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CORRECTION

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# Correction: Bottom-up synthesis of fully sp$^2$ hybridized three-dimensional microporous graphitic frameworks as metal-free catalysts

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Correction for 'Bottom-up synthesis of fully sp$^2$ hybridized three-dimensional microporous graphitic frameworks as metal-free catalysts' by S. N. Talapaneni *et al.*, *J. Mater. Chem. A*, 2017, **5**, 12080–12085.

The authors regret that the $^1$H NMR and $^{13}$C NMR spectra of octaketotetraphenylene and hexaketotriphenylene shown in the Fig. S6, S7, S11 and S12 of the original manuscript were inconsistent with the purported ketones. It was determined that the NMR spectra were obtained from an old batch of samples, thus leading to this inconsistency in the spectra. To avoid possible misunderstanding, the octaketotetraphenylene and hexaketotriphenylene molecules have been freshly prepared and characterized once again by NMR and also by FTIR spectroscopic analysis. Moreover, in the published version, the authors have not provided any characterization data for the octahydroxytetraphenylene, whereas, in the current Correction, they are also reporting $^1$H NMR and $^{13}$C NMR spectra for octahydroxytetraphenylene. The authors would like to update the Fig. S6, S7, S11 and S12 with the corrected versions containing new $^1$H NMR and $^{13}$C NMR spectra of octahydroxytetraphenylene, octaketotetraphenylene and hexaketotriphenylene and also add the corresponding FTIR data. The authors would like to stress that the ketones must be used in the next step immediately after their synthesis due to their high sensitivity towards ambient conditions and also apologize from the community for this unintentional mistake.

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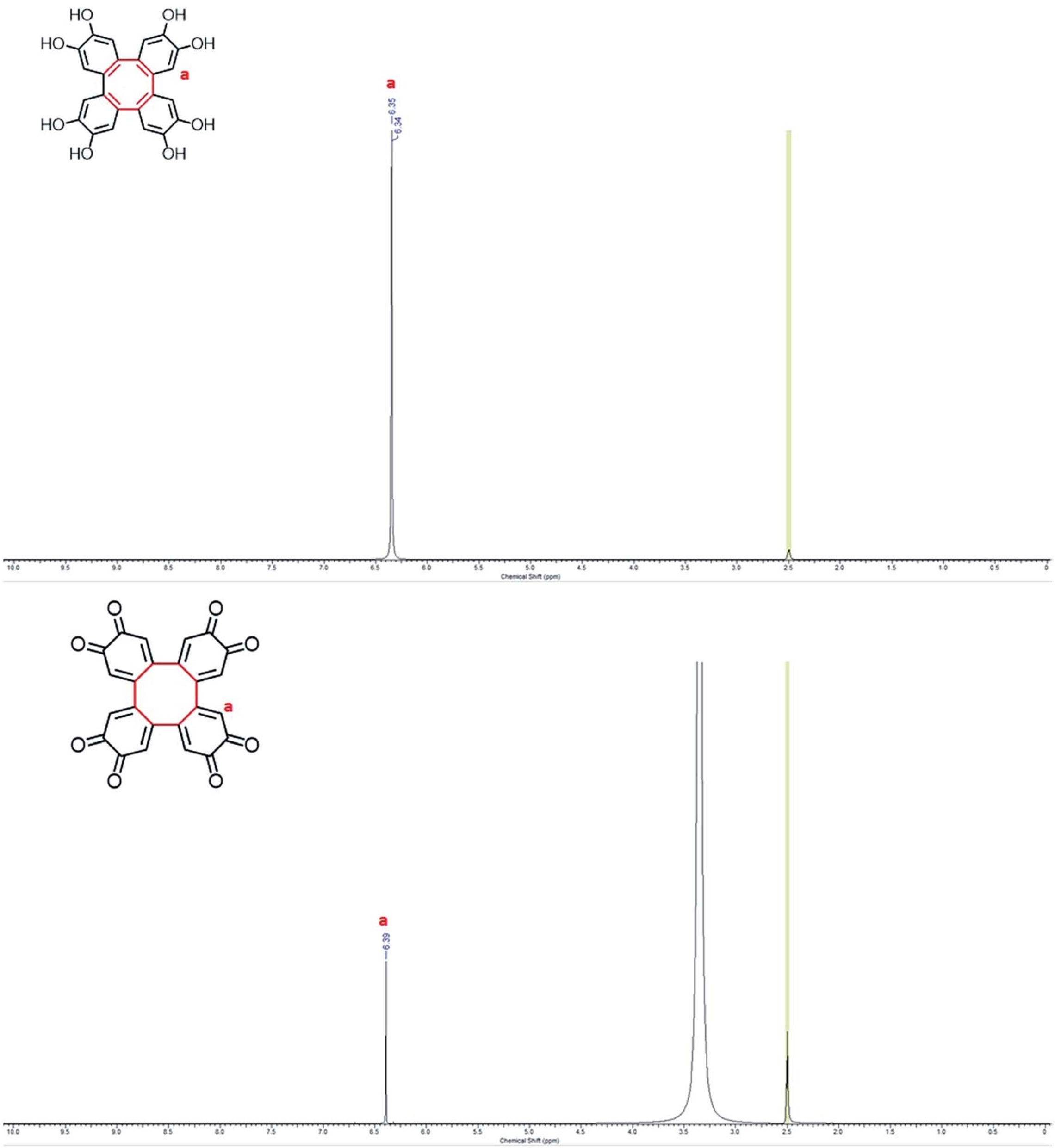

