

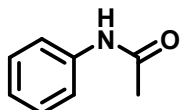
## Electronic Supplementary Information

### Sunlight-driven *N*-acetylation of anilines: a green chemistry approach

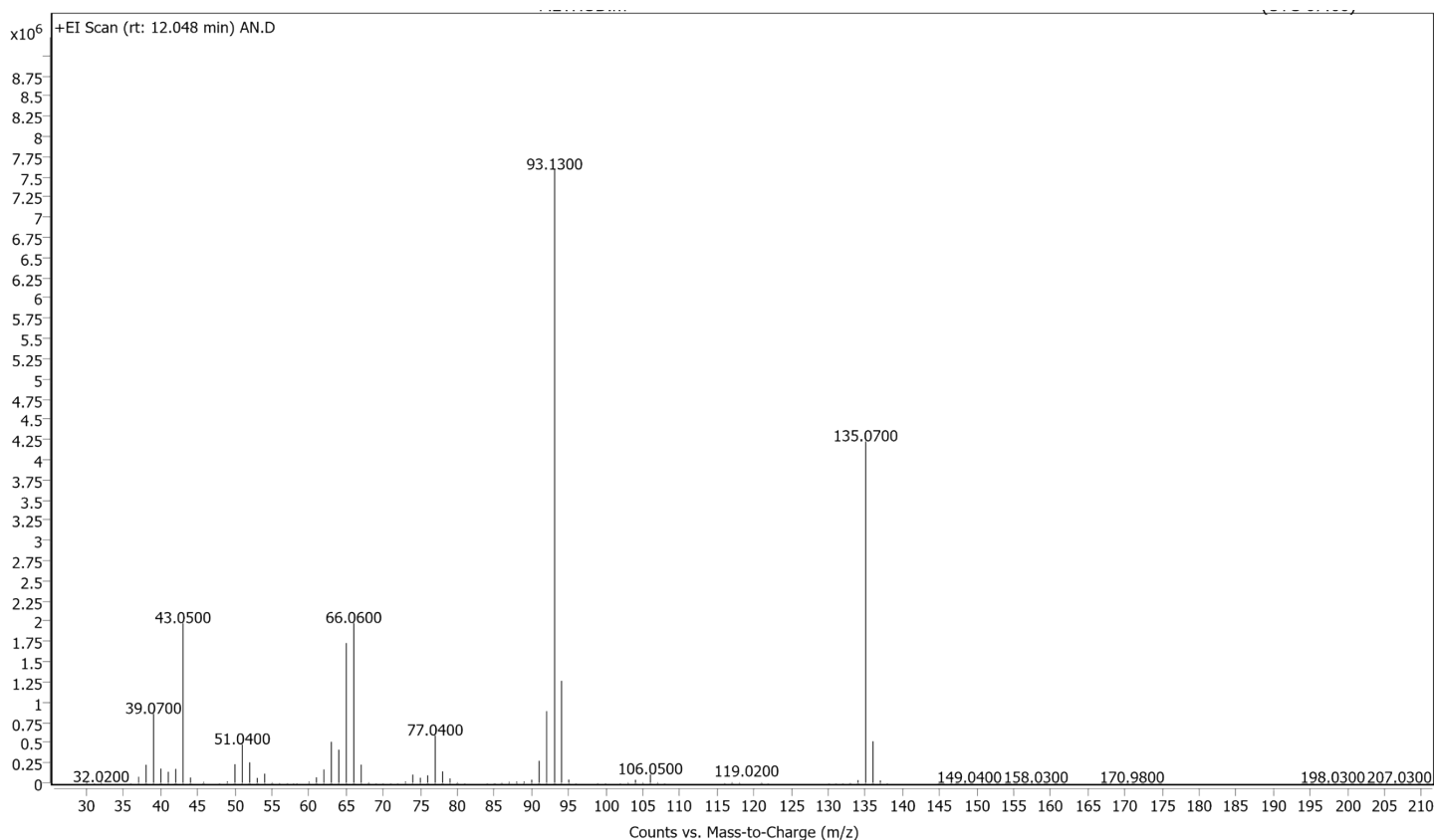
Ashu Gupta,<sup>a</sup> Indu Tucker Sidhwani<sup>b</sup>, Radhika Gupta,<sup>a,b</sup> Yukti Monga<sup>a,b</sup> and Rakesh Kumar Sharma<sup>b</sup>

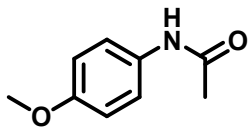
<sup>a</sup>Department of Chemistry, Shyam Lal College, University of Delhi, <sup>b</sup>Green Chemistry Network Centre, Department of Chemistry, University of Delhi

