

## Supporting Information

### Polymerization of new aniline derivatives: Synthesis, characterization and application as sensors

Akhat G. Mustafin,<sup>\*a</sup> Lyaysan R. Latypova,<sup>\*a</sup> Anastasia N. Andriianova,<sup>\*a</sup> Ilnur Mullagaliev,<sup>b</sup> Shamil M. Salikhov,<sup>a</sup> Renat B. Salikhov,<sup>b</sup> Gulsum S. Usmanova<sup>a</sup>

<sup>a</sup> Ufa Institute of Chemistry of the Russian Academy of Sciences, Republic of Bashkortostan, pr. Oktyabrya 71, Ufa 450054, Russia. E-mail: agmustafin@gmail.com

<sup>b</sup> Bashkir State University, Republic of Bashkortostan, Z. Validi St 32, Ufa, 450076, Russia.

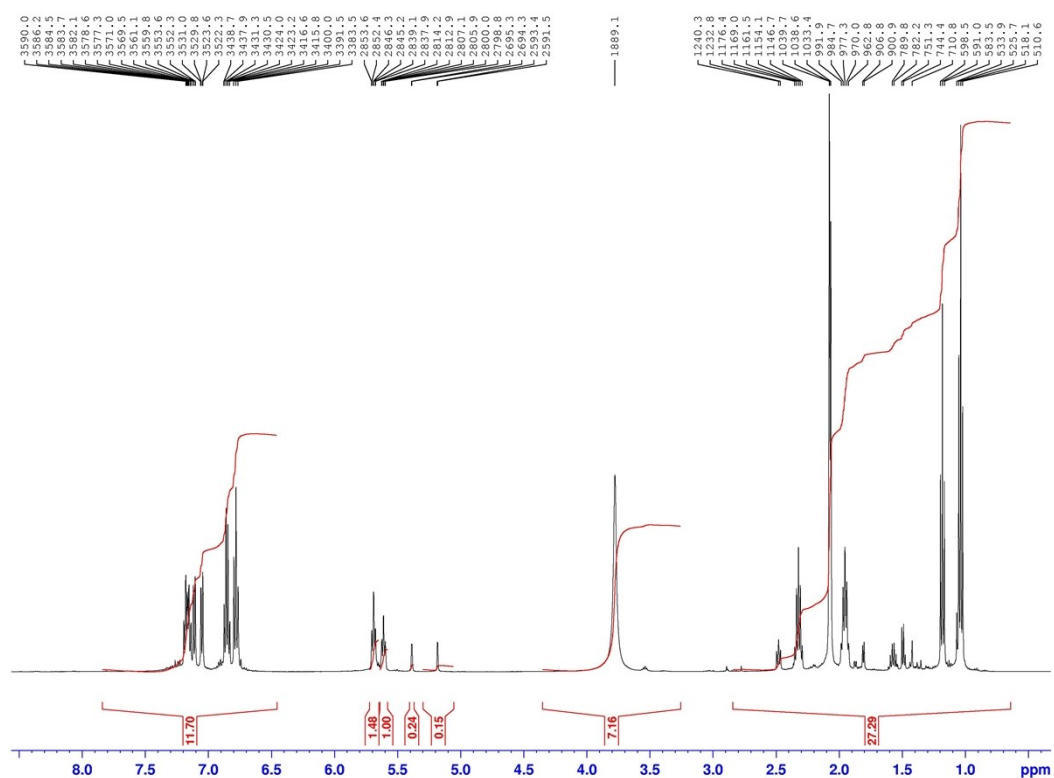


Figure S1. <sup>1</sup>H NMR spectra of 2-(1-methylbut-1-en-1-yl)aniline.



