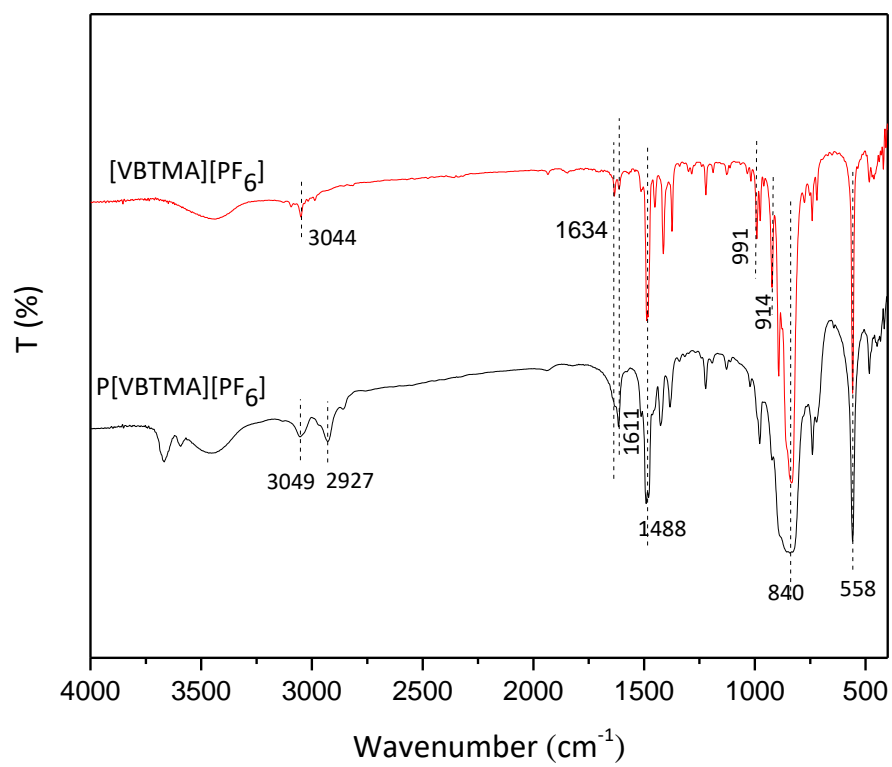


Figure S2. FT-IR spectra of [VBTMA][PF<sub>6</sub>] and P[VBTMA][PF<sub>6</sub>].

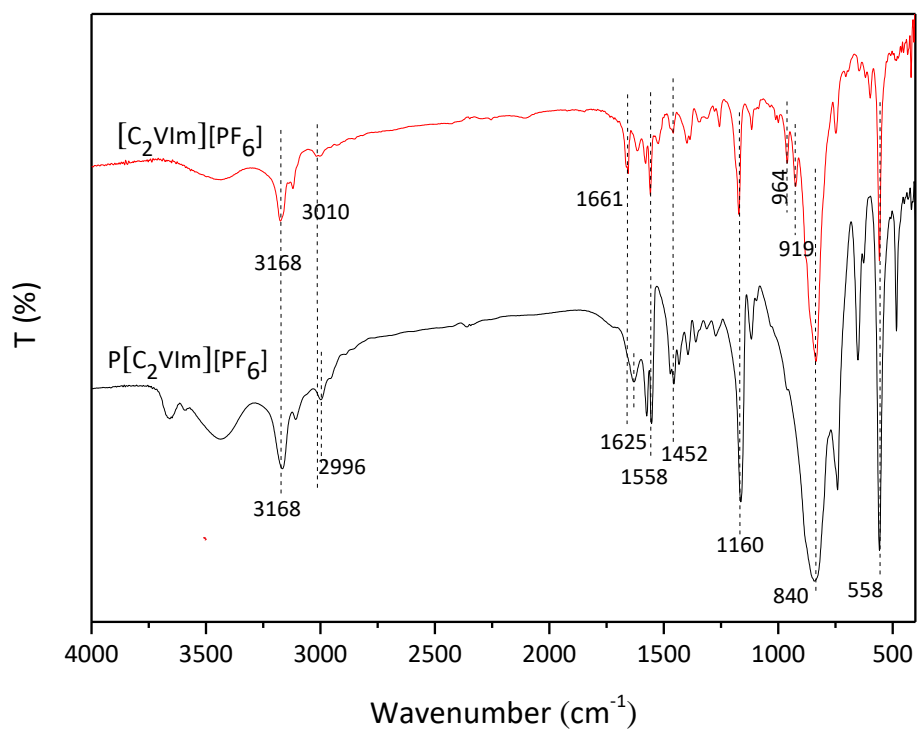


Figure S3. FT-IR spectra of  $[C_2VIm][PF_6]$  and  $P[C_2VIm][PF_6]$ .