## Catalysis Science & Technology



## RETRACTION

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## Retraction: Photocatalytic activation and utilization of $CO_2$ for *N*-formylation of amines promoted by a zinc( $\square$ ) phthalocyanine grafted on g-carbon nitride hybrid

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Retraction of 'Photocatalytic activation and utilization of  $CO_2$  for *N*-formylation of amines promoted by a zinc(III) phthalocyanine grafted on g-carbon nitride hybrid' by Anil Malik et al., Catal. Sci. Technol., 2022, 12, 2688–2702, https://doi.org/10.1039/D1CY02286E.

The Royal Society of Chemistry hereby wholly retracts this *Catalysis Science & Technology* article due to concerns with the reliability of the NMR spectra reported in the ESI.

There are similarities in the baselines of the <sup>13</sup>C NMR spectra of Fig. S23 and S27, but different arrangement of peaks.

The <sup>1</sup>H NMR spectra presented in Fig. S28 and S38 are identical but they represent different compounds.

The corresponding author stated that the provided NMR spectra represent a mixture of compounds instead of the pure compounds.

Given the significance of the concerns regarding the integrity of the NMR data, the findings presented in this paper are no longer reliable.

All authors were informed about the retraction. The following authors request to include the following statements regarding their contributions. Suman L. Jain accepts the decision to retract. B. Moses Abraham remains neutral on the decision to retract. The other authors did not state whether they agree or disagree with the decision to retract.

Anil Malik was involved in the experimental work, product characterization and preparation of the ESI file.

Pankaj Kumar Prajapati synthesized the nanoparticles, characterized them using XRD, IR and TEM, and corrected them in the manuscript language.

B. Moses Abraham provided theoretical contribution to this article through density functional theory studies and was not involved in the experimental data collection or analysis, and is not responsible for any issues related to the NMR spectra.

Sakshi Bhatt's contribution was only related to material preparation and its characterization. They were not involved in preparing, analysing or presenting the NMR spectra while preparing the manuscript.

Purashri Basyach states that only material characterisations, such as PL, were carried out at their institute.

Suman L. Jain was the main supervisor who was involved in the planning and execution of the work.

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Executive Editor, Catalysis Science & Technology

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