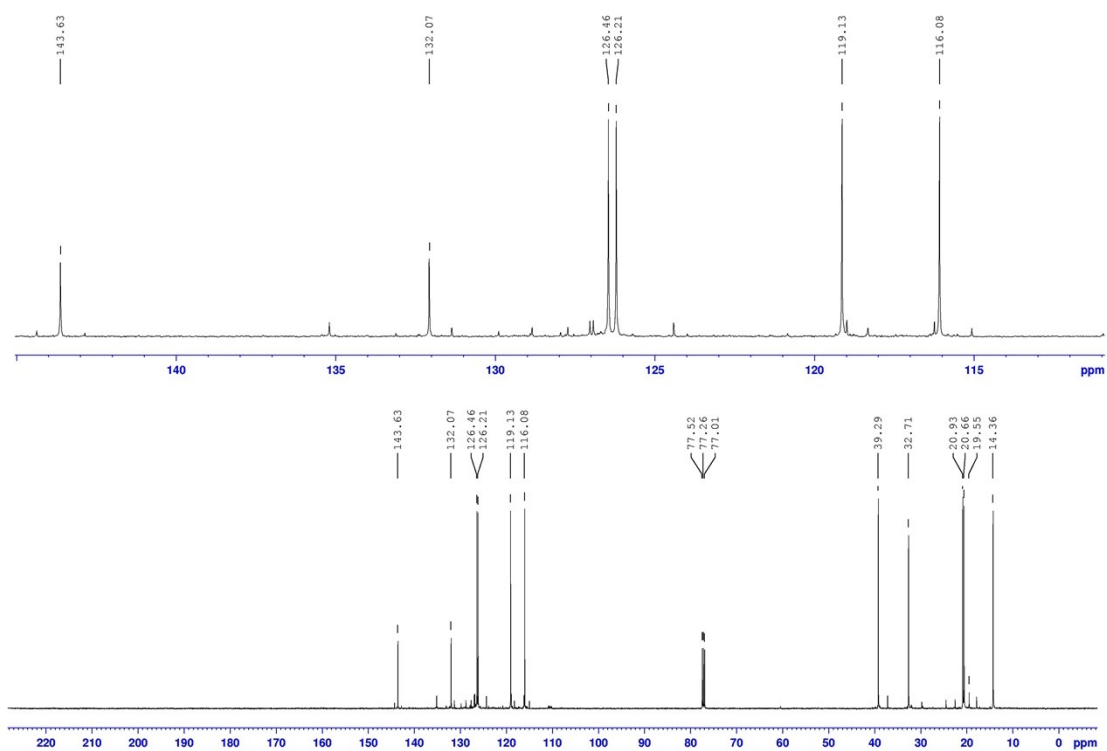


Figure S4.  $^{13}\text{C}$  NMR spectra of 2-(1-methylbutyl)aniline.

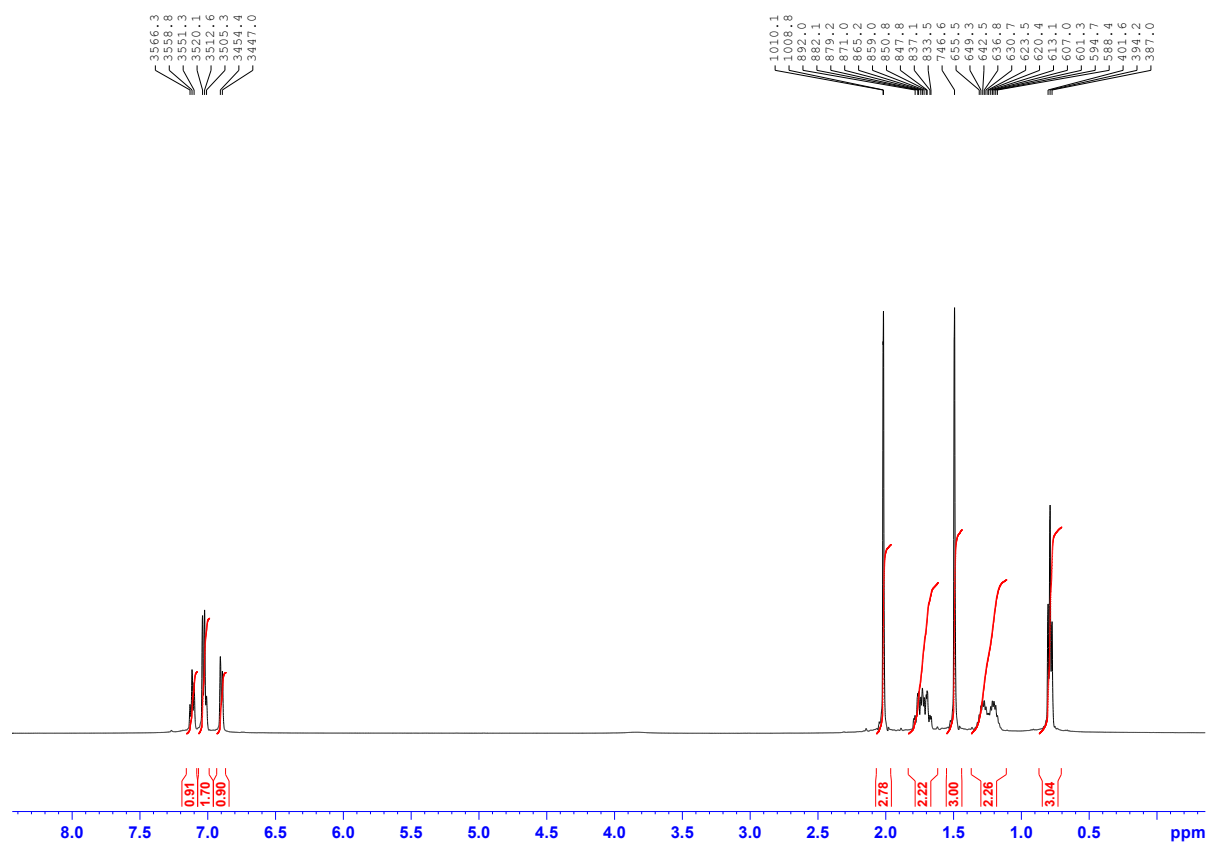


Figure S5.  $^1\text{H}$  NMR spectra of N-[2-(1-hydroxy-1-methylbutyl)phenyl]acetamide.