#### GC-MS Data



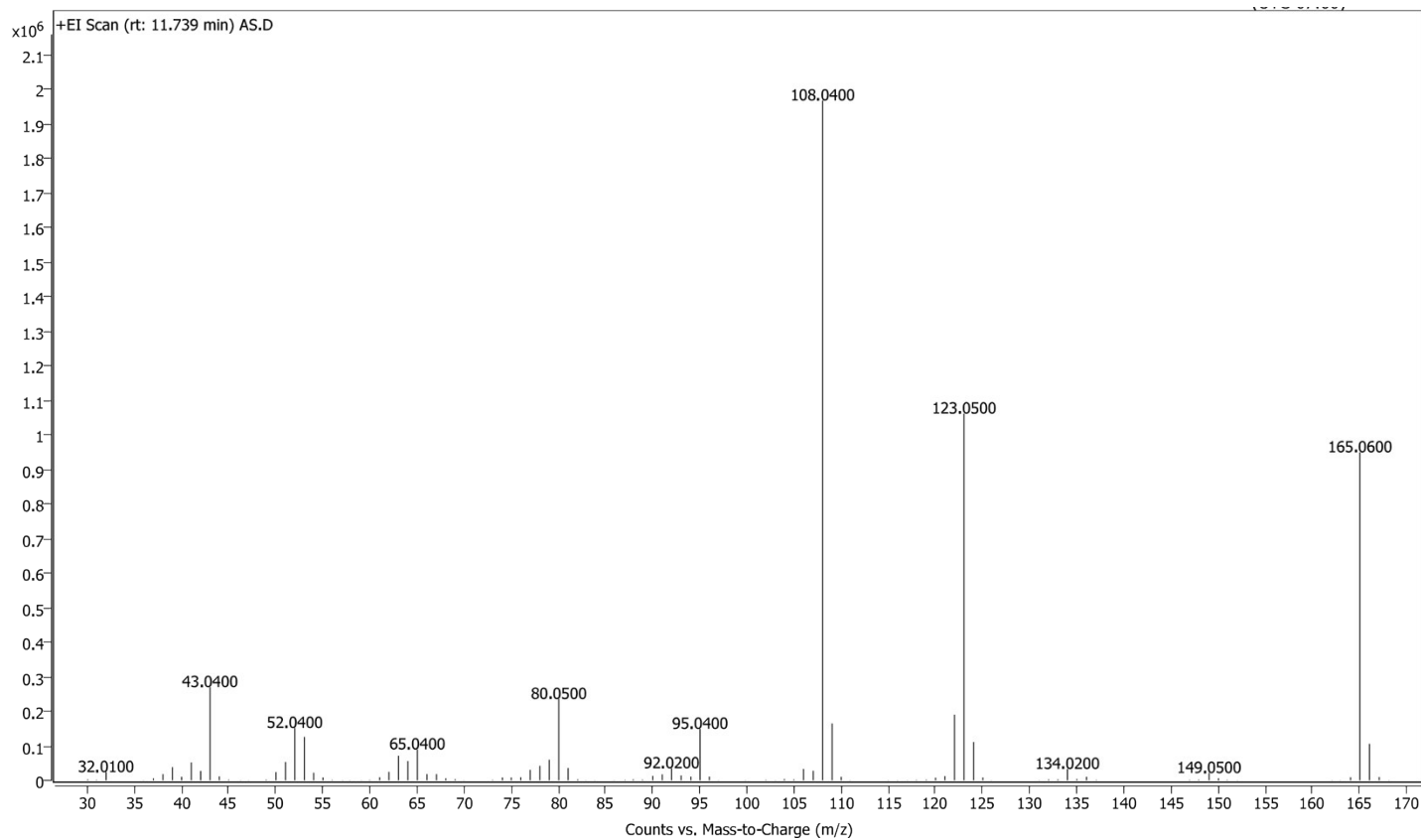
Acetanilide (Table 2, entry 1)



