

Supporting Information

Low-Temperature Crosslinked Anion Exchange Membranes

By Lizhu Wang and Michael A. Hickner*

Department of Materials Science and Engineering, The Pennsylvania State University,
University Park, PA 16802, USA

Corresponding Author: [Tel:1-814-8631847](tel:1-814-8631847); E-mail: hickner@matse.psu.edu

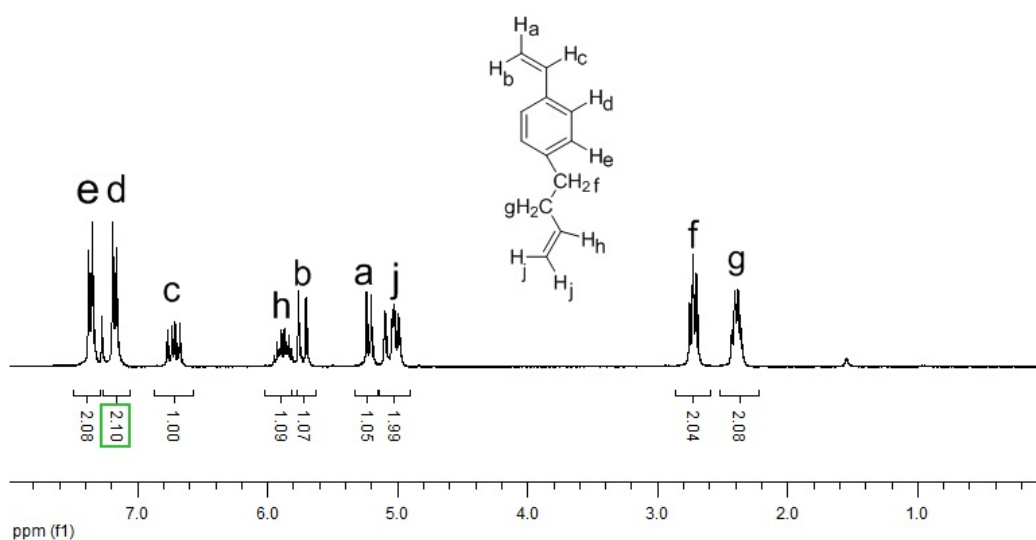


Figure S1. ¹H NMR spectrum of 4-(3-butenyl)styrene.

Table S1. Block Copolymer Molecular Weights and Polydispersity Indices.

	M_n (kg mol ⁻¹)	M_w (kg mol ⁻¹)	M_w/M_n
PVBC _{49-r} -PBeS ₅₀	19.4	26.6	1.37
PVBC _{44-b} -PBeS ₄₄	12.3	16.1	1.31
PVBC _{100-b} -PBeS ₁₀₇	26.1	33.7	1.29
PVBC _{100-b} -PBeS ₁₈₃	33.4	45.8	1.37

