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Correction: Benign-by-design N-doped carbonaceous materials obtained from the hydrothermal carbonization of sewage sludge for supercapacitor applications

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Correction for 'Benign-by-design N-doped carbonaceous materials obtained from the hydrothermal carbonization of sewage sludge for supercapacitor applications' by Zhi-Xiang Xu *et al.*, *Green Chem.*, 2020, **22**, 3885–3895, <https://doi.org/10.1039/D0GC01272F>.

The authors regret that concerns have been raised regarding the FTIR data for the RH-230-220 and RH-230-260 traces in Fig. 4 in the article, which appear to be very similar. Additionally, questions have been raised around the discussion of the quantification of nanoparticle sizes relating to Fig. 5 and 6.

In response, the authors have reviewed the concerns, repeated some of their experiments, and confirmed that the results are consistent with the published data. They maintain that there are no issues with the data presented in the article but provide some clarification in this correction.

An independent expert has reviewed the authors' response and concluded that the FTIR data for RH-230-220 and RH-230-260 are indeed very similar, with only minor discrepancies. The expert supports the authors' explanation that both samples are unexpectedly similar. The original FTIR traces of RH-230-260 and RH-230-220 are shown in Fig. 1 herein.

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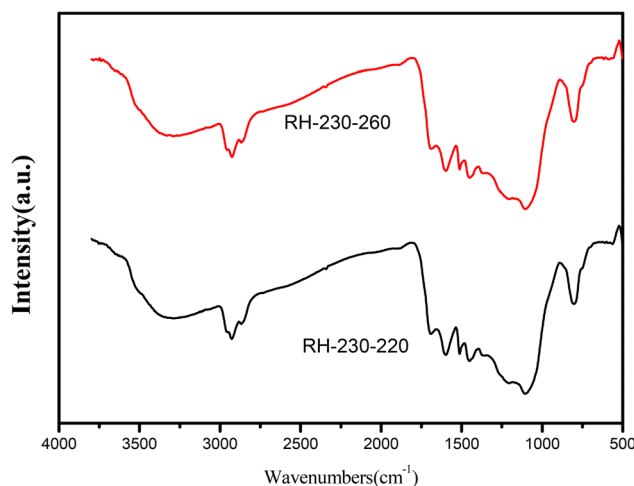


Fig. 1 FTIR of rice-husk-derived N-hydrochar of RH-230-220 and RH-230-260.

Regarding the nanoparticle sizes, the scales used in Fig. 5 and 6 are not sufficiently compatible to support reliable comparisons. As a result, the particle size distribution and aggregate size distribution cannot be directly compared. The authors explain that this misunderstanding stems from a lack of clarity in distinguishing between “particles” and “aggregates”.

The particle sizes reported by the particle size analyzer represent averages of “aggregates of particles” and do not reflect individual particle sizes. In contrast, SEM images can, in some cases, visualize and measure individual particles, which accounts for the observed discrepancies. The SEM images clearly show differences in the morphology of the materials, with the presence of aggregates being evident.

The Royal Society of Chemistry thanks the authors and the reviewer for their clarifying remarks and apologies for any inconvenience to authors and readers.