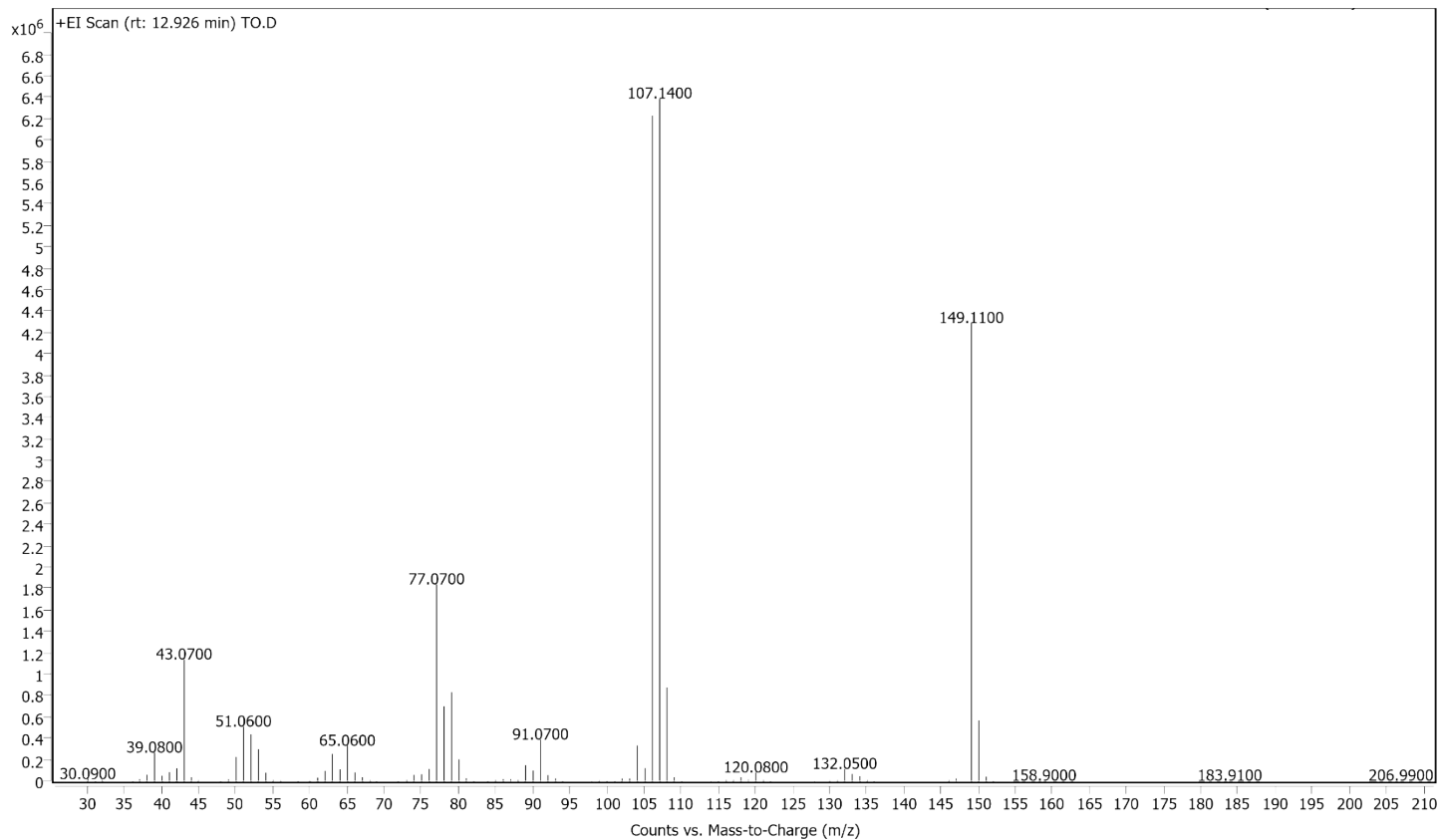


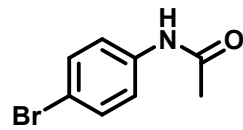
