

Supporting Information

Pyridine- and Pyrimidine-Functionalized Poly(sulfone)s: Performance-Enhancing Crosslinkers for Acid/Base Blend Proton Exchange Membranes for the Direct Methanol Fuel Cell

*C. Daniel Varnado Jr.,^a Xinsheng Zhao,^b Michael Ortiz,^a Zicheng Zuo,^b Zhongqing Jiang,^b
Arumugam Manthiram^b and Christopher W. Bielawski^{a*}*

^aDepartment of Chemistry, The University of Texas at Austin, Austin, TX 78712

^bMaterials Science and Engineering Program, The University of Texas at Austin, Austin, TX 78712

E-mail: bielawski@cm.utexas.edu

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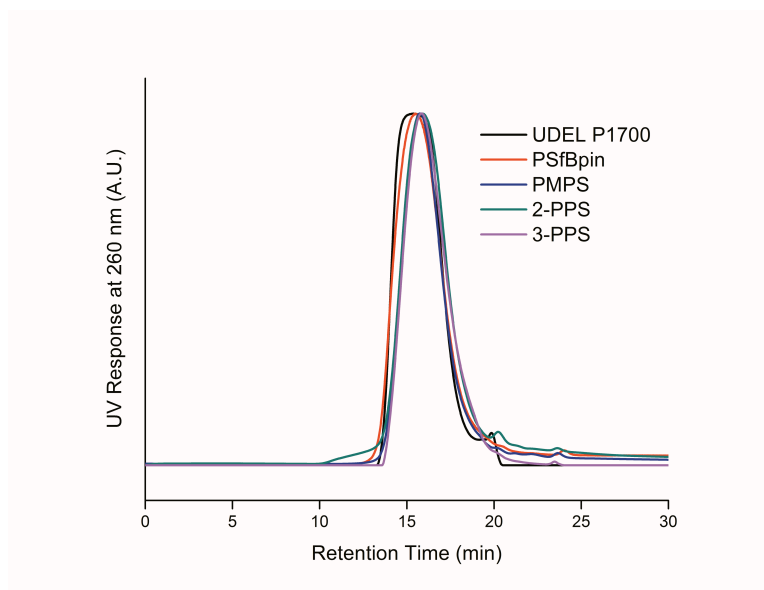


Figure S1. Gel permeation chromatograms of various polymers (eluent: THF, rate: 1.0 mL/min).

