# Correction to "Bifunctional Porphyrin Catalysts for the Synthesis of Cyclic Carbonates from Epoxides and $\mathrm{CO}_{2}$ : Structural Optimization and Mechanistic Study" 

Tadashi Ema,* Yuki Miyazaki, Junta Shimonishi, Chihiro Maeda, and Jun-ya Hasegawa*

J. Am. Chem. Soc. 2014, 136, 15270-15279. DOI: 10.1021/ja507665a
(S) Supporting Information

Page 15273. In the final step of Scheme 2a, the ${ }^{18} \mathrm{O}$ atom of benzaldehyde can be washed out because the O atom of aldehyde can exchange with that of water under acidic conditions. ${ }^{1}$ Therefore, we have conducted additional experiments to determine the regioselectivity in the insertion of ${ }^{18} \mathrm{O}$ labeled $\mathrm{CO}_{2}$ into styrene oxide (2b) more reliably. The improved method is shown below (Scheme 2).

Scheme 2. Improved Method for the Analysis of ${ }^{18} \mathrm{O}$-Labeled Cyclic Carbonate 3b


Mass spectra indicated that path B and path A proceeded in a ratio of 52:48 (not 99:1). This improved method (Scheme 2) is recommended. The detailed procedure is added to the Supporting Information, where sections 3 and 14 have been revised accordingly.

We are grateful to Prof. Michael North (University of York, UK) for recommending that we employ the improved method.

## ASSOCIATED CONTENT

## (s) Supporting Information

The Supporting Information is available free of charge on the ACS Publications website at DOI: 10.1021/jacs.6b06328.

Synthesis of $\mathbf{1 h}-\mathbf{o},{ }^{1} \mathrm{H}$ and ${ }^{13} \mathrm{C}$ NMR spectra, isotope experiments, determination of binding constants, computational details, and complete ref 28 (revised) (PDF)

## REFERENCES

(1) Byrn, M.; Calvin, M. J. Am. Chem. Soc. 1966, 88, 1916-1922.