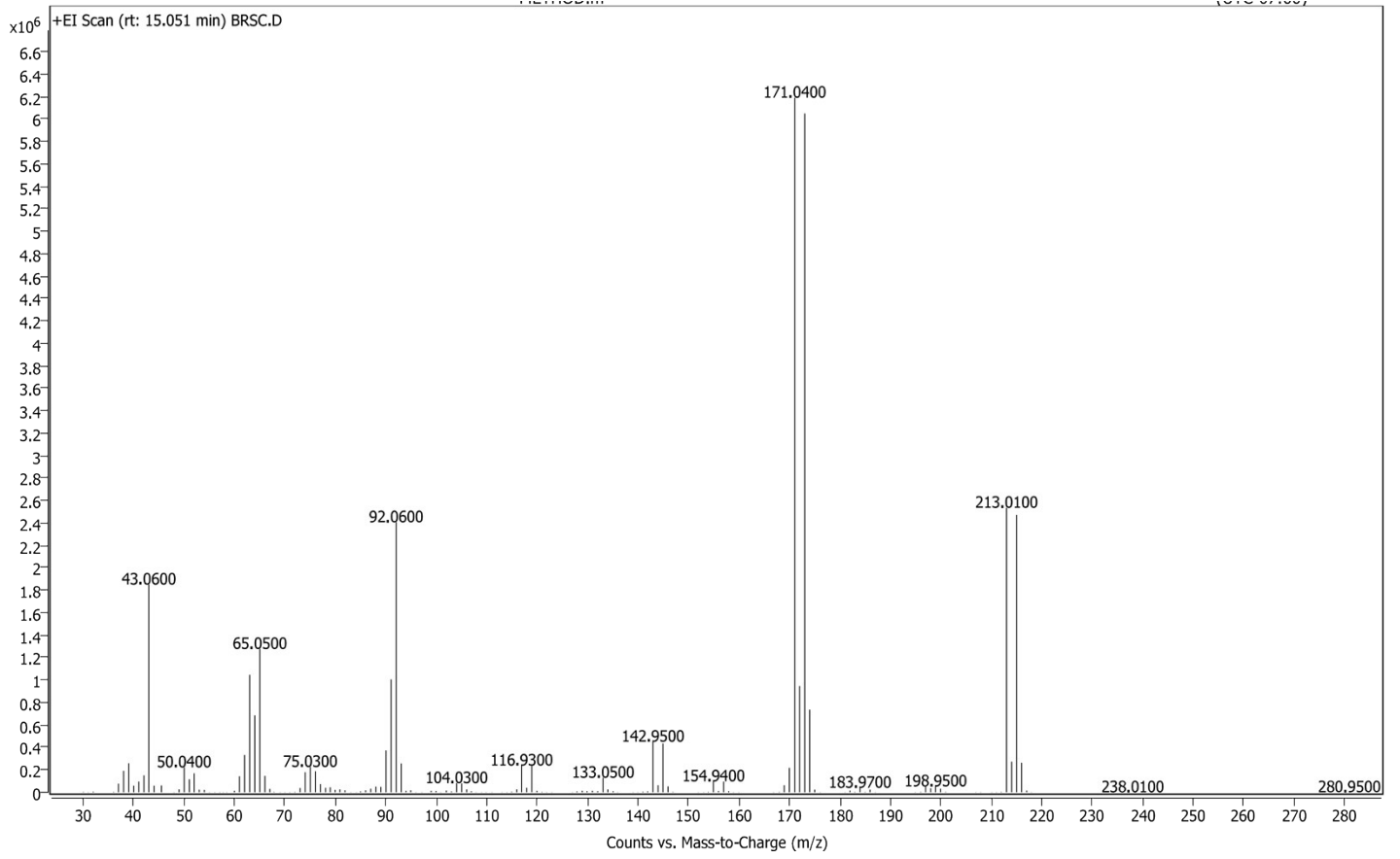
**p-Methoxyacetanilide**