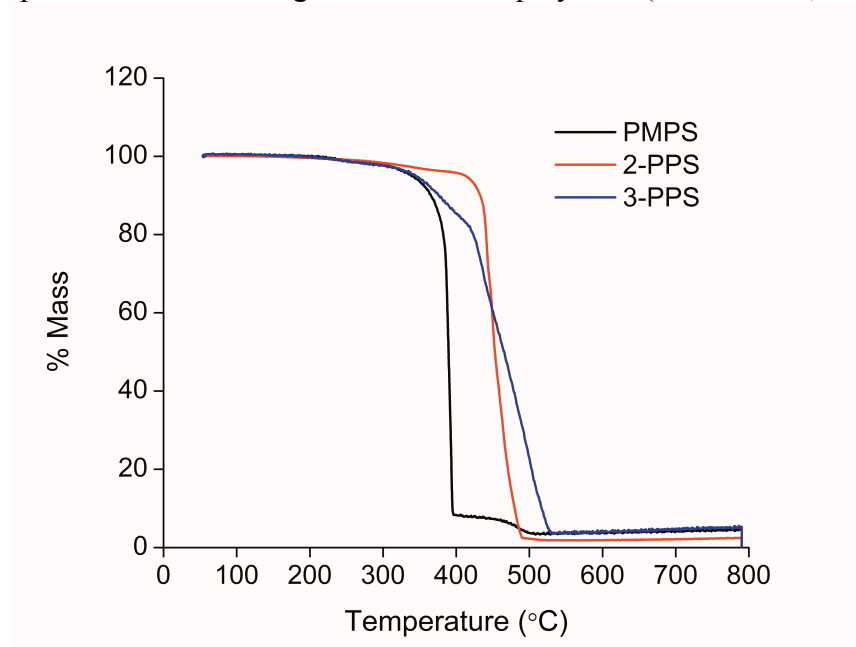
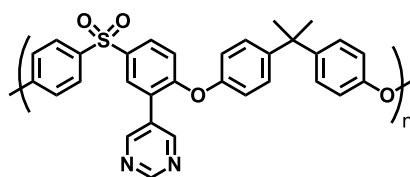
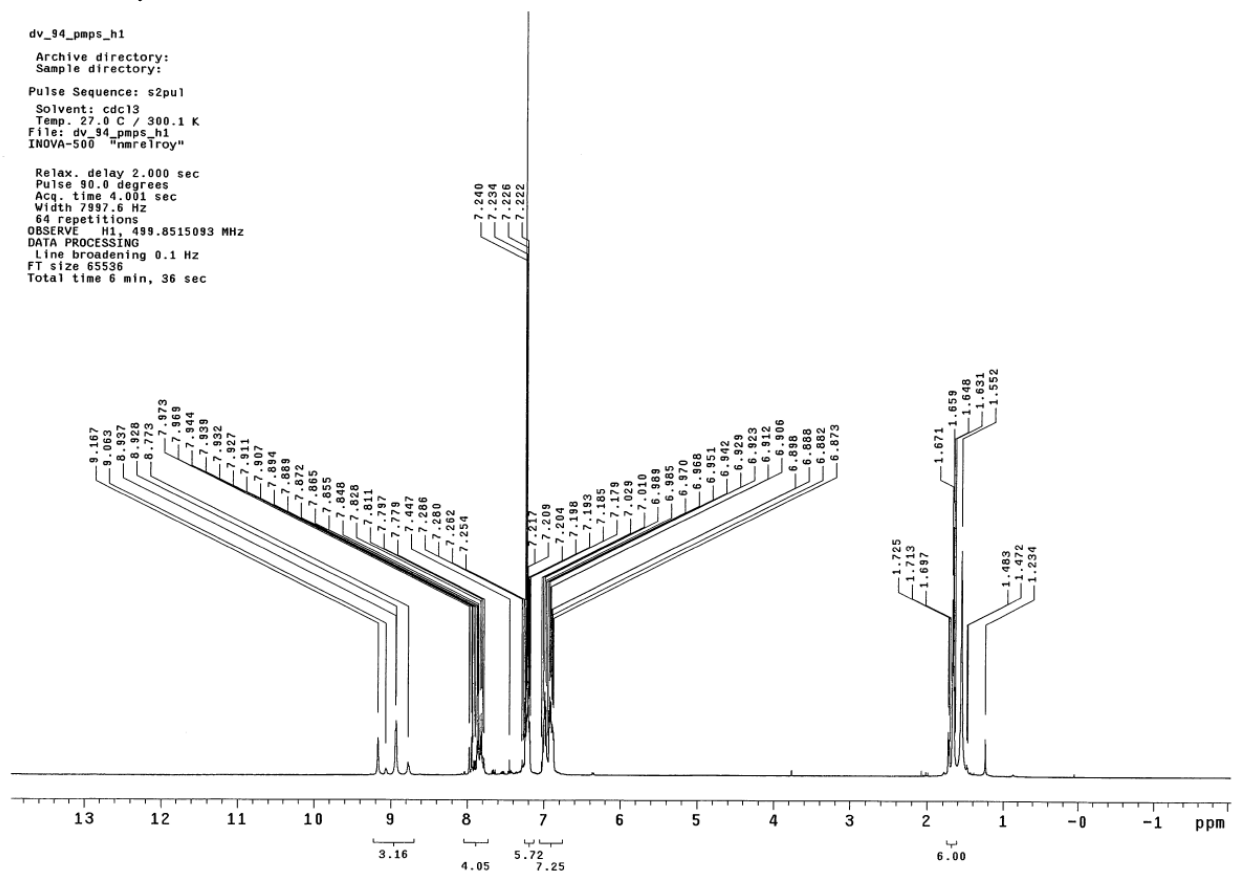
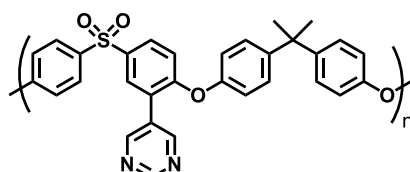