**Fig. S6** $^{1}$H NMR (400 MHz, DMSO-$d_6$, 298 K) spectra of octahydroxytetraphenylene (6.35 (s, 8H) ppm) and octaketotetraphenylene (6.39 (s, 8H) ppm).

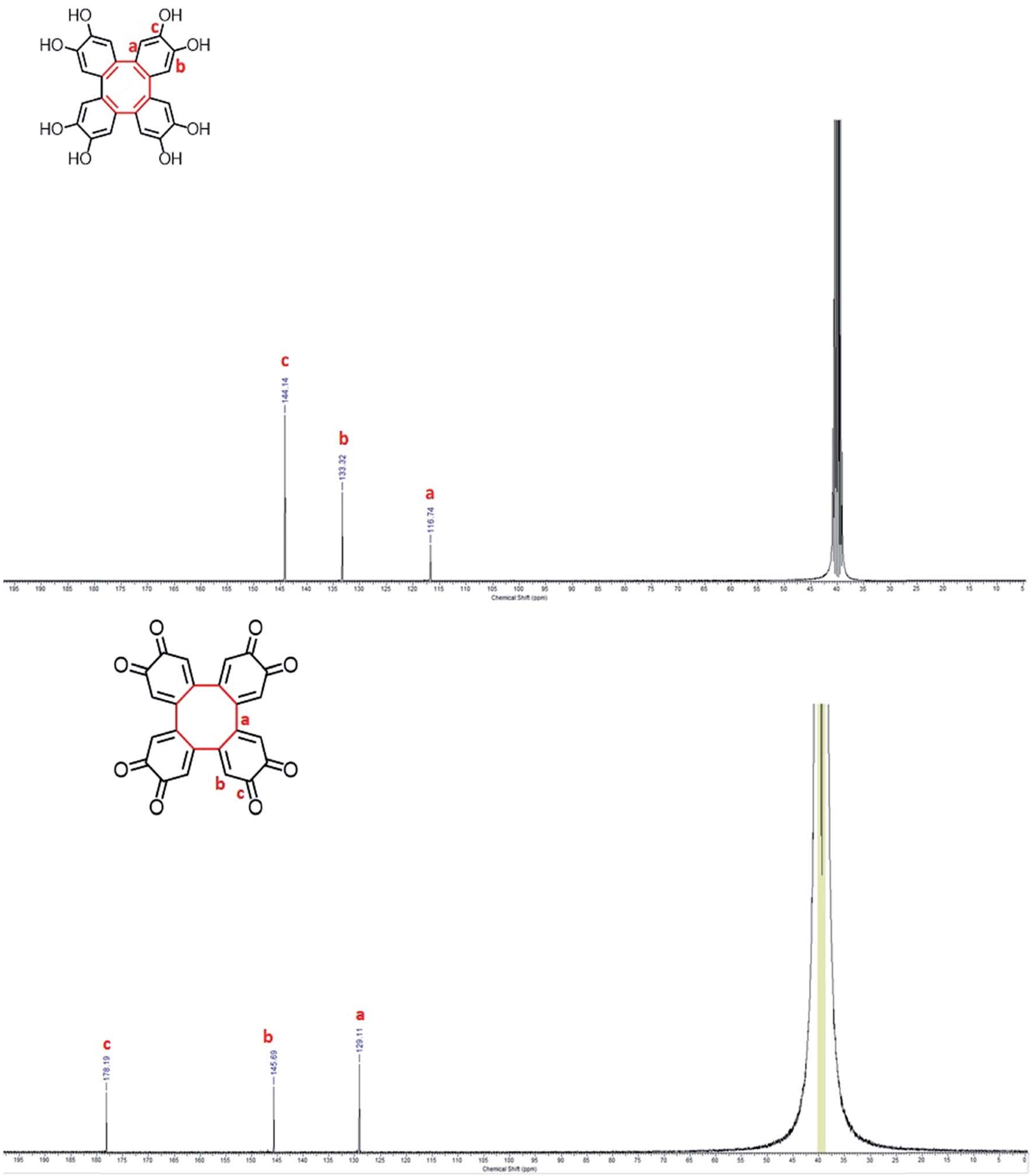

**Fig. S7** $^{13}$C NMR (100 MHz, DMSO-d$_6$, 298 K) spectra of octahydroxytetraphenylene (top) ($\delta$ 144.1, 133.3, 116.5 ppm) and octaketotetraphenylene ($\delta$ 178.2, 145.7, 129.1 ppm).