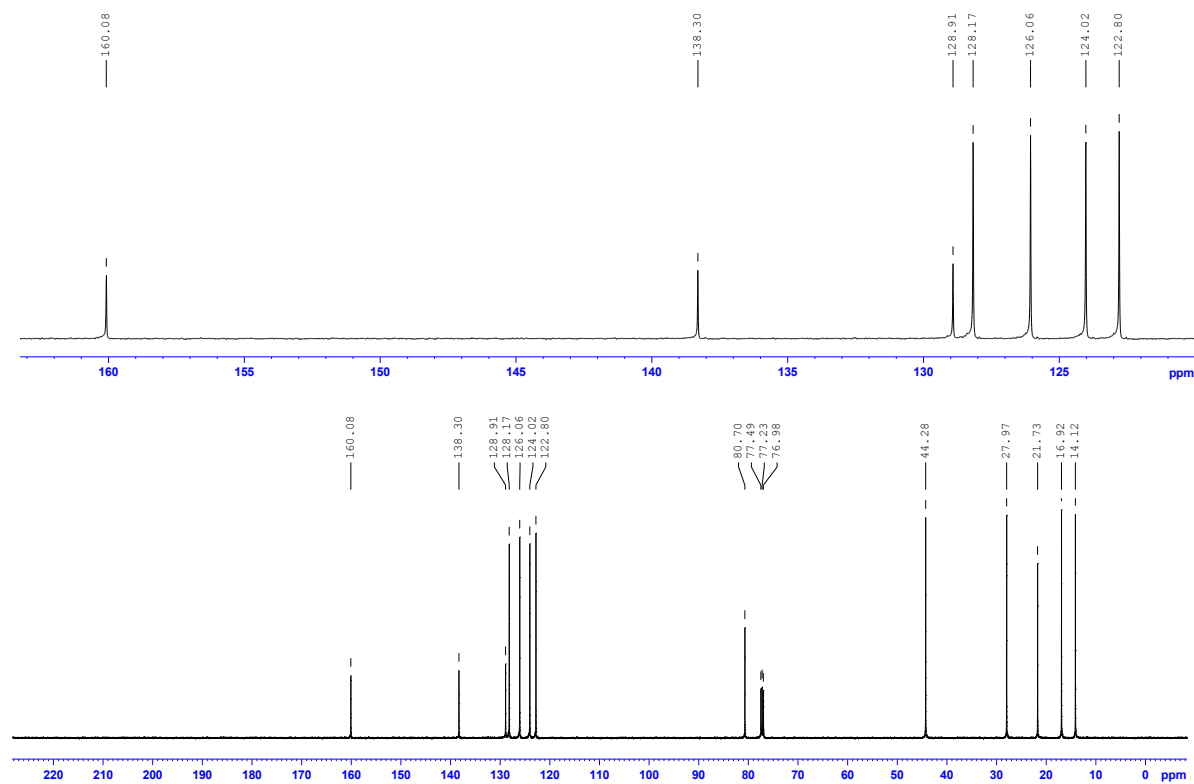


Figure S6.  $^{13}\text{C}$  NMR spectra of N-[2-(1-hydroxy-1-methylbutyl)phenyl]acetamide.

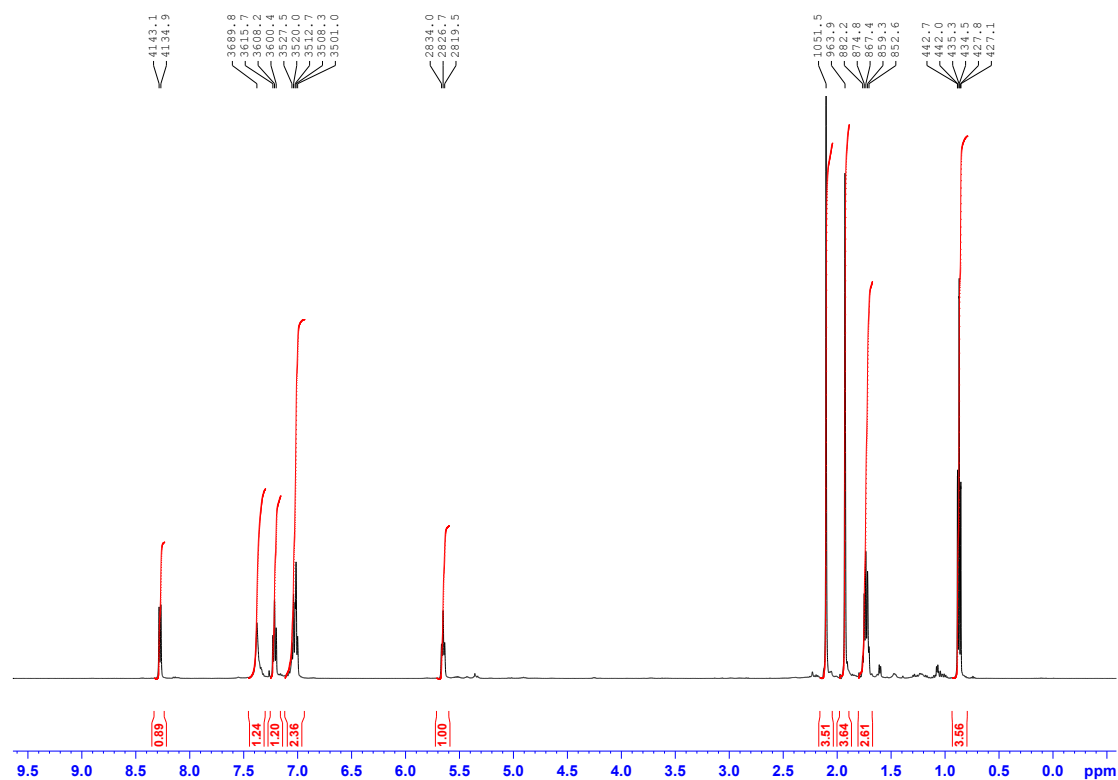


Figure S7.  $^1\text{H}$  NMR spectra of N-{2-[1-methylbut-1-en-1-yl]phenyl}acetamide.