Figure S2. Thermogravigrams of various polymers under an atmosphere of oxygen (ramp rate = 20 °/min).



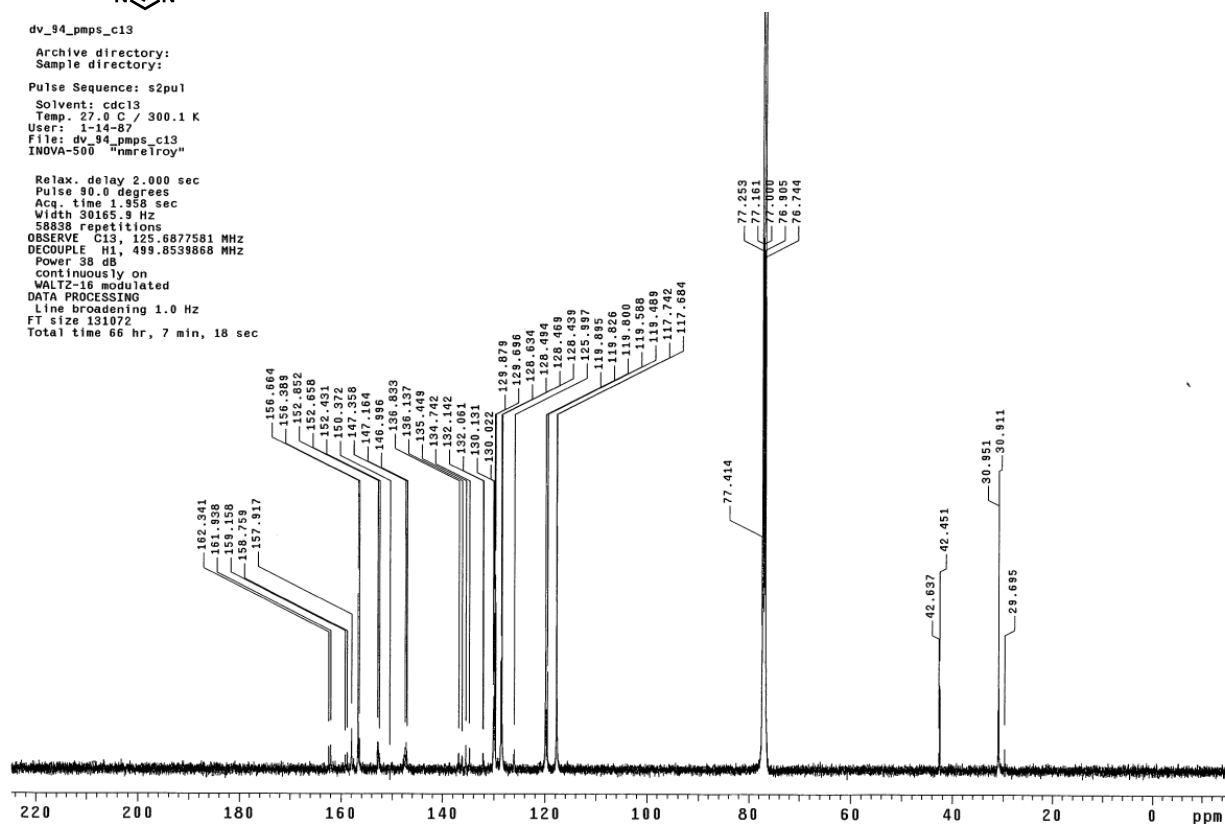
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Sample directory:
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Solvent: cdc13
Temp: 27.0 C / 300.1 K
File: dv_94_pmps_h1
INOVA-500 "nmrelroy"
Relax. delay 2.000 sec
Pulse 90.0 degrees
Acq. time 4.001 sec
Width 7997.6 Hz
64 repetitions
OBSERVE H1, 499.8515093 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 65536
Total time 6 min, 36 sec

