

Anal. Chem. submitted
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SUPPORTING INFORMATION

Structure-Function Relationships in High Density
Octadecylsilane Stationary Phases by Raman Spectroscopy:
4. Effects of Neutral and Basic Aromatic Compounds

Christopher J. Orendorff, Michael W. Ducey, Jr.,[†]
Jeanne E. Pemberton,*

University of Arizona
Department of Chemistry
Tucson, AZ 85721

and

Lane C. Sander

National Institute of Standards and Technology
Gaithersburg, MD 20899

*Author to whom correspondence should be addressed: (520)621-8245, pembertn@u.arizona.edu

[†]Current address: Missouri Western State College, Department of Chemistry, St. Joseph, MO 64507

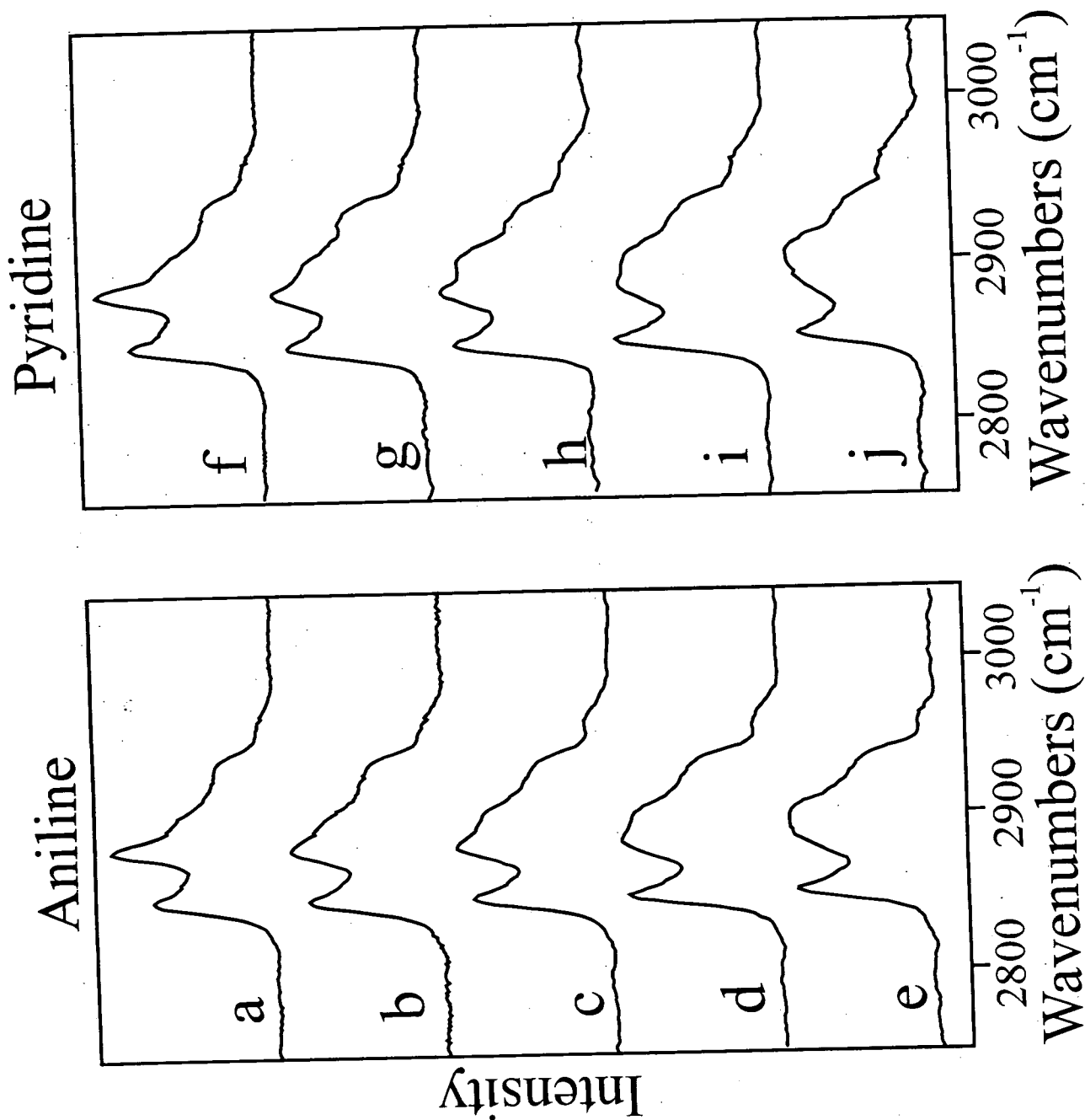


Figure S1. Raman spectra in the $\nu(\text{C-H})$ region for a) and f) TFC18SF, b) and g) TFC18SL, c) and h) DFC18SF, d) and i) DFC18SL, e) and j) MFC18 in perdeuterated aniline (left panel) and pyridine (right panel) at 20°C. Spectral acquisition times for TFC18SF, TFC18SL, DFC18SF and DFC18SL in all solvents are 2 min. Spectral acquisition times for MFC18 in all solvents are 5 min.