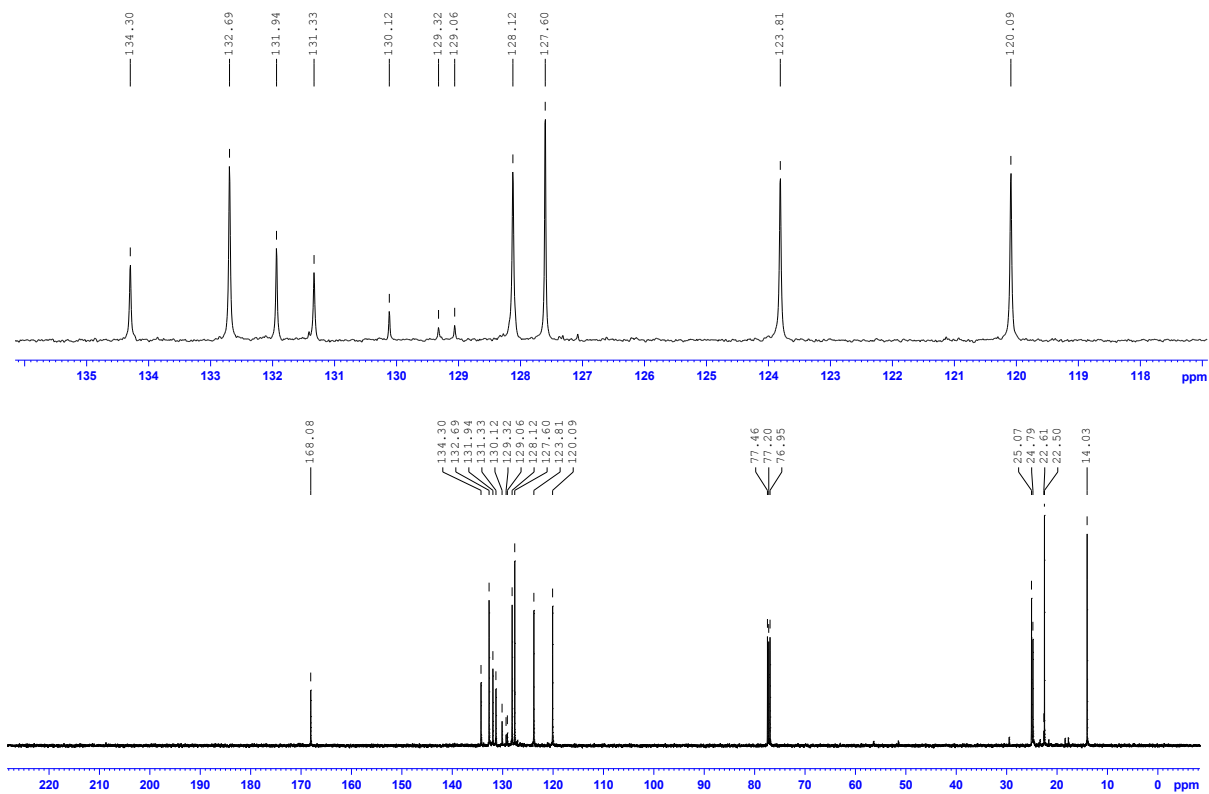


Figure S8.  $^{13}\text{C}$  NMR spectra of N-{2-[1-methylbut-1-en-1-yl]phenyl}acetamide.

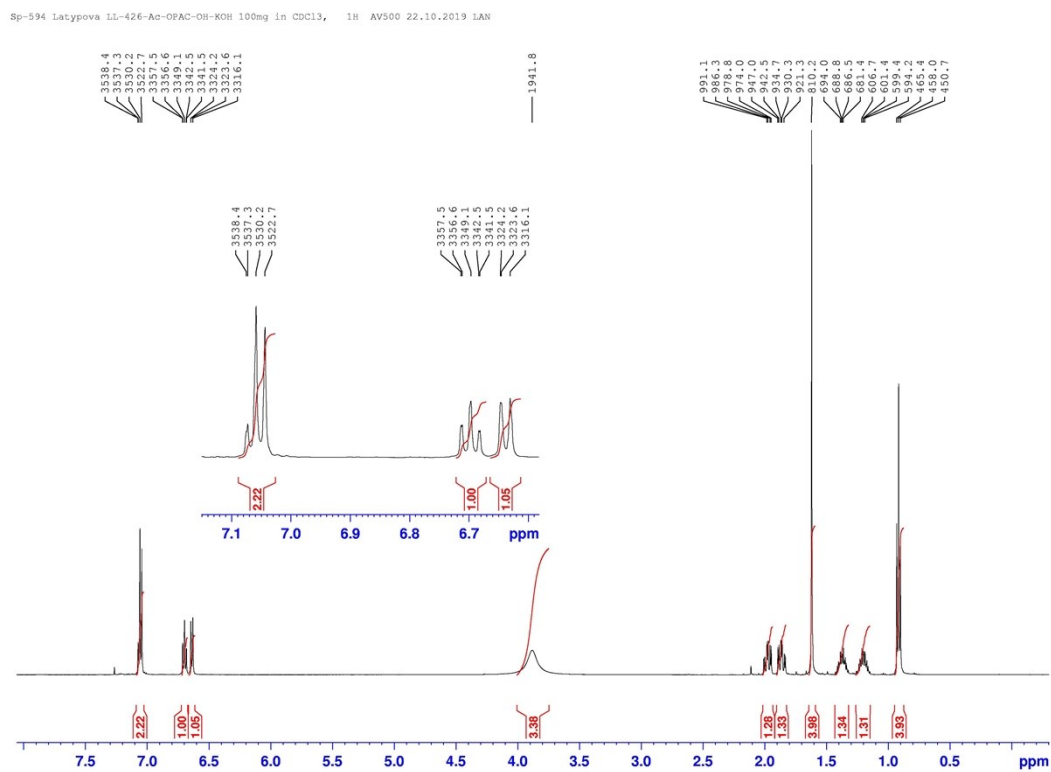


Figure S9.  $^1\text{H}$  NMR spectra of 2-(2-aminophenyl)pentan-2-ol.