**(Table 2, entry 2)**



### p-Methylacetanilide (Table 2, entry 3)

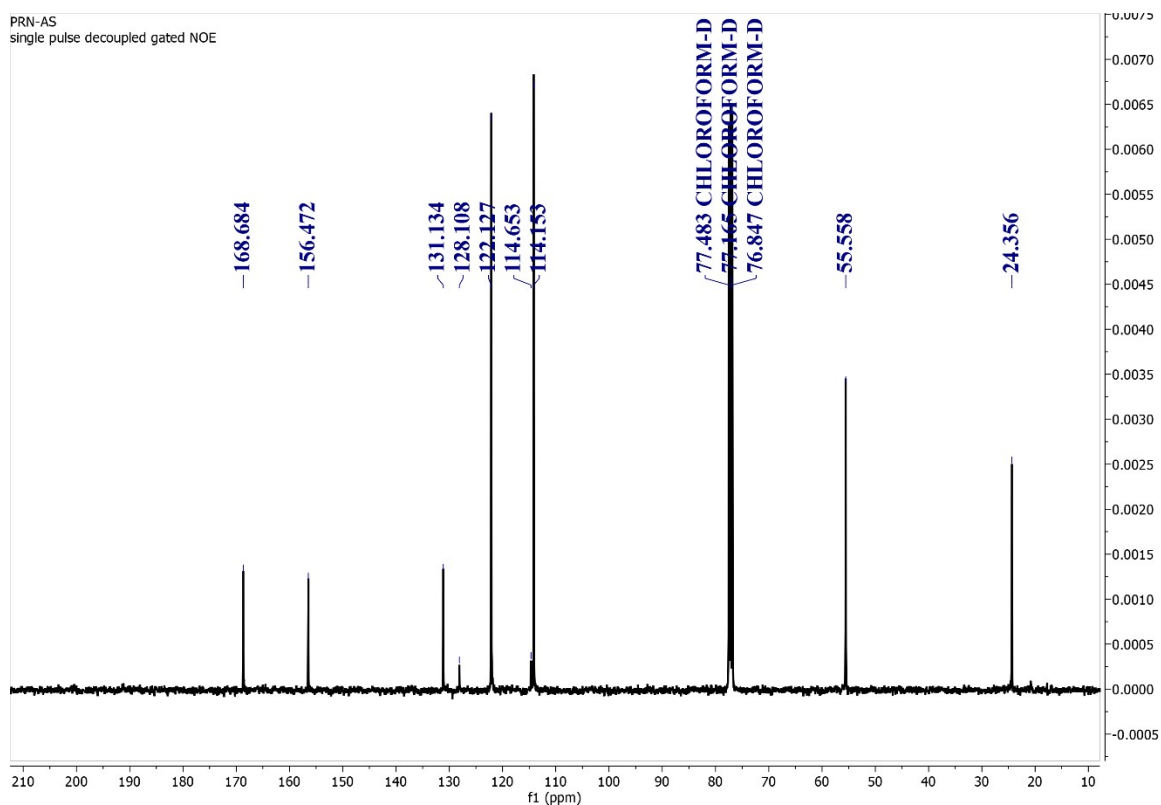
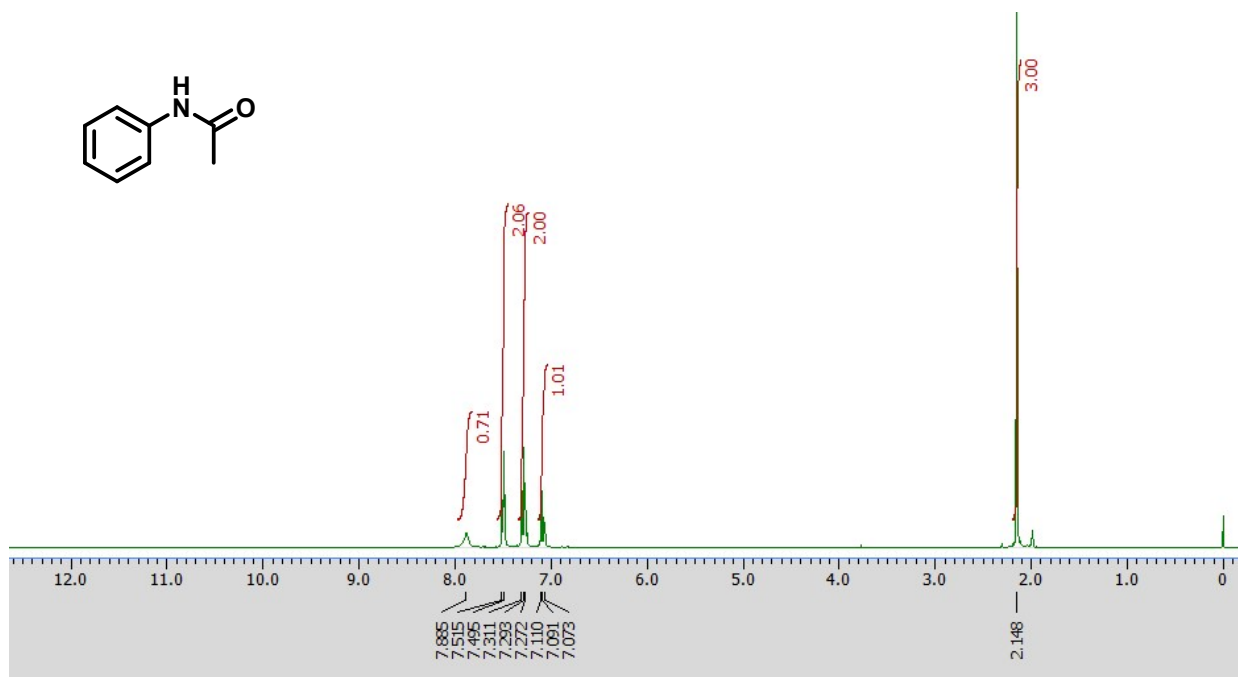
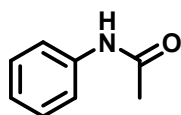