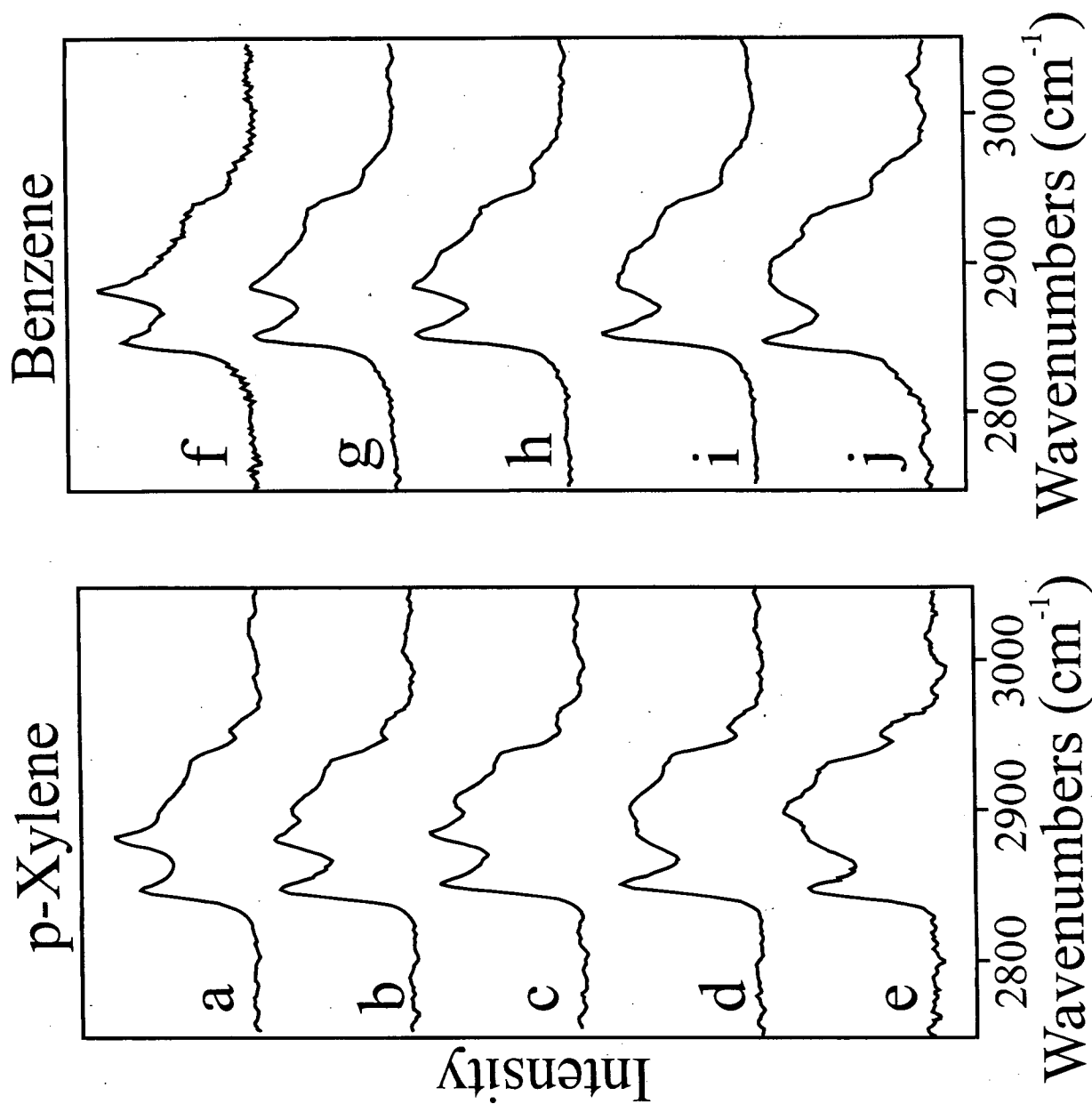


Figure S2. Raman spectra in the $\nu(\text{C-H})$ region for a) and f) TFC18SF, b) and g) TFC18SL, c) and h) DFC18SF, d) and i) DFC18SL, e) and j) MFC18 in perdeuterated p-xylene (left panel) and benzene (right panel) at 20°C. Spectral acquisition times for TFC18SF, TFC18SL, DFC18SF, and DFC18SL