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Retraction: Synthesis of triazolidine-3-one derivatives through the nanocellulose/hydroxyapatite-catalyzed reaction of aldehydes and semicarbazide†

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Retraction of 'Synthesis of triazolidine-3-one derivatives through the nanocellulose/hydroxyapatite-catalyzed reaction of aldehydes and semicarbazide' by Vashen Moodley *et al.*, *New J. Chem.*, 2017, **41**, 6455–6463, DOI: 10.1039/c7nj00855d.

We, the authors of this paper hereby wholly retract this *New Journal of Chemistry* article due to concern about the interpretation of assigned peaks in the ^1H NMR spectra in the published article.

The reactions of aromatic aldehydes and semicarbazide under experimental catalytic conditions were purported to produce the cyclic 1,2,4-triazolidin-3-one isomers, but on closer inspection of the ^1H NMR spectra, we are now certain that in all cases acyclic semicarbazone isomers formed instead. In particular, the ^1H NMR spectra in $\text{DMSO-}d_6$ for several derivatives show two broad singlets of the NH_2 and NH protons of the semicarbazone moiety in the ranges 6.41–6.57 (2H) and 10.09–10.60 ppm (1H) as well as a singlet of the imine proton ($\text{CH}=\text{N}$) at 7.75–8.23 ppm (1H). We further substantiated these results by solving a single-crystal X-ray structure for one of the derivatives, clearly indicating semicarbazone formation. We enclose the cif and checkcif files of that structure in the ESI† of this retraction.

The data therefore does not support the formation of the claimed title compounds, but instead that of a different series of compounds.

Signed: Vashen Moodley, Suresh Maddila, Sreekantha B. Jonnalagadda, Werner E. van Zyl

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Retraction endorsed by Andrew Shore, Executive Editor, *New Journal of Chemistry*.

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