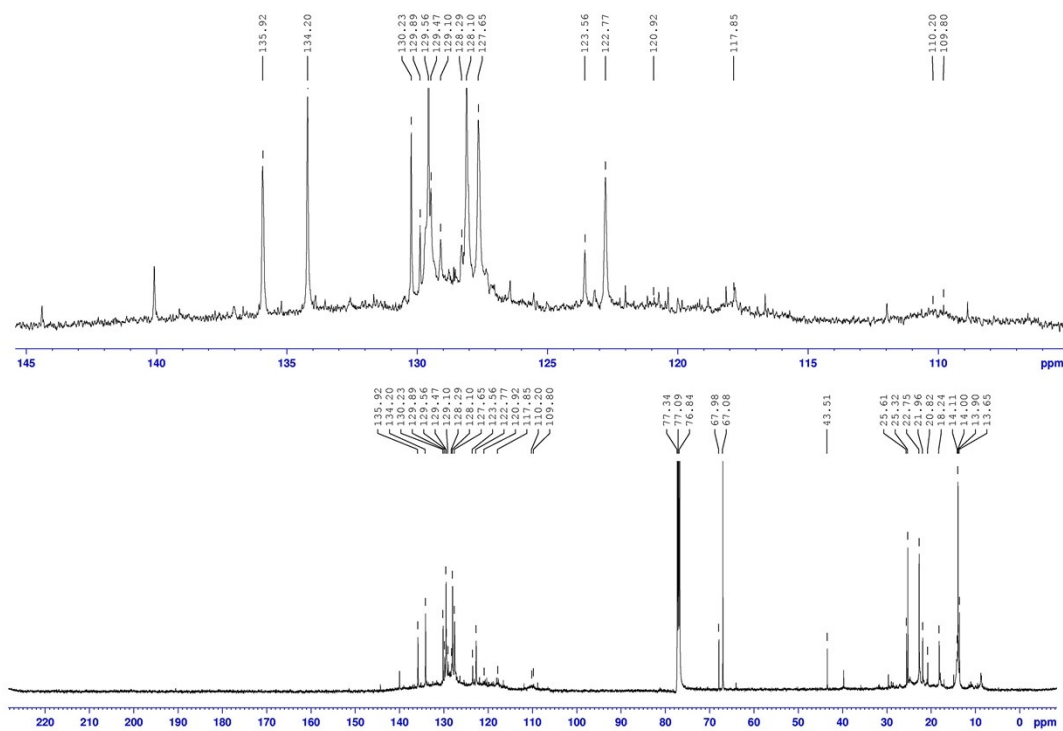


Figure S12.  $^{13}\text{C}$  NMR spectra of poly[2-(1-methylbut-1-en-1-yl)aniline].

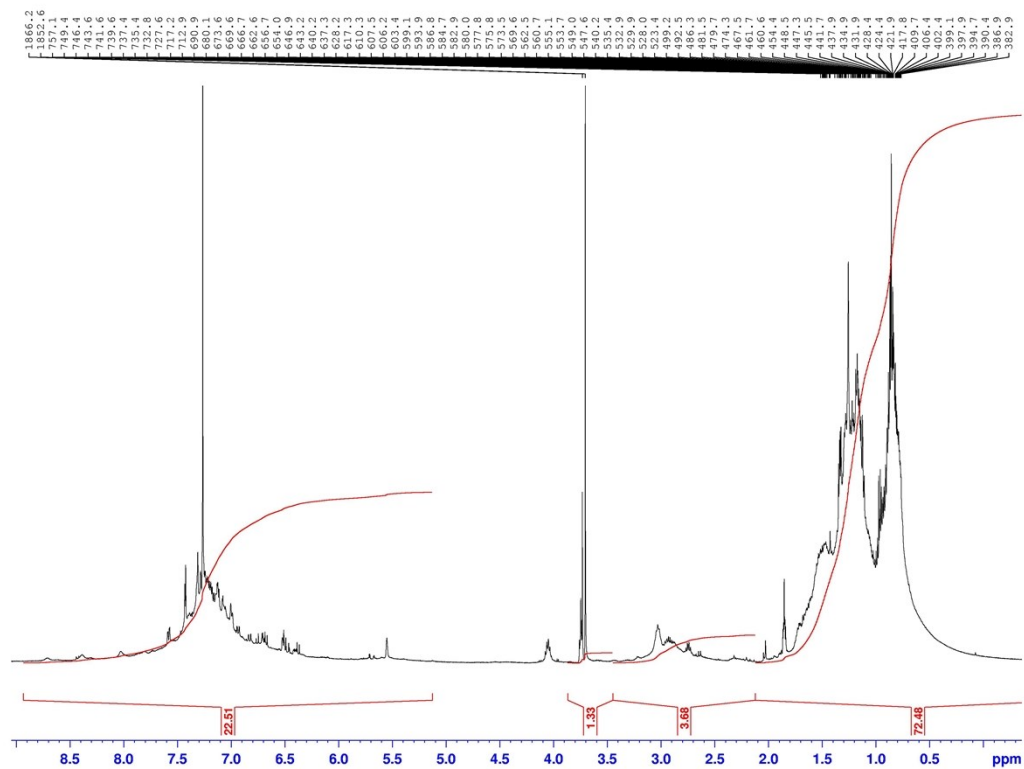


Figure S13.  $^1\text{H}$  NMR spectra of poly[2-(1-methylbutyl)aniline].