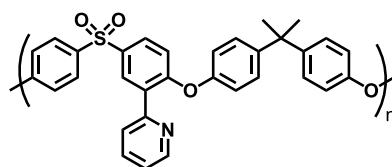




dv_94_pmps_c13
Archive directory:
Sample directory:
Pulse Sequence: s2pul
Solvent: cdcl3
Temp. 27.0 C / 300.1 K
User: 1-14-87
File: dv_94_pmps_c13
INOVA-500 "nmrelroy"

Relax. delay 2.000 sec
Pulse 90.0 degrees
Acq. time 1.958 sec
Width 30165.9 Hz
58838 repetitions
OBSERVE C13, 125.6877581 MHz
DECOUPLE H1, 499.8539868 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 66 hr, 7 min, 18 sec





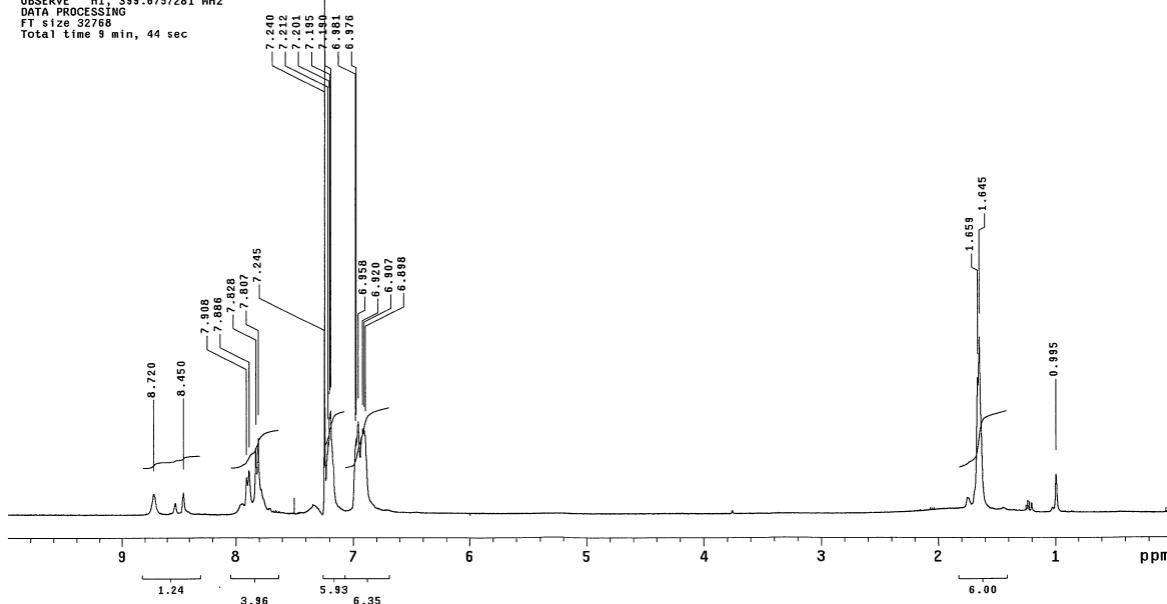
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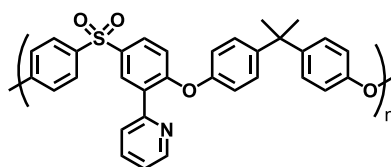
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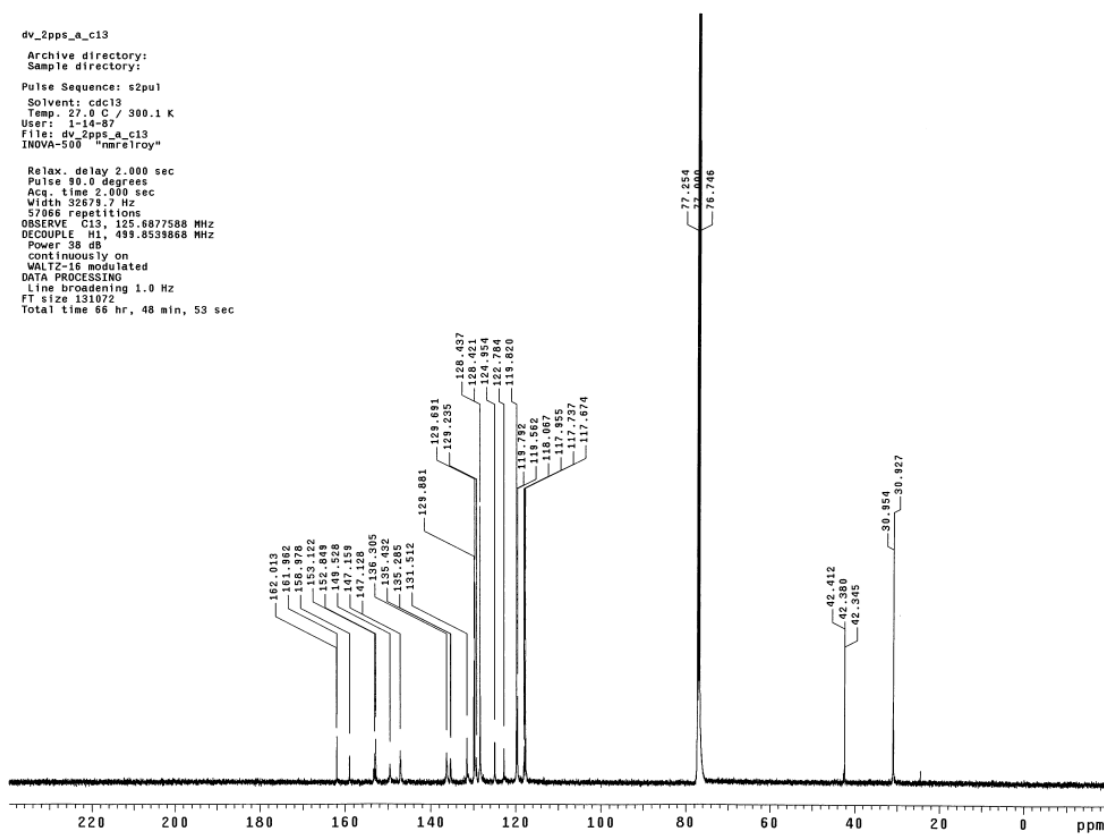
Solvent: cdc13
Temp: 25.0 C / 298.1 K
File: PROTON_01
INNOVA-500 "nmrfred"

Relax. delay 2.000 sec
Pulse 30.0 degrees
Acq. time 2.556 sec
Width 6410.3 Hz
128 repetitions
OBSERVE H1, 399.6757281 MHz
DATA PROCESSING
FT size 32768
Total time 9 min, 44 sec

