



# Corrigendum: Chirogenesis and Pfeiffer Effect in Optically Inactive $Eu^{III}$ and $Tb^{III}$ Tris( $\beta$ -diketonate) Upon Intermolecular Chirality Transfer From Poly- and Monosaccharide Alkyl Esters and $\alpha$ -Pinene: Emerging Circularly Polarized Luminescence (CPL) and Circular Dichroism (CD)

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# A Corrigendum on

Chirogenesis and Pfeiffer Effect in Optically Inactive Eu<sup>III</sup> and Tb<sup>III</sup> Tris( $\beta$ -diketonate) Upon Intermolecular Chirality Transfer From Poly- and Monosaccharide Alkyl Esters and  $\alpha$ -Pinene: Emerging Circularly Polarized Luminescence (CPL) and Circular Dichroism (CD) by Fujiki, M., Wang, L., Ogata, N., Asanoma, F., Okubo, A., Okazaki, S., et al. (2020). Front. Chem. 8:685. doi: 10.3389/fchem.2020.00685

In the original article, there were mistakes in **Table 1** as published. **Table 1** aimed to compare all  $g_{\text{lum}}$  values at specific wavelengths of four Ln<sup>III</sup> tris( $\beta$ -diketonates) (Ln<sup>III</sup>: Eu<sup>III</sup> and Tb<sup>III</sup>) upon intermolecular chirality transfer from **CABu**, **CTA**, **Glu** (D- and L-), **Ara** (D- and L-), and  $\alpha$ -pinene for clarity and readability. However, although the  $g_{\text{lum}}$  values described in the main text are correct, most data in the three right-side columns of **Table 1** are incorrectly displayed. Also, in **Table 1** caption, D-/L-glucose pentamethyl esters should be D-/L-glucose pentamethyl esters. The corrected **Table 1** with corrected numerical values in the three right-side columns and corrected caption appears below.

Also, there was an error in Introduction. The sentence starting with "Particularly, chirogenesis in metal coordination chemistry by the chirality transfer has long been one of the central subjects in inorganic chemistry 1 (Mason and Norman, 1965...)" should read as follows: "Particularly, chirogenesis in metal coordination chemistry by the chirality transfer has long been one of the central subjects in inorganic chemistry (Mason and Norman, 1965...)".

The authors apologize for these errors and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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**TABLE 1** | CPL characteristics (dissymmetry ratio,  $g_{\text{lum}}$  in  $10^{-2}$  at specific wavelength) of Eu<sup>III</sup> and Tb<sup>III</sup> coordinated with three  $\beta$ -diketonates as achiral ligands embedded in two polysaccharide alkyl esters (**CABu** and **CTA**), D-/L-glucose pentamethyl esters (**D**-/L-Arabinose tetramethyl esters (**D**-/L-Arabinose).

Ln <sup>III</sup> tris(β- diketonates)	CABu $g_{\text{lum}}/10^{-2}$ (nm)	CTA g <sub>lum</sub> /10 <sup>-2</sup> (nm)	Glu $g_{ m lum}/10^{-2}$ (nm)		Ara $g_{ m lum}/10^{-2}$ (nm)		$lpha$ -pinene $g_{ m lum}/10^{-2}$ (nm)	
			D-	L-	D-	L-	(1 <i>R</i> )	(1 <i>S</i> )
Eu(fod) <sub>3</sub>	+6.71 (593) <sup>a</sup> -0.59 (613) <sup>b</sup>	+4.63 (593) <sup>a</sup> -0.40 (613) <sup>b</sup>	+1.05 (594) <sup>a</sup> -0.19 (612) <sup>b</sup>	-0.81 (596) <sup>a</sup> +0.08 (613) <sup>b</sup>	+0.19 (593) <sup>a</sup> -0.02 (607) <sup>b</sup>	-0.30 (591) <sup>a</sup> +0.06 (611) <sup>b</sup>	-0.49 (593) <sup>f</sup> +0.05 (613) <sup>f</sup>	+0.41 (593) <sup>f</sup> -0.04 (613) <sup>f</sup>
Eu(dpm) <sub>3</sub>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>
Tb(fod) <sub>3</sub>	-0.29 (490) <sup>c</sup> +0.78 (540) <sup>d</sup> -0.18 (552) <sup>e</sup>	-0.10 (490) <sup>c</sup> +0.35 (542) <sup>d</sup> -0.07 (553) <sup>e</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>				
Tb(dpm) <sub>3</sub>	-0.53 (491)° +0.37 (537) <sup>d</sup> -0.59 (547)°	-0.44 (489) <sup>c</sup> - +0.80 (547) <sup>e</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d. <sup>g</sup>	n.d <sup>g</sup> (~490) +0.44 <sup>d</sup> (537) -0.13 <sup>e</sup> (547)	n.d <sup>g</sup> (~490) -0.49 <sup>d</sup> (537) +0.34 <sup>e</sup> (548)

All numerical values in bracket mean wavelength extremum for CPL signals.  $^aEu^{\parallel 1}$   $^5D_0 \rightarrow ^7F_1$  (593 nm),  $^bEu^{\parallel 15}D_0 \rightarrow ^7F_2$  (613 nm),  $^cTb^{\parallel 15}D_4 \rightarrow ^7F_6$  (490 nm),  $^dTb^{\parallel 15}D_4 \rightarrow ^7F_6$  (190 nm),  $^dTb^{\parallel 15}D_4 \rightarrow ^7F_6$  (190 nm),  $^dTb^{\parallel 15}D_4 \rightarrow ^7F_6$  (191 (552 nm),  $^fDb^{\parallel 15}D_4 \rightarrow ^7F_6$  (191 (552 nm),  $^fDb^{\parallel 15}D_4 \rightarrow ^7F_6$  (191 (191 nm),  $^dTb^{\parallel 15}D_4 \rightarrow ^7F_6$  (191 nm),  $^dTb^{\parallel 15}D_4 \rightarrow ^7F_6$  (191 (191 nm),  $^dTb^{\parallel 15}D_4 \rightarrow ^7F_6$  (191 nm),  $^dTb^{\parallel 15}D_4 \rightarrow ^7F_$ 

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Mason, S. F., and Norman, B. J. (1965). Outer-sphere co-ordination and optical activity in transition-metal complexes. *Chem. Commun.* 335–336. doi: 10.1039/c19650000335 Copyright © 2020 Fujiki, Wang, Ogata, Asanoma, Okubo, Okazaki, Kamite and Jalilah. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.