## NMR Data

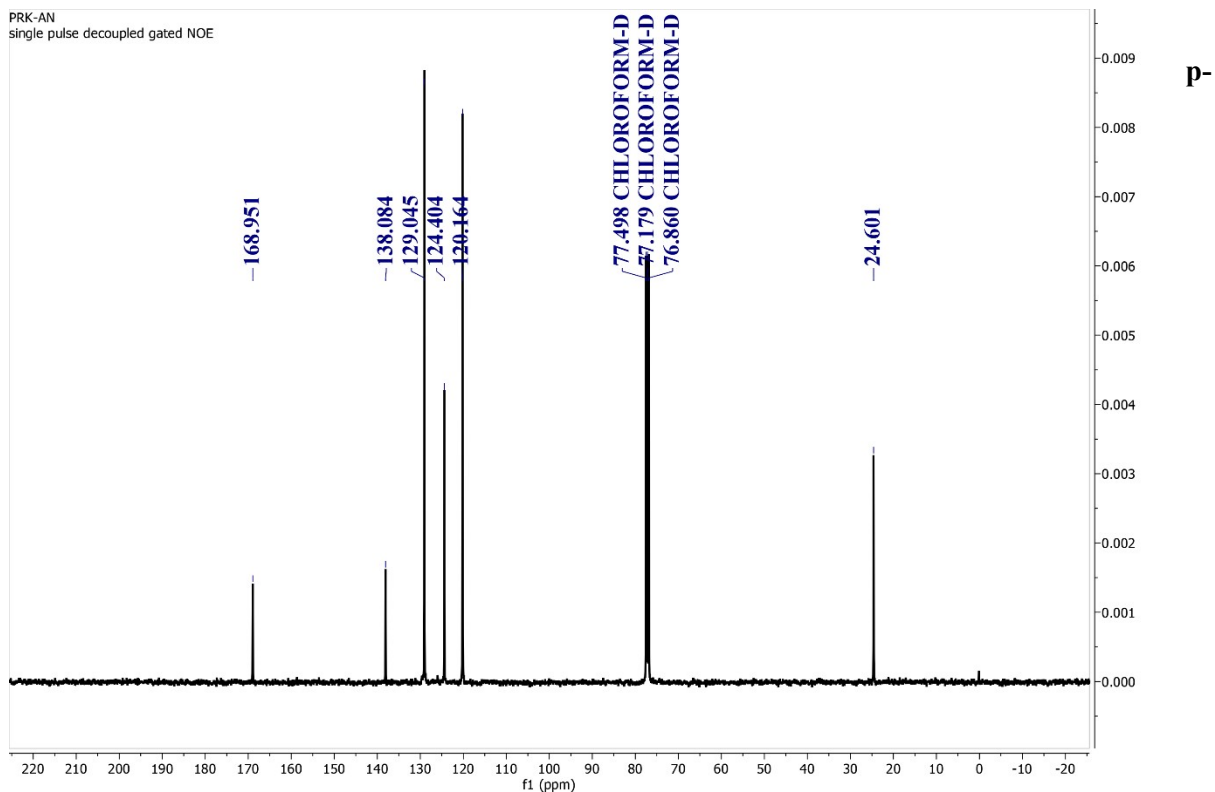
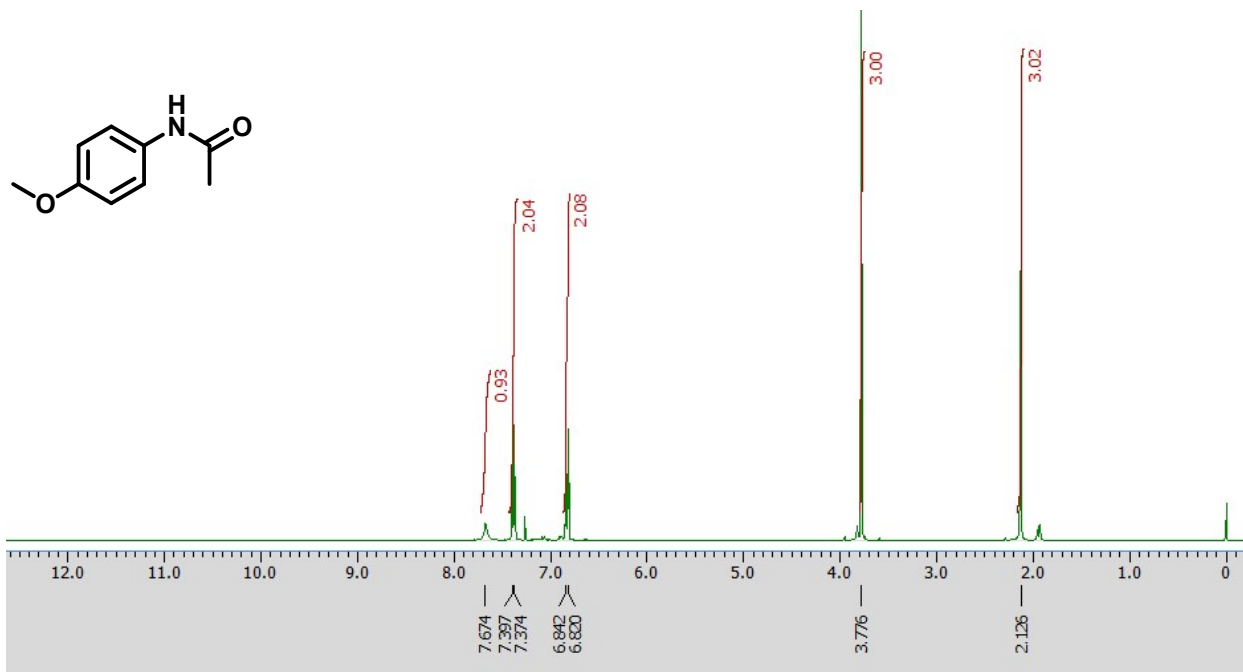
### Acetanilide (Table 2, entry 1)

$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  7.88 (s, 1H), 7.50 (d,  $J = 7.7$  Hz, 2H), 7.34-7.23 (m, 2H), 7.09 (t,  $J = 7.4$  Hz, 1H), 2.15 (s, 3H);  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  168.6, 156.4, 131.1, 128.1, 122.1, 114.6, 114.1, 55.5, 24.3



