***Supplementary material to article***

**Green approach to production of porous char adsorbents via oxidative carbonization in fluidized catalyst bed**

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Table S1 – Texture characteristics, ash content and yield of chars from the feedstock carbonized in FCB reactor at 465 – 600 °C

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | ABET, m2·g-1 | AEXT, m2·g-1 | VƩ, cm3·g-1 | | Vµ, cm3·g-1 | | <dpore>, nm | |
| **Bran** | | | | | | | | |
| B465 | 43 | 15 | 0.04 | | 0.01 | | 3.7 | |
| B550 | 91 | 40 | 0.05 | | 0.02 | | 2.2 | |
| B600 | 68 | 36 | 0.04 | | 0.01 | | 2.3 | |
| **Rice husk** | | | | | | | | |
| RH465 | 87 | 82 | 0.13 | | 0 | | 6.0 | |
| RH550 | 117 | 102 | 0.17 | | 0.01 | | 5.8 | |
| RH600 | 99 | 78 | 0.18 | | 0.01 | | 7.4 | |
| **Peat** | | | | | | | | |
| P465 | 11 | 11 | | 0.05 | | 0 | | 19.5 |
| P550 | 9 | 10 | | 0.06 | | 0 | | 28.5 |
| P600 | 7 | 7 | | 0.05 | | 0 | | 32.7 |
| **Coal** | | | | | | | | |
| C465 | 133 | 61 | | 0.07 | | 0.03 | | 2.1 |
| C550 | 126 | 68 | | 0.07 | | 0.02 | | 2.1 |
| C600 | 172 | 92 | | 0.09 | | 0.03 | | 2.1 |



Figure S1 – TG and DSC profiles of WB-derived char samples obtained at 465 – 600 °C

