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Correction to “A Luminescent and Biocompatible PhotoCORM”

Agustin E. Pierri, Alessia Pallaoro, Guang Wu, and Peter C. Ford*

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The photoCORM *fac*-[Re(bpy)(CO)₃(thp)](CF₃SO₃) (**1**, bpy = 2,2'-bipyridine, thp = tris(hydroxymethyl)-phosphine) was prepared as originally described. NMR and elemental analysis were performed on **1** to provide complete characterization, and these data have been added to the attached revised Supporting Information.

The photoluminescence (PL) from photoproduct **2** was not reproducible. Thus, statements in the Abstract and elsewhere that photoproduct **2** is luminescent are not correct. The residual PL upon photolysis of **1** apparent in Fig. 6 (bottom) was likely due an impurity produced during synthesis/purification, a probable candidate being *fac*-[Re(CO)₃(bpy)(OH₂)](OTf) (**A**), formed from *fac*-[Re(CO)₃(bpy)(THF)](OTf), the starting material for **1**. **A** was independently prepared and characterized (evidenced by ¹HNMR, IR and crystal structure).^{1,2} and shown to have an absorption spectrum close to that of **1** and to exhibit weak luminescence at ~580 nm as initially reported for **2**. A revised Fig. 4 showing the PL from **1** only is shown here, and Fig. S-1 has been replaced in the revised Supporting Information to show the excitation spectrum of **1** only. These corrections do not change the conclusion of the published communication that photoCORM **1** serves as a biocompatible, imageable reporter using PL to indicate the location of CO delivery in cellular media.

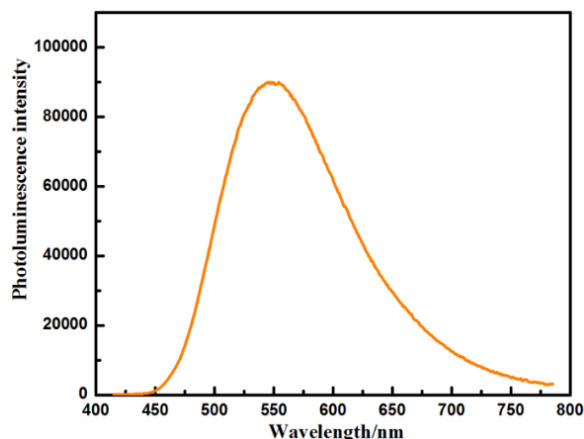


Figure 4. Emission spectrum of **1** in PBS (10 mM, pH 7.4) at ambient T, $\lambda_{\text{ex}} = 400$ nm.

Page 18199: The quantum yield for the photo-substitution of **1** (eq. 1) in aerobic phosphate buffered saline (PBS) (10 mM, pH 7.4) under 365 nm irradiation was remeasured to be 0.024 ± 0.001 , roughly an order of magnitude smaller than previously reported, the higher value likely due to a computational or clerical error. The PL quantum yield for **1** was remeasured in air-equilibrated solution using rhodamine B ($\Phi_{\text{lum}} = 65\%$, in ethanol) as a reference standard. It was determined to be 0.080 ± 0.003 , which is lower than the original report (0.18). These corrections do not affect the principal conclusion of the published Communication, namely that **1** is a biocompatible, imageable photoCORM.

ASSOCIATED CONTENT

Supporting Information

Original details regarding experimental procedures and crystallographic parameters plus additional characterization data for compound **1** and revised Figure S1. The revised Supporting Information is available free of charge on the ACS Publications website.

ACKNOWLEDGMENT

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