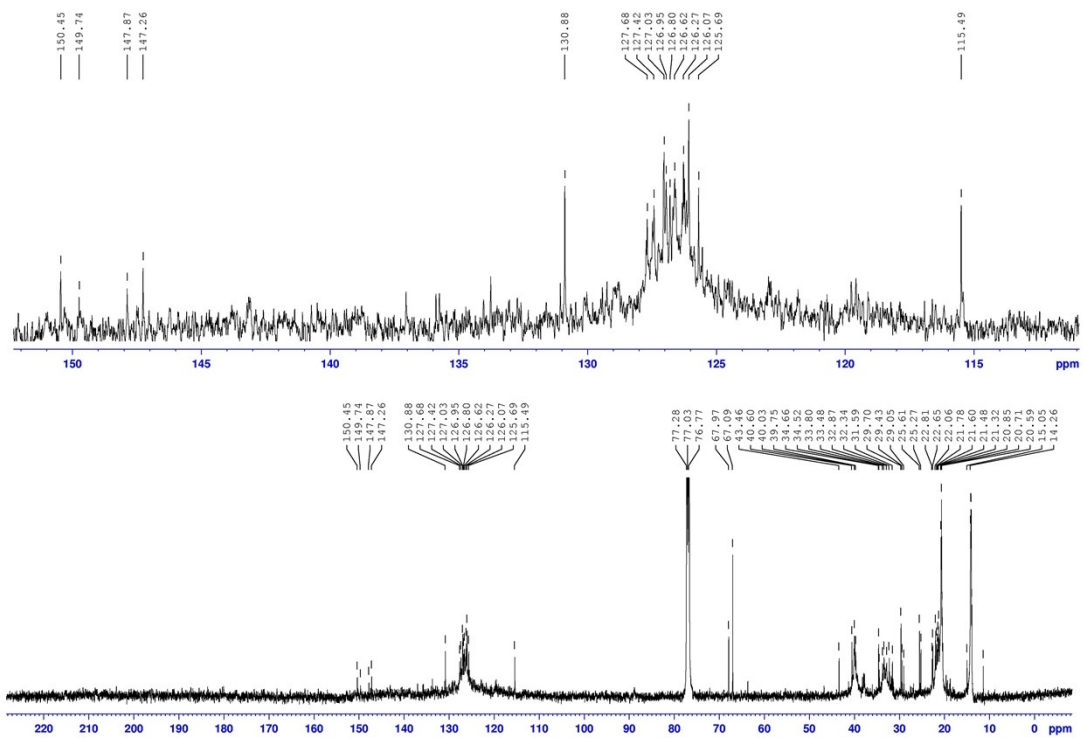


Figure S14.  $^{13}\text{C}$  NMR spectra of poly[2-(1-methylbutyl)aniline].

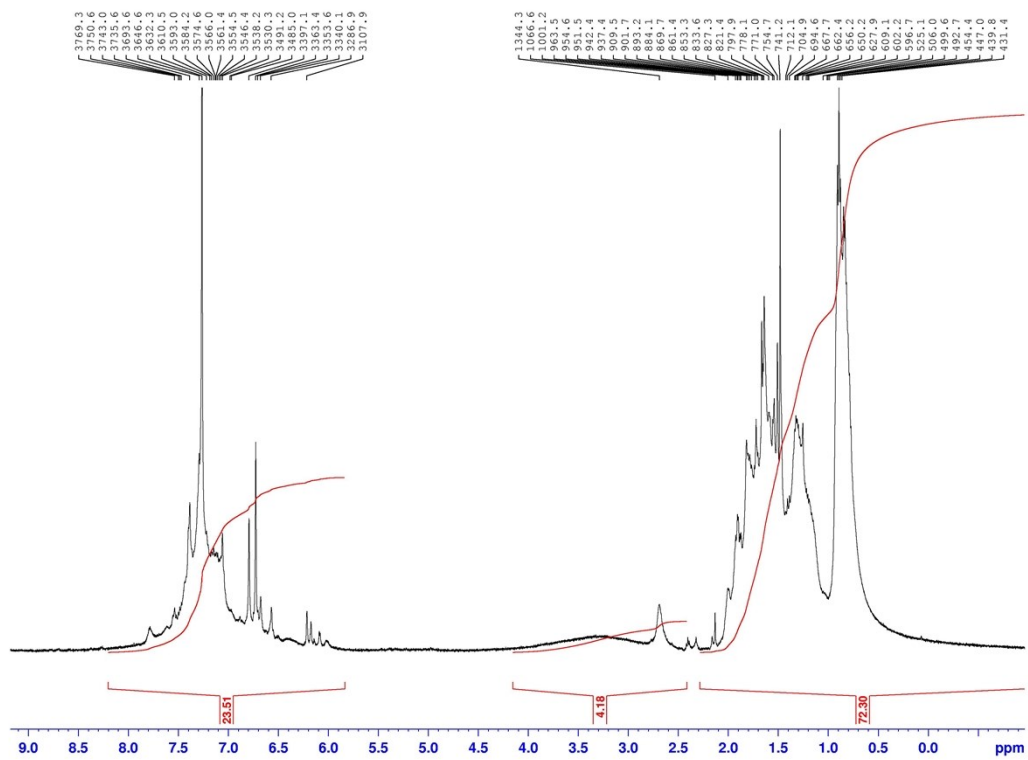


Figure S15.  $^1\text{H}$  NMR spectra of poly[2-(2-aminophenyl)pentan-2-ol].