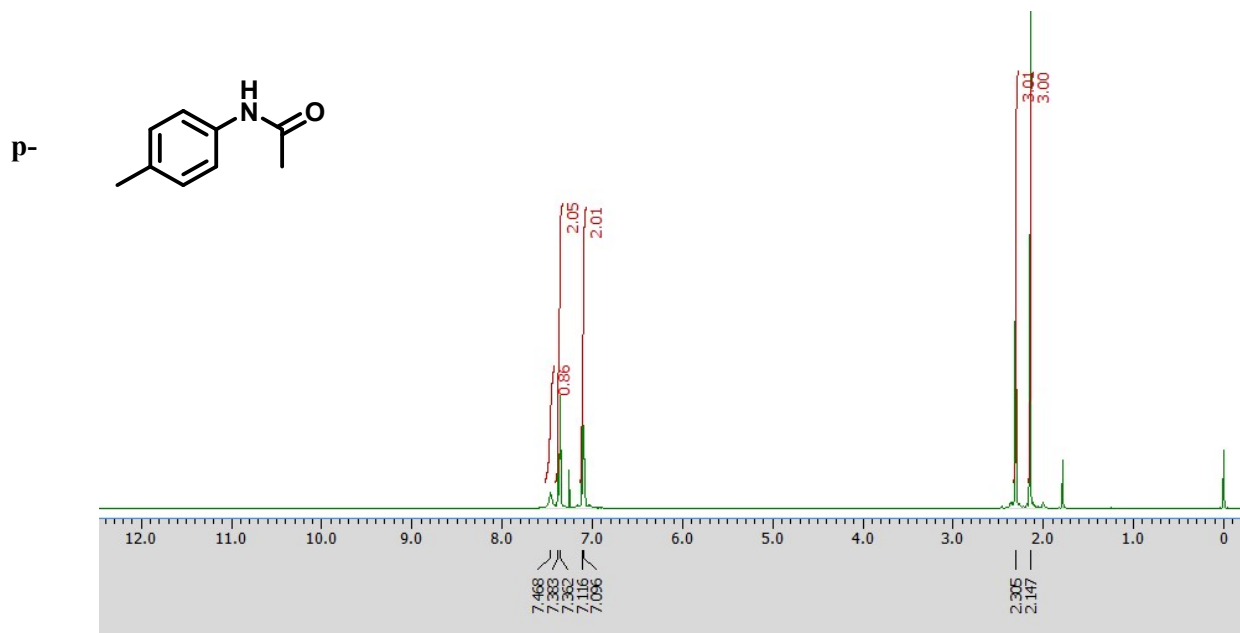
**p-Methoxyacetanilide (Table 2, entry 2)**

$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  7.67 (s, 1H), 7.39 (d,  $J = 9.1$  Hz, 2H), 6.83 (d,  $J = 8.9$  Hz, 2H), 3.78 (s, 3H), 2.13 (s, 3H);  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  168.9, 138.0, 120.0, 124.4, 120.1, 130.0, 128.1, 24.6

