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# Correction to Synthesis, Structure, and Catalytic Studies of Palladium and Platinum Bis-Sulfoxide Complexes

Emma E. Drinkel, Linglin Wu, Anthony Linden, and Reto Dorta\*

Organometallics 2013, 10.1021/om4000067

Supporting Information

During peer review of the manuscript, a reviewer recommended and the assigned Associate Editor relayed a request that the manuscript be shortened. In response, the authors moved the Experimental Section provided in the submitted manuscript to a Supporting Information file. In the course of this text transfer, the authors regrettably introduced new text consisting of internal communication among the authors not intended for publication. These files were not provided to reviewers. The purpose of this Addition/Correction is to share further amendments to the published article and Supporting Information, providing additional experimental detail as warranted by further editorial review.

In the course of editorial review, microanalysis reports were provided to the Editor for all but six of the compounds reported. For the six compounds where original microanalysis reports were not located (compounds 4, 5b, 11a,b, 12, and 15b), and for all compounds in this article, <sup>1</sup>H and <sup>13</sup>C NMR spectra were provided and included in the appended Supporting Information in accordance with the *Organometallics* guidelines to authors.<sup>1</sup>

Specific changes to the article are as follows.

- (1) The following sentence beneath Scheme 1 is incorrect and should be deleted: Nevertheless, the elemental analysis matched that predicted for  $Pd\{(M,S_S,SS)-p\text{-tolyl-binaso}\}Cl_2$  (4), and no benzonitrile was observed in the <sup>1</sup>H NMR spectrum.
- (2) The assigned stereochemistry for the X-ray structure of 6 is incorrect. The first sentence in the caption for Figure 2 should be corrected to read: Figure 2. Molecular structure of  $Pd((P,R_S,R_S)-p$ -tolyl-binaso)(TFA)<sub>2</sub>  $((P,R_S,R_S)-6\cdot2Et_2O)$  (50% probability ellipsoids; hydrogen atoms and solvate molecules have been omitted).

Likewise, the sentence before the crystallographic discussion of compound 6 beneath Figure 1 should read: Crystals of the complex  $(P_1R_S,R_S)$ -6·2Et<sub>2</sub>O were grown, and an X-ray analysis was performed (Figure 2).

- (3) The palladium complexes 4, 6, and 7 have been synthesized starting from either  $Pd(PhCN)_2Cl_2$  or  $Pd-(CH_3CN)_2Cl_2$ .
- (4) The structure of 7 in Scheme 2 is more correctly represented with two solid wedges for the p-Tol bonds of the left binaso ligand and with two dashed wedges for the binaso ligand on the right. For the starting ligand and the structure of 6, simple lines instead of wedges are more appropriate.
- (5) The reference to compound  $[Pt(\mu-SMe_2)Me_2]$  preceding Scheme 4 should be corrected to  $[Pt(\mu-SMe_2)Me_2]_2$ .
- (6) The atom labels C33 and C34 in Figure 6 are incorrect. They should be reversed.

- (7) When compound 5a was treated with only 1 equiv of AgBF<sub>4</sub> (see Scheme 5 and ensuing discussion), the chlorobridged intermediate shown on the top right of Scheme 5 seems to form. An in situ  $^1H$  NMR spectrum (provided in the Supporting Information) showed the ligand to be still symmetric, as evidenced by the single signal for the two methyl groups of the p-tolyl-binaso ligand.
- (8) Scheme 4 contained the incorrect stoichiometry. It is correctly represented as

(9) The first sentence of the Acknowledgments should be corrected to read: We thank the Mikrolabor of LOC at ETH Zurich, Switzerland, for elemental analyses of compounds.

Specific changes in the appended Supporting Information include the following.

- (1) A paragraph with the bold header  $[Pt_2(II)(M,S_s,S_s)-p-tolyl-binaso)_2(\mu-Cl)_2][BF_4]_2$  (14) (page 12 of the original Supporting Information) has been deleted (incorrect compound number; corresponds to unnumbered upper right structure, Scheme 5). This information is replaced by one of the additions to the text (see point (7) above) and the spectrum with the following caption on page 34:  $[Pt-((M,S_s,S_s)-p-tolyl-binaso)(\mu-Cl)]_2[BF_4]_2$  (upper right structure, Scheme 5).
- (2) The incorrect bold compound number **9a** has been replaced by compound number **11a** (page 10).
- (3) The incorrect bold compound number 154 has been replaced by compound number 14 (page 12).
- (4) The incorrect bold compound number **165a** has been replaced by compound number **15a** (page 13).
- (5) The incorrect bold compound number **165b** has been replaced by compound number **15b** (page 14).
- (6) The incorrect bold compound number **165c** has been replaced by compound number **15c** (page 15).
- (7) Microanalysis data have been deleted for six compounds where the original microanalysis reports were not available (4, 5b, 11a,b, 12, 15b).
- (8) In cases where replicate microanalyses were determined, all data are now reported as opposed to a single result (5a, 6–8, 10, 13, 14, 15a,c).

Published: February 10, 2014

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(9) Infrared data from Table 1 have been included for compounds 5a, 8, 10, and 11b.

- (10) The samples of compounds 6 and 10 submitted for microanalyses are no longer represented as solvates.
- (11) In the experimental text for compounds 9, 10, 12, and 13, the incorrect bold compound number 5 has been replaced by compound number 5a.
  - (12) <sup>19</sup>F NMR data have been added for compound 9.
- (13) The values reported for compound 13 are for  $PtC_{68}H_{52}B_2F_8S_4O_4\cdot 2H_2O$  (not  $PtC_{68}H_{52}B_2F_8S_4O_4\cdot 3H_2O$ ). This typographical error has been corrected.
- (14) The values reported for compound 14 are for  $PtC_{39}H_{33}BF_4O_4S_2$  (not  $PtC_{39}H_{33}BF_4O_2S_2$ ). This typographical error has been corrected.
- (15) Molar quantities are given for all isolated products, and significant digits have been edited for some reactant/product quantities.
- (16) The yield of compound 14 (91 mg) has been corrected from 85% to 79%.
- (17) The <sup>13</sup>C NMR data for compound 9, which corresponded to a spectrum recorded in CDCl<sub>3</sub>, have been changed to those corresponding to a spectrum recorded in CD<sub>2</sub>Cl<sub>2</sub>.
- (18) A methyl <sup>13</sup>C NMR signal of compound **10** that was accidentally omitted has been added to the text (21.48 ppm).
- (19) Three overlooked signals in the <sup>13</sup>C NMR spectrum of compound **15c** have been added to the experimental text (130.87, 132.42, 135.27 ppm).

#### ASSOCIATED CONTENT

### S Supporting Information

An amended version of the original Supporting Information, with changes made as detailed in this correction. This material is available free of charge via the Internet at http://pubs.acs.org.

## AUTHOR INFORMATION

## **Author Contributions**

<sup>†</sup>The contribution of Anthony Linden was limited to the determination and discussion of the crystal structures.

### REFERENCES

(1) "Manuscripts may occasionally be considered in which there has been no effort to obtain microanalytical data, but for which the NMR spectra have been supplied..."; http://pubs.acs.org/paragonplus/submission/orgnd7/orgnd7\_authguide.pdf.