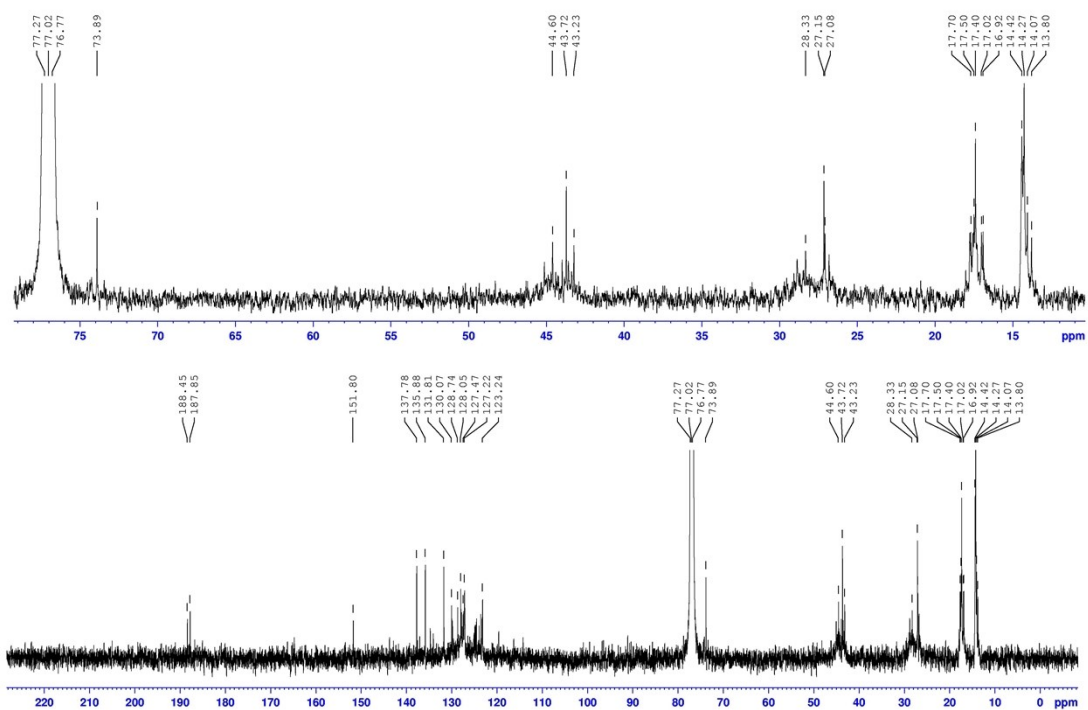
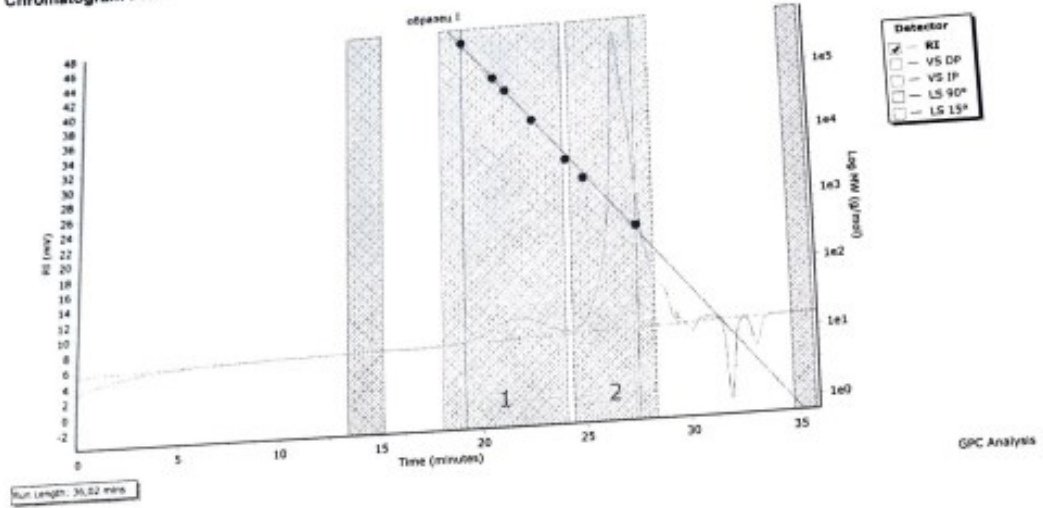


Figure S16.  $^{13}\text{C}$  NMR spectra of poly[2-(2-aminophenyl)pentan-2-ol].