in all solvents are 2 min. Spectral acquisition times for MFC18 in all solvents are 5 min.

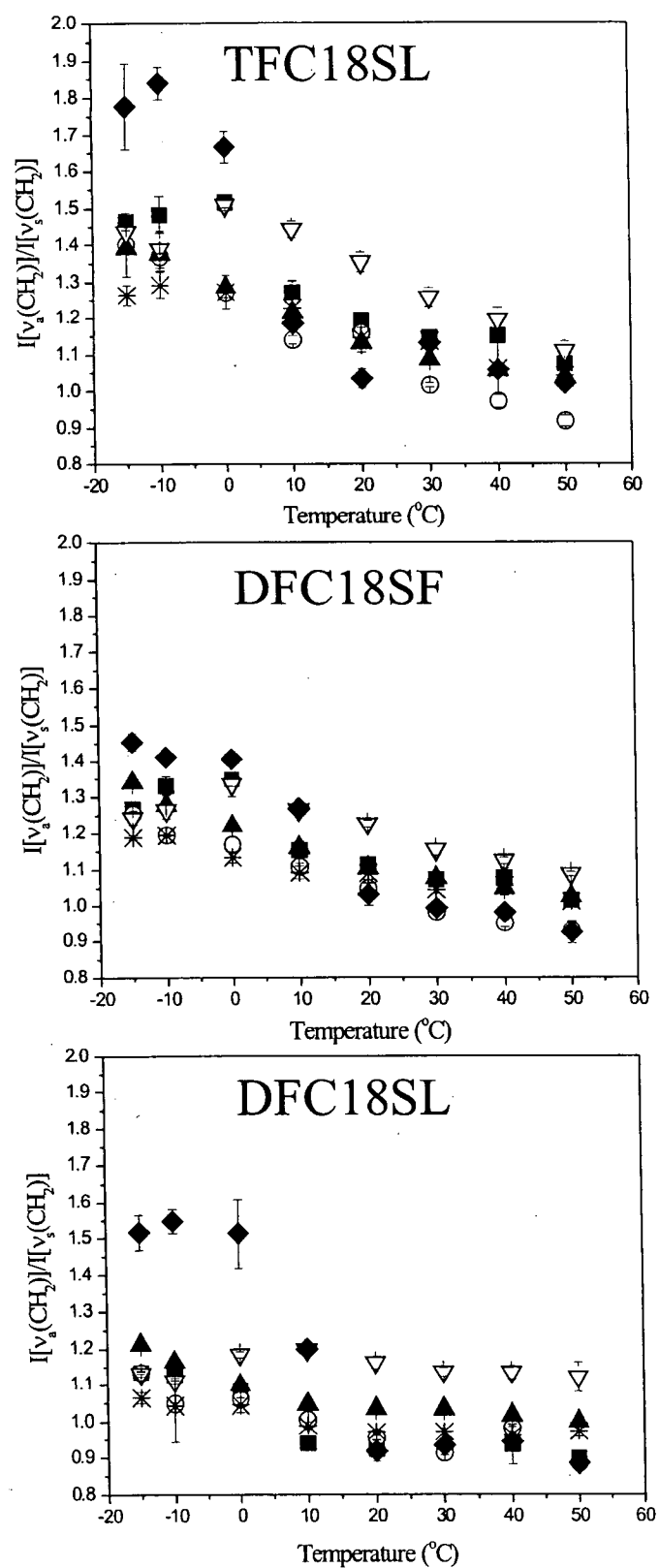


Figure S3. Temperature dependence of $I[v_a(\text{CH}_2)]/I[v_s(\text{CH}_2)]$ for TFC18SL, DFC18SF, and DFC18SL in benzene (■), aniline (▲), toluene (○), p-xylene (◆), anisole (▽), and pyridine (*).