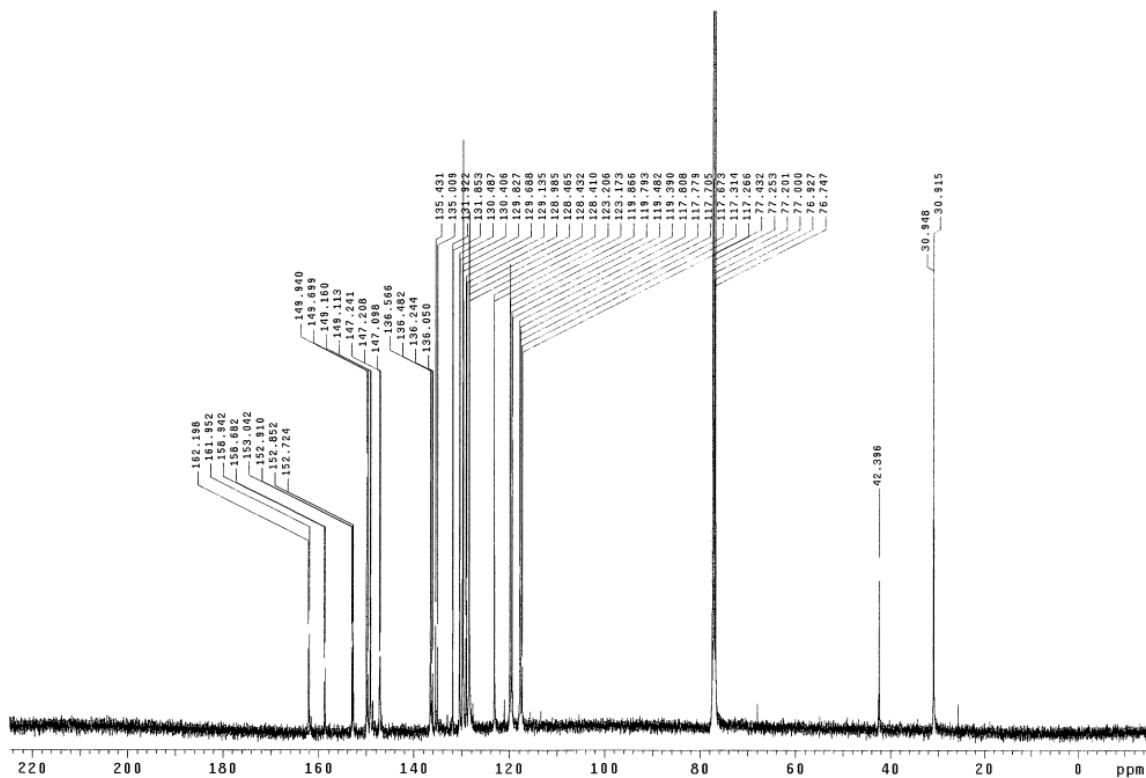
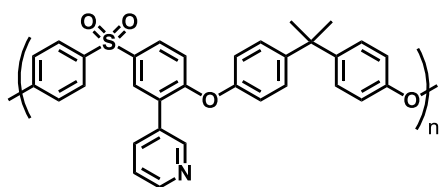




dv_2pps_a_c13
Archive directory:
Sample directory:
Pulse Sequence: s2pu1
Solvent: cdc13
Temp. 27.0 C / 300.1 K
User: 1-14-87
File: dv_2pps_a_c13
INOVA-500 "nmre1roy"
Relax. delay 2.000 sec
Pulse 90.0 degrees
Acq. time 2.000 sec
Width 32679.7 Hz
57066 repetitions
OBSERVE C13, 125.6877588 MHz
DECOUPLE H1, 499.8539868 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 131072
Total time 56 hr, 48 min, 53 sec







PULSE SEQUENCE Relax. delay 2.000 sec Pulse 90.0 degrees Acq. time 1.956 sec Width 30165.9 Hz 14000 repetitions	OBSERVE C13, 125.6877595 DECOUPLE H1, 499.8539868 Power 38 dB continuously on WALTZ-16 modulated	DATA PROCESSING Line broadening 1.0 Hz FT size 131072 Total time 15.4 hours	dv_psfpy_c13 Archive directory: Sample directory: 201408270900259:ab60v1k
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