

Supporting Information

Rheological Investigation on the Microstructure of Fuel Cell Catalyst Inks

Sunilkumar Khandavalli,[†] Jae Hyung Park,[‡] Nancy N. Kariuki,[‡] Deborah J. Myers,[‡] Jonathan J. Stickel,[¶] Katherine Hurst,[†] K. C. Neyerlin,[†] Michael Ulsh,[†]
and Scott A. Mauger*[†]

[†]*National Renewable Energy Laboratory, Chemistry and Nanoscience Department, 15013
Denver West Parkway, Golden, CO 80401, United States*

[‡]*Chemical Sciences and Engineering Division, Argonne National Laboratory, Argonne, IL
60439, USA*

[¶]*National Bioenergy Center, National Renewable Energy Laboratory, Golden, CO 80401,
USA*

E-mail: *scott.mauger@nrel.gov

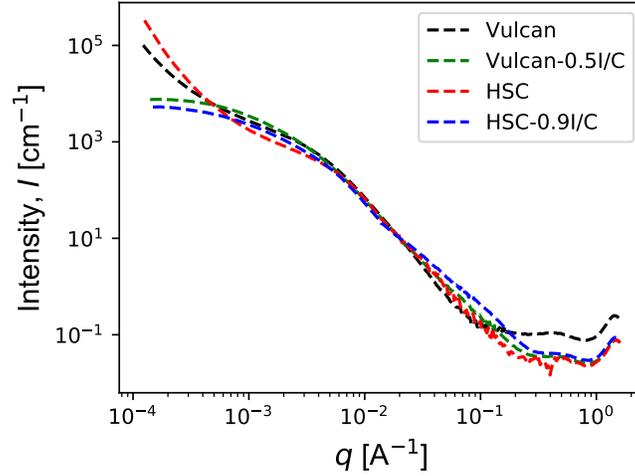


Figure S1: USAXS-SAXS scattering of Vulcan and HSC dispersions with ionomer at 0.5 and 0.9 I/C respectively, plotted on log-log scales. The intensity data sets for each carbon type have been offset to overlap at $q = 0.02 \text{ \AA}^{-1}$ on the y-axis for clarity of the data curvature.

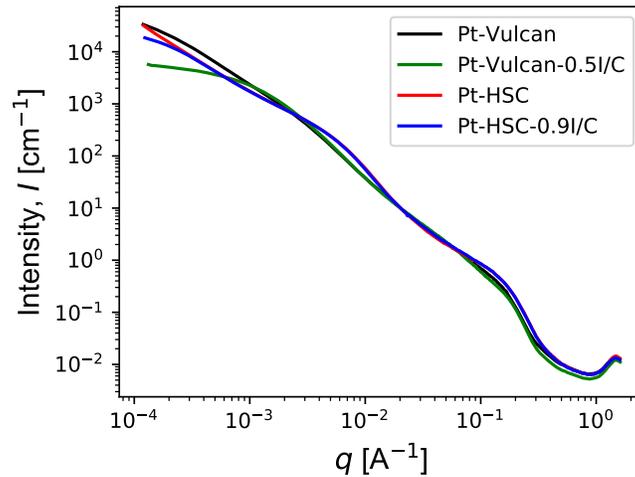


Figure S2: USAXS-SAXS scattering of Pt-Vulcan and Pt-HSC dispersions with ionomer at 0.5 and 0.9 I/C respectively, plotted on log-log scales. The plots of Pt-CB without ionomer cases are also shown. The intensity data sets for each carbon type have been offset to overlap at $q = 0.02 \text{ \AA}^{-1}$ on the y-axis for clarity of the data curvature.

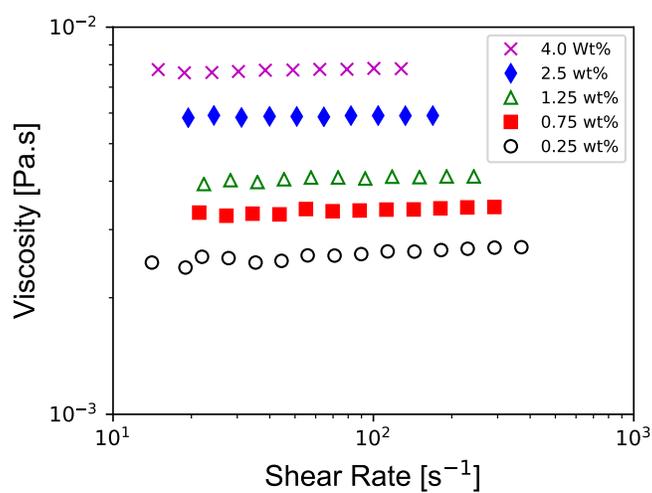


Figure S3: Viscosity of Nafion ionomer dispersions in n-propanol and aqueous solvent mixture (3:1 mass ratio) at different mass concentrations.