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Corrigendum

Corrigendum to "Study on phosphorus(III) complex of tetrabenzotriazacorrole: A novel phthalocyanine-like photosensitizer" [J. Photochem. Photobiol. A: Chem. 99 (1996) 115–119]

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In the above named paper we reported on a compound we identified as H[TBC(O^iPr)_4P^{III}(OH)]. We recently obtained the high-resolution MALDI time-of-flight mass spectrum on a Bruker Biflex III TOF Mass Spectrometer using α -cyano-4-hydroxy cinnamic acid as matrix. The mass peaks are (m/z, rel intensity): 795.26(48%), 777.26(100%), which should correspond to TBC(O^iPr)_4P(OH)_2 (C_{44}H_{42}N_7O_6P, m/z 795) rather than H[TBC(O^iPr)_4P^{III}(OH)] as reported earlier. The species can lose water to be TBC(O^iPr)_4PO (m/z 777), the mass previously reported.

We also obtained the XPS of P atom in compound on a VG Scientific ESCALAB 220i-XL X-ray Photoelectron Spectrometer. The binding energy of P_{2p} electron is 133.9 eV. Generally, such value should correspond to P(V). So the compound reported as $H[TBC(O^iPr)_4P^{III}(OH)]$ before should be $TBC(O^iPr)_4P^V(OH)_2$ (dihydroxy phosphorus (V)-2,9,16,23-tetraisopropoxy tetrabenzotriazacorrole). Its structure is shown in Fig. 1

The misinterpretation of the structure of this compound was due to the low-resolution mass spectrum obtained by FAB. However, the other conclusions reached are not vitiated. We thank Prof. Martin Gouterman (Department of Chemistry, University of Washington) for suggesting this alternative structure.

Fig. 1. Chemical structure of TBC(OⁱPr)₄P^V(OH)₂.

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