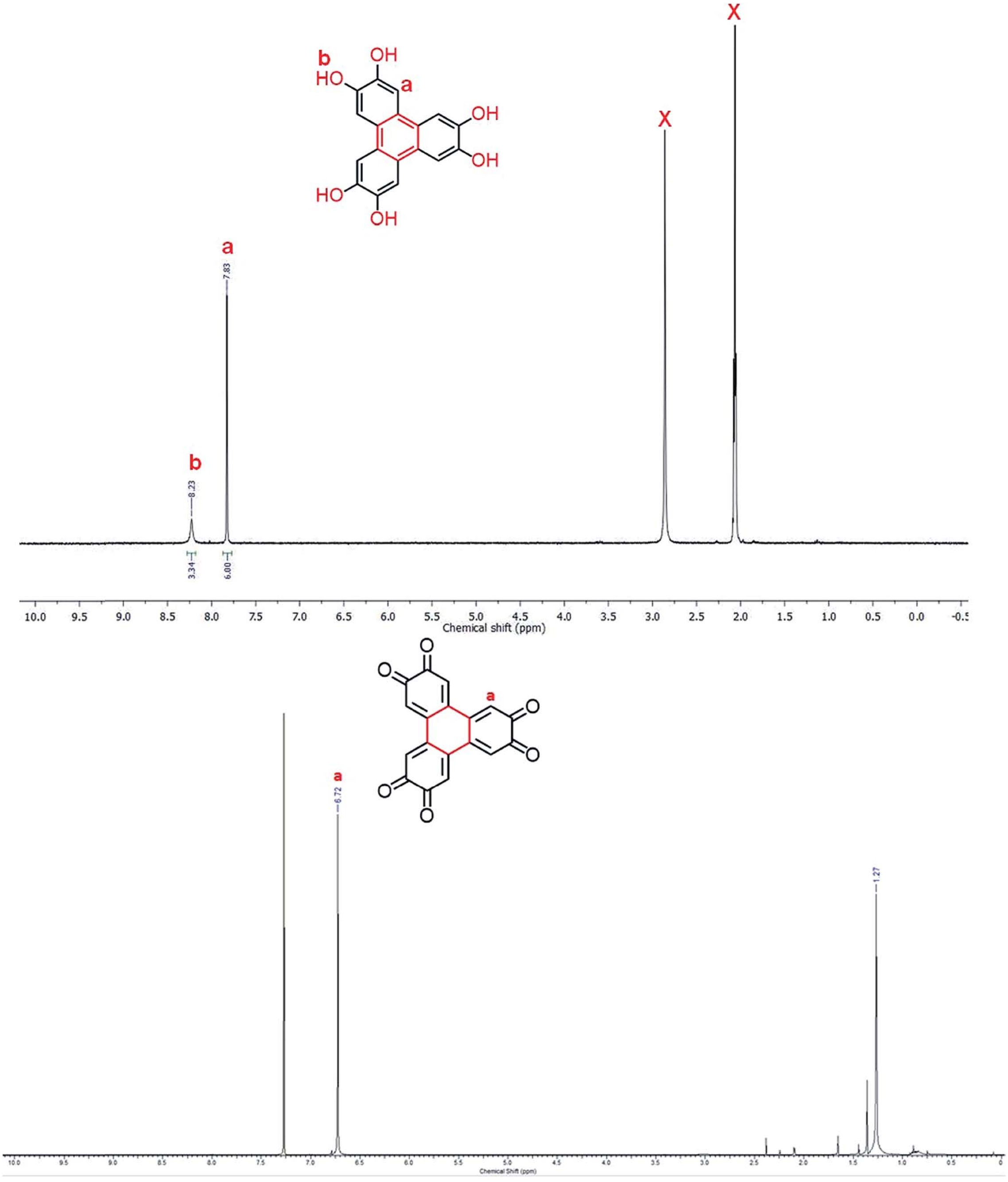

**Fig. S11** $^{1}$H NMR (300 MHz, Acetone-$d_6$, 298 K) spectrum of hexahydroxytetraphenylene (7.83 (s, 8H), 8.23 (b, 4H) ppm) and $^{1}$H NMR (400 MHz, $CDCl_3$, 298 K) spectrum of hexaketotriphenylene (6.72 (s, 6H) ppm). Unable to obtain $^{13}$C NMR spectrum of hexaketotriphenylene possibly due to its low stability. The small peaks below 2.5 ppm are attributed to the solvent impurities.

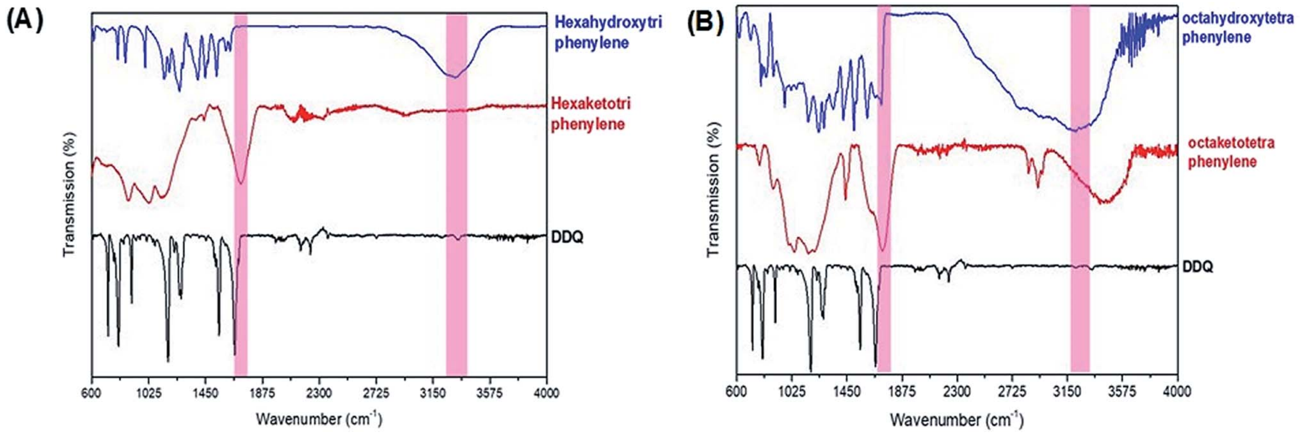

**Fig. S12** (A) FTIR spectra of hexahydroxytriphenylene (blue), hexaketotriphenylene (red) and DDQ (black); (B) FTIR spectra of octahydroxytetraphenylene (blue), octoketotetraphenylene (red) and DDQ (black). As it can be seen in the FTIR spectra, both hexaketotriphenylene and octoketotetraphenylene exhibited a strong peak at ~1750 cm$^{-1}$ attributed to the formation of ketone functional groups accompanied by the disappearance of the –OH stretching band of hexahydroxytriphenylene and octahydroxytetraphenylene at ~3200 cm$^{-1}$.[1] While the C–H stretching band is clearly visible for octaketophenylene at ~3000 cm$^{-1}$, the one for hexaketotriphenylene is found to be relatively weak and broad.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

## Notes and references

1 M. Nomura, Japanese Patent No. JP 2016008227 A, (2016), Jpn. Kokai Tokkyo Koho.