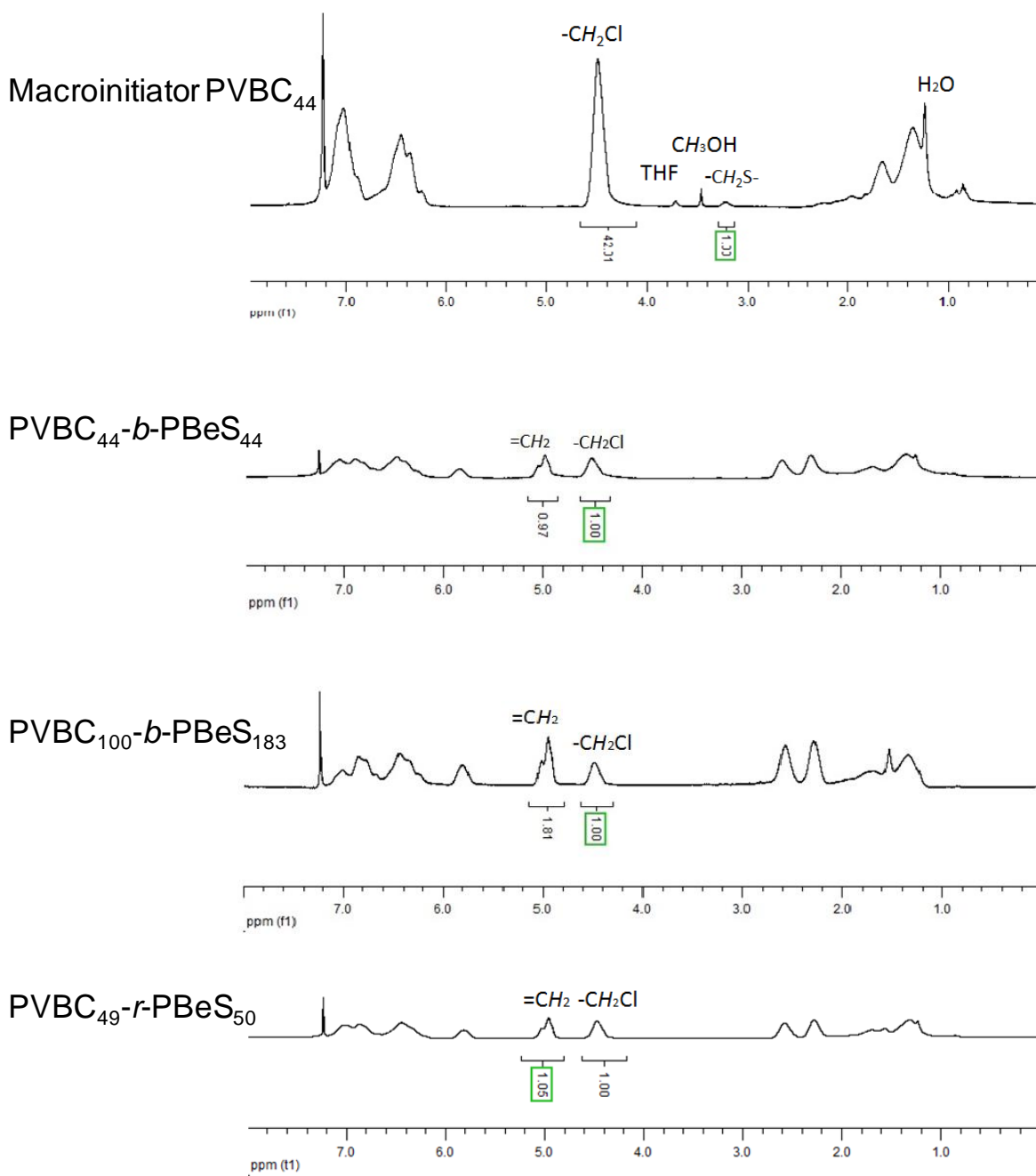


Figure S2. ¹H NMR spectra of macroinitiators, block and random copolymers.

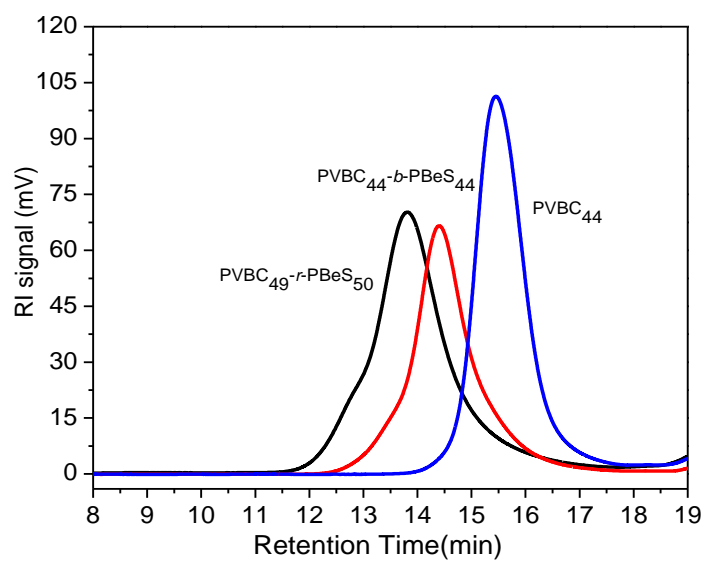


Figure S3. GPC traces for macroinitiators and block and random copolymers.