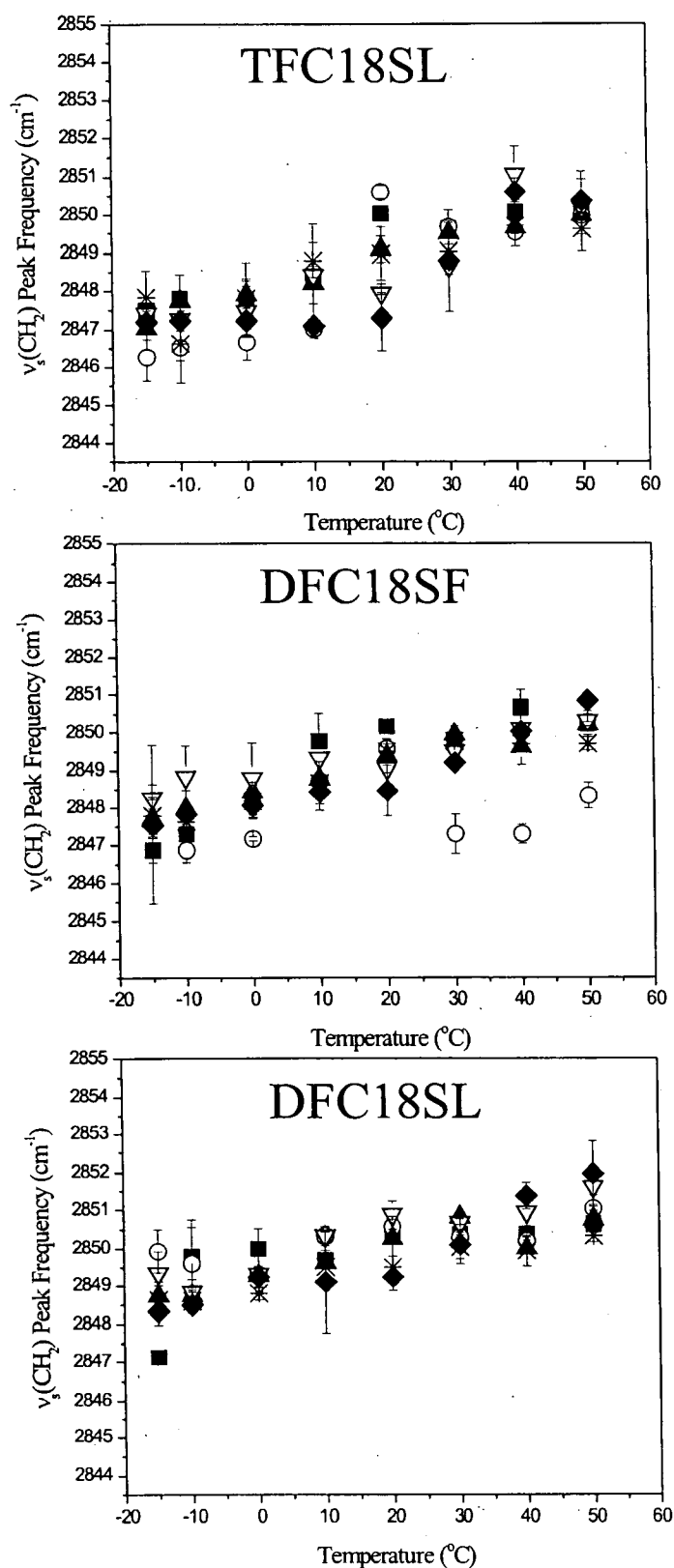


Figure S4. Temperature dependence of $\nu_s(\text{CH}_2)$ peak frequency for TFC18SL, DFC18SF, and DFC18SL in benzene (■), aniline (▲), toluene (○), p-xylene (◆), anisole (▽), and pyridine (*).