Agilent GPC/SEC Software  
Sample GPC Analysis Report

Chromatogram Plot



GPC Analysis

Distribution Plot

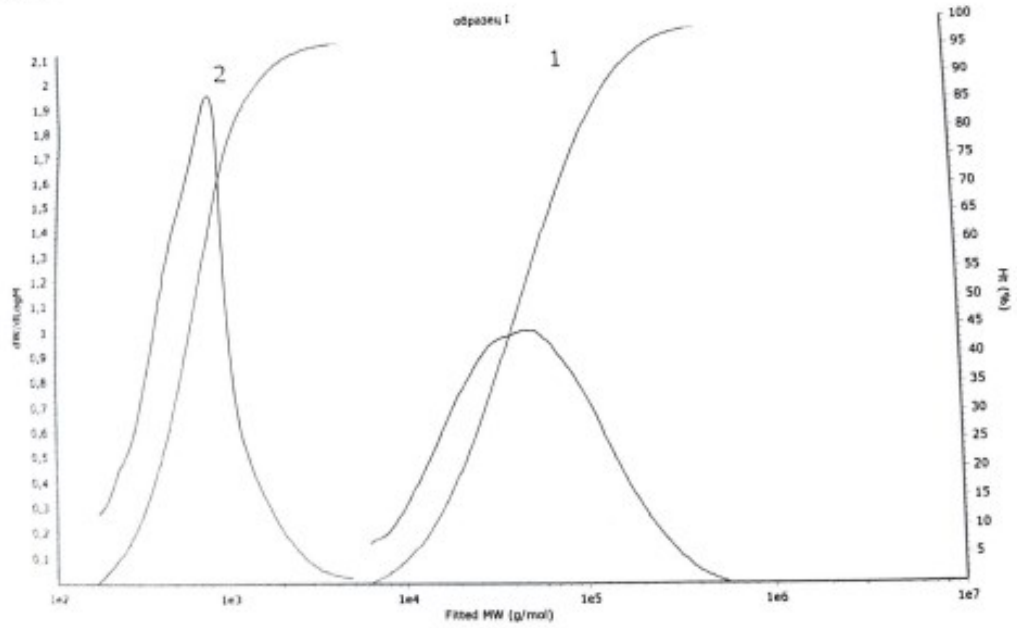
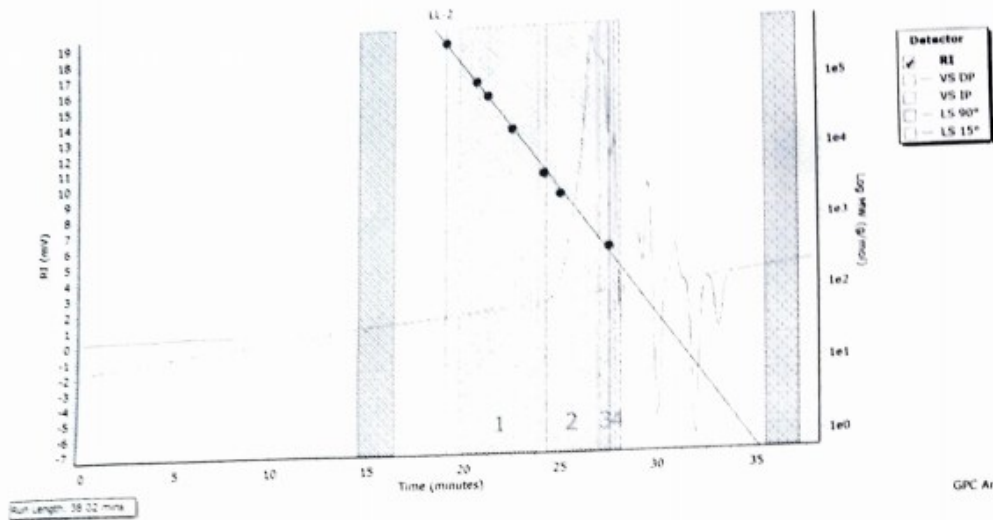


Figure S17. GPC of poly[2-(1-methylbutyl)aniline].



Chromatogram Plot



GPC Analysis

Distribution Plot

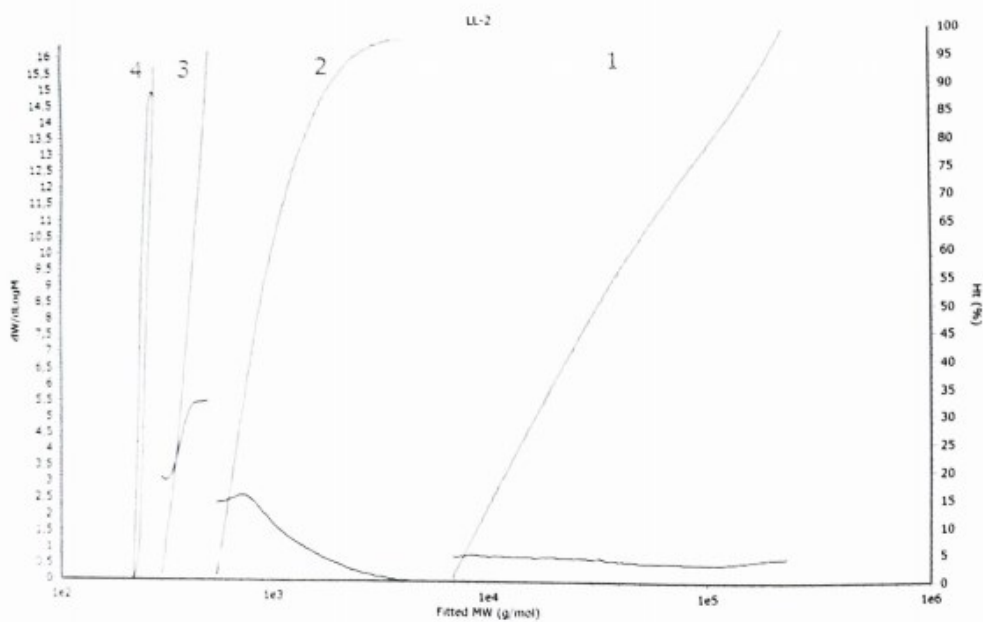


Figure S18. GPC of poly[2-(2-aminophenyl)pentan-2-ol].