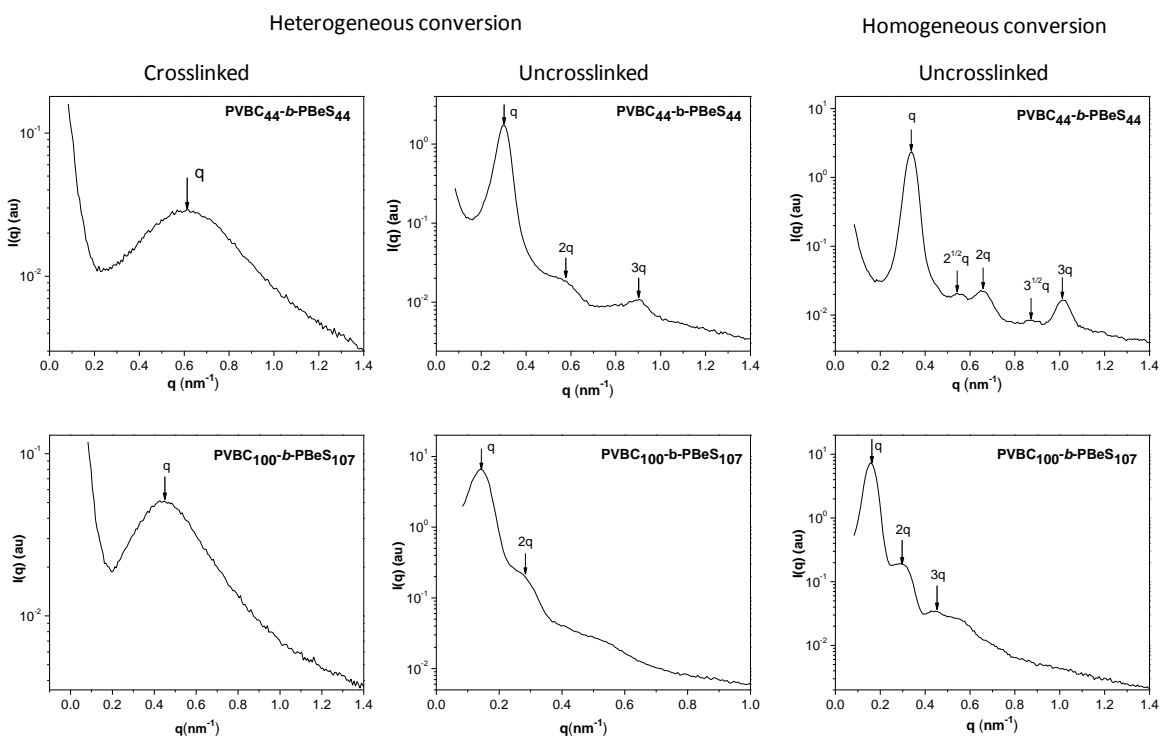


Figure S4. SAXS profiles of block AEMs formed under different conditions.

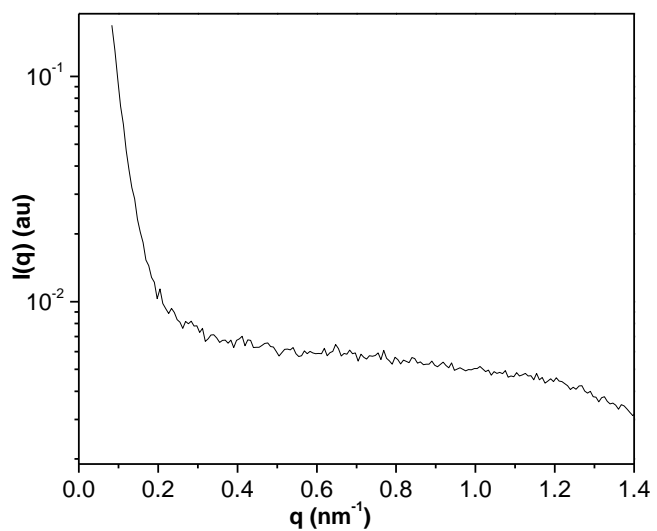


Figure S5. Random PVBC_{49-r}-PBeS₅₀ crosslinked AEM formed using heterogeneous amination.