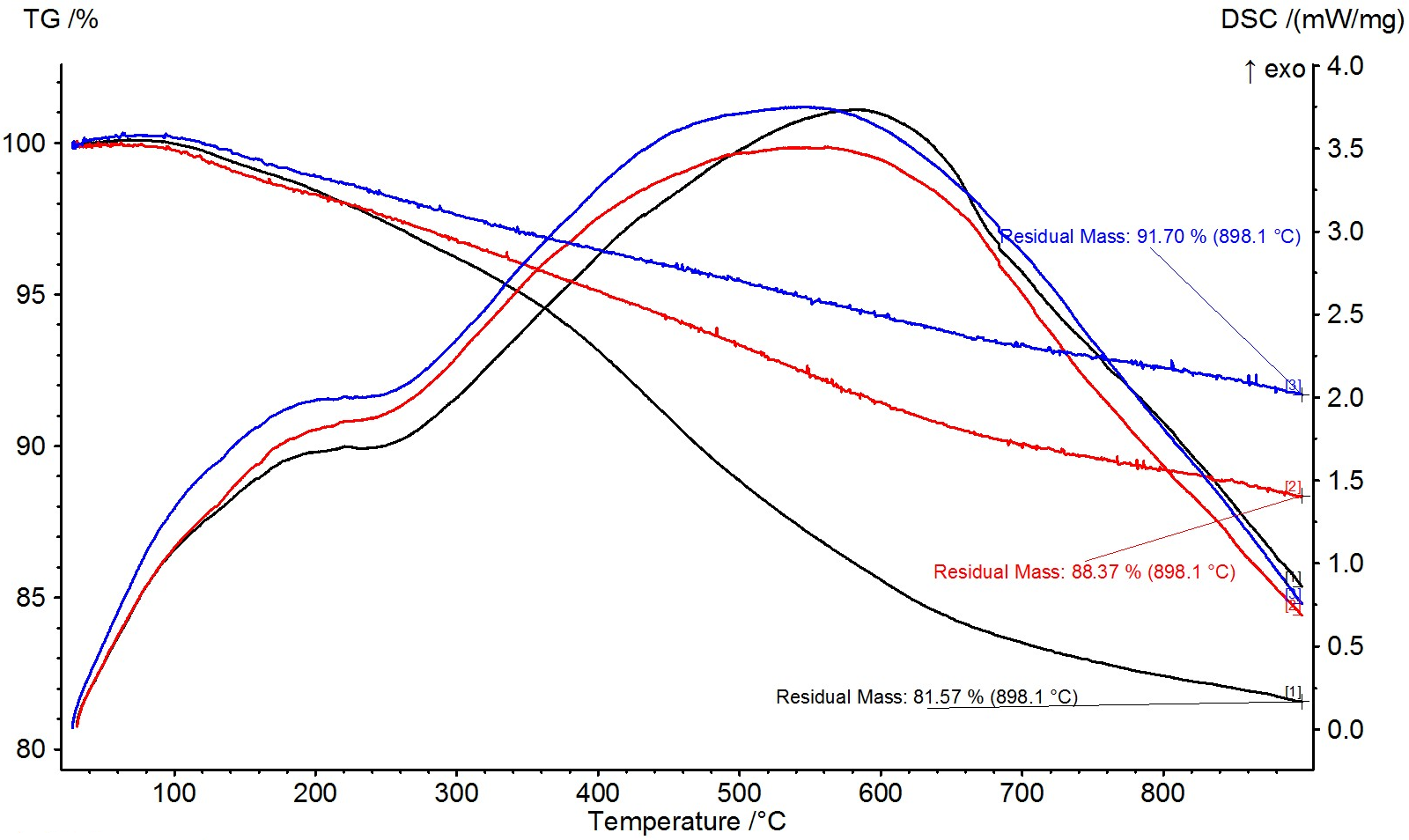


Figure S2 – TG and DSC profiles of RH-derived char samples obtained at 465 – 600 °C

