Table 2. Experimental adsorption of ACC toward ammonia vapor at 28°C and 1 ATM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of Carbons | Total weight sticked C (g) | Total of ACC sheets | Area (cm2) | Adsorption capacity (total mg ammonia. g-1 carbon) |
| WF-C(coconut shell carbon) | 0.294 | 1 | 22.75 | 6.681 |
| 0.616 | 2 | 45.5 | 7.123 |
| 1.048 | 3 | 68.25 | 7.208 |
| 1.419 | 4 | 91 | 7.140 |
| 1.869 | 5 | 113.8 | 7.038 |
|  |  |  | 7.038 +0.2 |
| RWF-C (coconut shell carbon) | 0.302 | 1 | 22.75 | 6.137 |
| 0.613 | 2 | 45.5 | 6.273 |
| 1.009 | 3 | 68.25 | 6.290 |
| 1.323 | 4 | 91 | 6.307 |
| 1.658 | 5 | 113.8 | 6.222 |
|  |  |  | 6.246+0.07 |
| Palm-act-prior-carb-C(palm kernel shell carbon) | 0.399 | 1 | 22.75 | 2.771 |
| 0.701 | 2 | 45.5 | 2.873 |
| 1.125 | 3 | 68.25 | 2.873 |
| 1.409 | 4 | 91 | 2.873 |
| 1.76 | 5 | 113.8 | 2.873 |
|  |  |  | 2.853+0.05 |
| Palm-carb-prior-act-C(palm kernel shell carbon) | 0.35 | 1 | 22.75 | 1.275 |
| 0.697 | 2 | 45.5 | 1.428 |
| 1.146 | 3 | 68.25 | 1.445 |
| 1.456 | 4 | 91 | 1.445 |
| 1.843 | 5 | 113.8 | 1.428 |
|  |  |  | 1.404+0.07 |