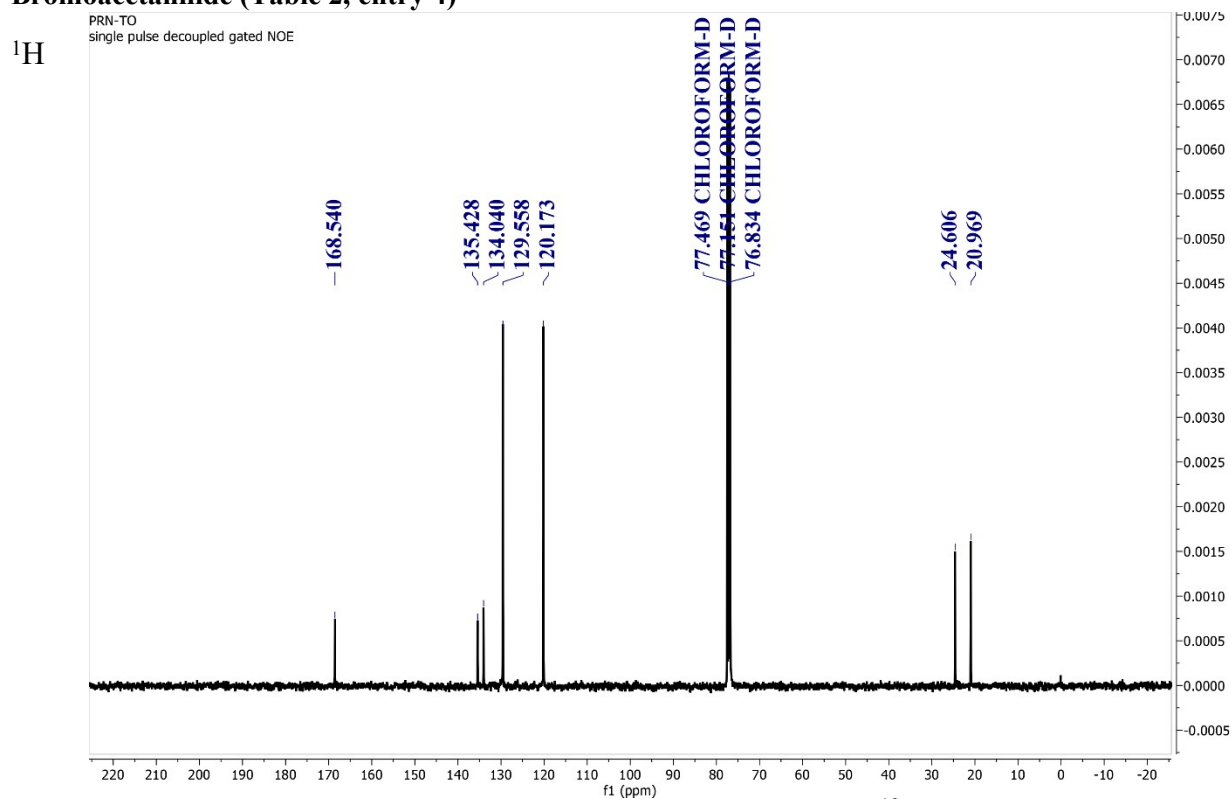


**Methylacetanilide (Table 2, entry 3)**

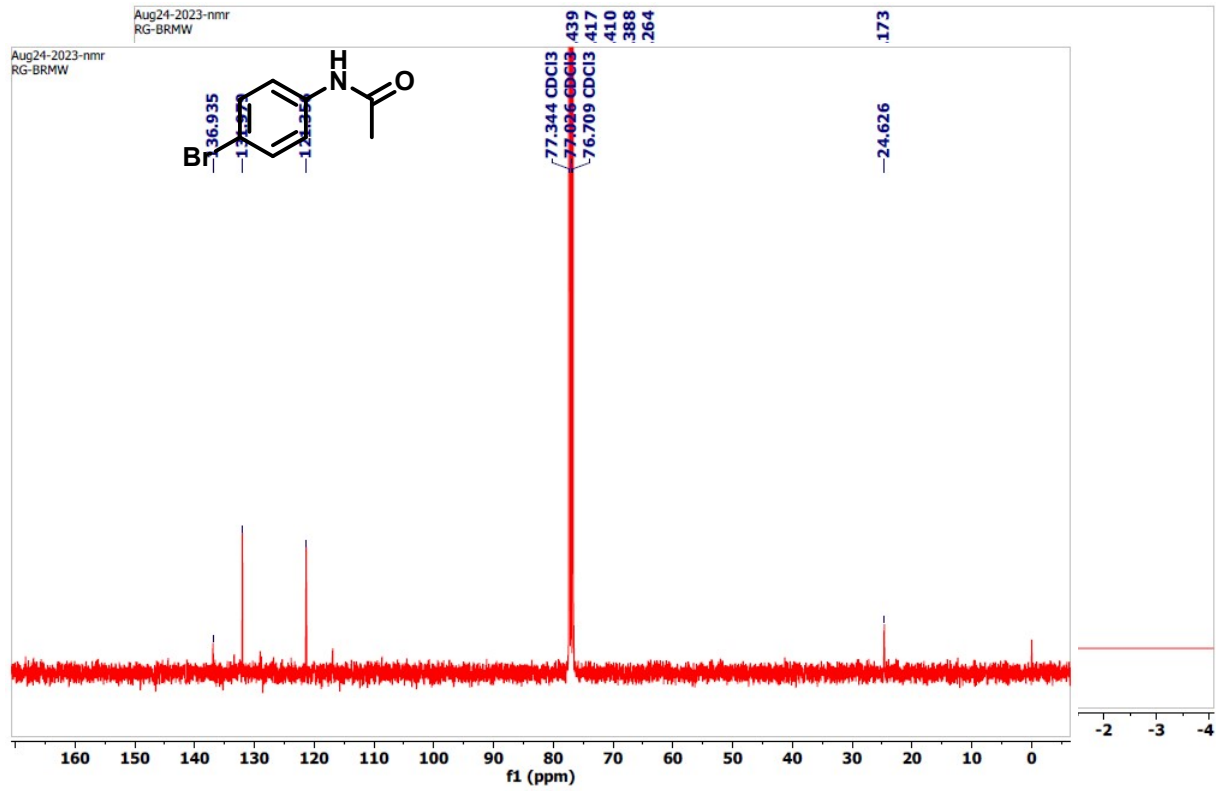
$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  7.47 (s, 1H), 7.37 (d,  $J = 8.4$  Hz, 2H), 7.11 (d,  $J = 8.2$  Hz, 2H), 2.30 (s, 3H), 2.15 (s, 3H);  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  168.5, 135.4, 134.0, 129.5, 120.1, 24.6, 20.9



#### Bromoacetanilide (Table 2, entry 4)



NMR (400 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  7.94 - 6.87 (m, 4H), 2.17 (s, 3H);  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ , TMS)  $\delta$  136.9, 132.0, 121.4, 24.6





IR-Data