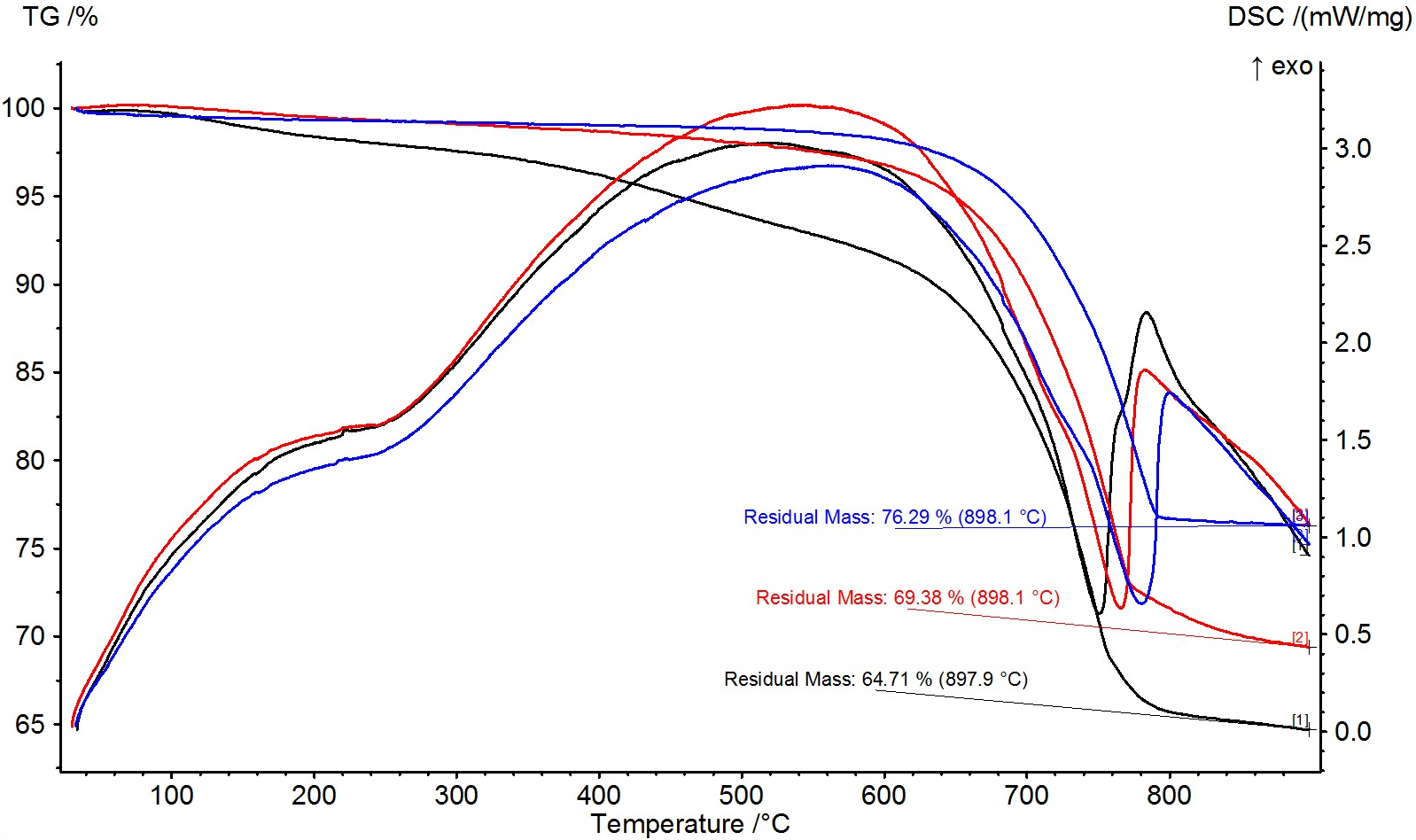


Figure S3 – TG and DSC profiles of peat-derived char samples obtained at 465 – 600 °C

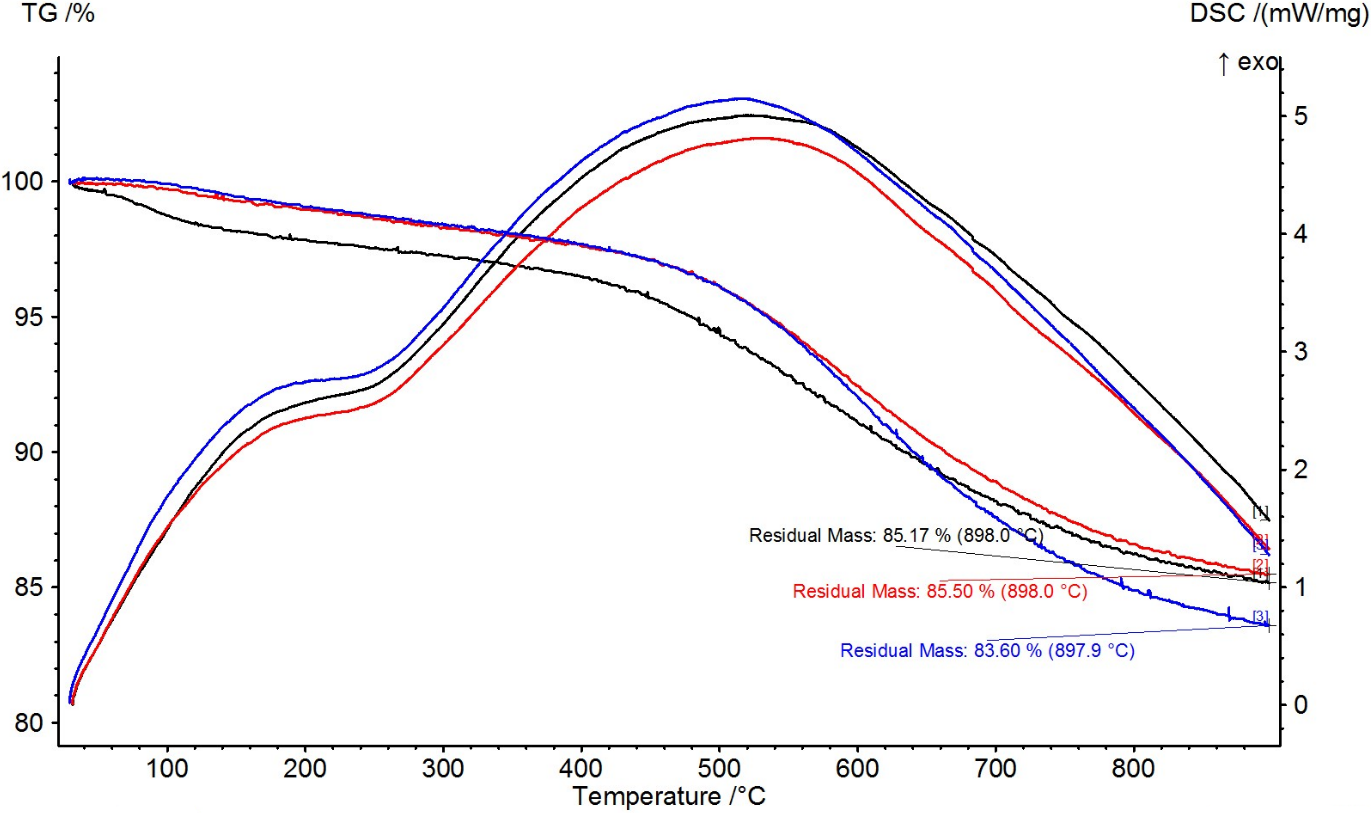


Figure S4 – TG and DSC profiles of coal-derived char samples obtained at 465 – 600 °C