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Correction: Impact of lanthanide ion complexation and temperature on the chemical reactivity of *N,N,N',N'*-tetraoctyl diglycolamide (TODGA) with the dodecane radical cation

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Correction for 'Impact of lanthanide ion complexation and temperature on the chemical reactivity of *N,N,N',N'*-tetraoctyl diglycolamide (TODGA) with the dodecane radical cation' by Gregory P. Horne *et al.*, *Phys. Chem. Chem. Phys.*, 2023, **25**, 16404–16413, <https://doi.org/10.1039/D3CP01119D>.

The value of the rate coefficient *k* published in the originating article for the Nd(III)–TODGA complex was found to be in error. The presented data was erroneously for an assumed 2 : 1 [Nd(TODGA)₂] complex instead of the actual 3 : 1 [Nd(TODGA)₃] complex. We have refit the data accordingly assuming a 3 : 1 ratio, and found improved fits for the blank solutions with TODGA and no Nd(III); therefore, the other two lanthanide complexes have been adjusted slightly accordingly, but agree with the original article values to within their uncertainties. All values of the rate coefficient *k* throughout the manuscript (including in Fig. 3) should be updated according to the below replacement for Table 2. These changes in kinetics do not affect the paper's overall findings and conclusions but are important for accuracy.

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

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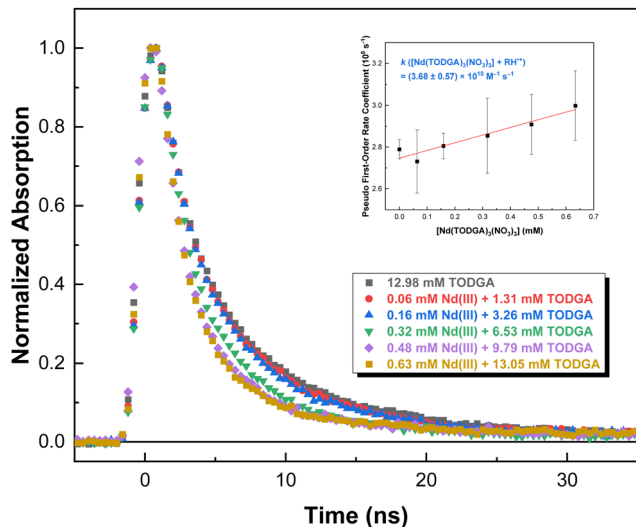


Fig. 3 Normalized kinetic traces at 800 nm for electron pulse irradiated solutions of TODGA in the presence of Nd(III) ions in aerated 0.5 M DCM/*n*-dodecane at 23 ± 1 °C: only TODGA ligand (■), 0.06 (●), 0.16 (▲), 0.32 (▼), 0.48 (◆) and 0.63 (■) mM Nd(III) ions complexed to TODGA. Inset: Second-order determination of the rate coefficient for the reaction of $[\text{Nd}^{\text{III}}(\text{TODGA})_3(\text{NO}_3)_3]$ with $\text{RH}^{\bullet+}$. Individual data points are the faster pseudo-first-order component of the double-exponential fit to the data shown in the main figure. The linear fit corresponds to $k([\text{Nd}^{\text{III}}(\text{TODGA})_3(\text{NO}_3)_3] + \text{RH}^{\bullet+}) = (3.68 \pm 0.57) \times 10^{10} \text{ M}^{-1} \text{ s}^{-1}$.

Table 2 Summary of second-order rate coefficients determined for the reaction of the $\text{RH}^{\bullet+}$ radical cation with TODGA in the absence and presence of complexed lanthanides—Nd(III), Gd(III) and Yb(III) ions—in aerated 0.5 M DCM/*n*-dodecane solutions

Ligand	Second-order rate coefficient (k , $\times 10^{10} \text{ M}^{-1} \text{ s}^{-1}$)			
	Non-complexed ligand	Nd(III) complex	Gd(III) complex	Yb(III) complex
TODGA	1.57 ± 0.28	3.68 ± 0.57	3.26 ± 0.52	1.83 ± 0.48

