

# A phosphonic acid anchoring analogue of the sensitizer P1 for p-type dye-sensitized solar cells

Y. Maximilian Klein,<sup>a</sup> Nathalie Marinakis,<sup>a</sup> Edwin C. Constable<sup>a</sup> and Catherine E. Housecroft\*<sup>a</sup>

<sup>a</sup>Department of Chemistry, University Basel, BPR 1096, Mattenstrasse 24a, CH-4058 Basel, Switzerland. E-mail: catherine.housecroft@unibas.ch

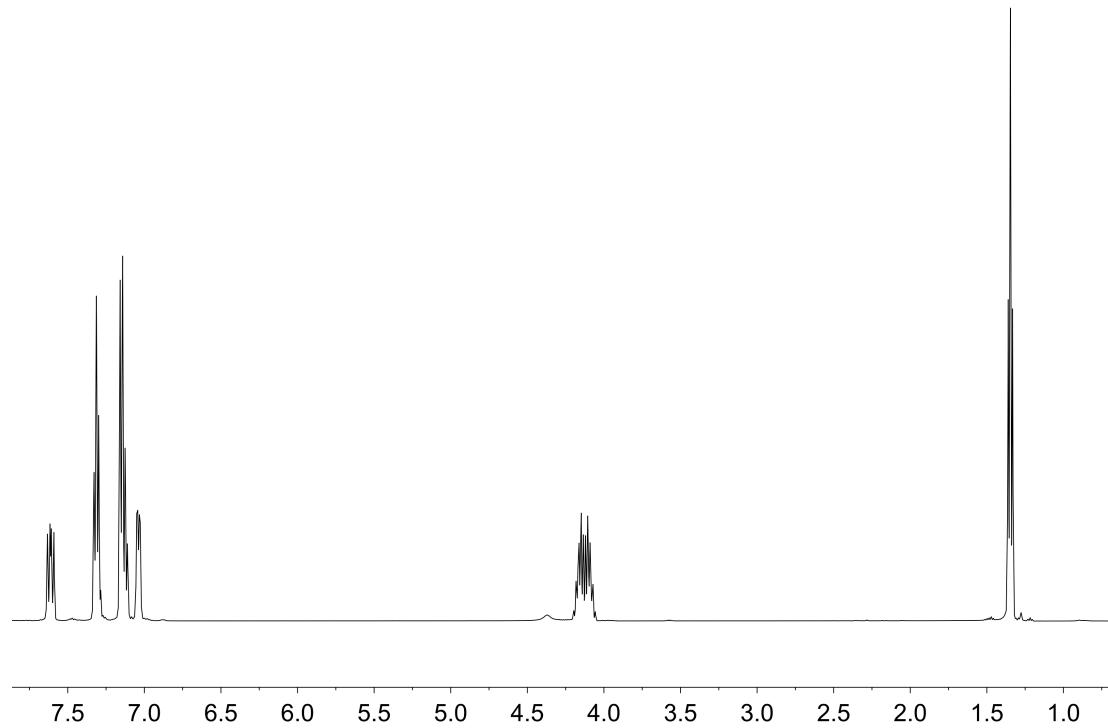


Fig. S1. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of compound 1.

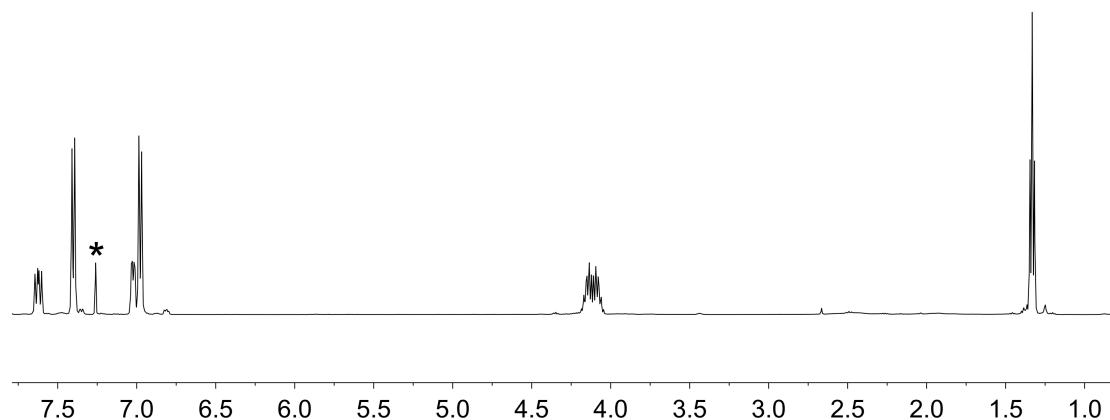


Fig. S2. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of compound 2. \* = residual CHCl<sub>3</sub>.

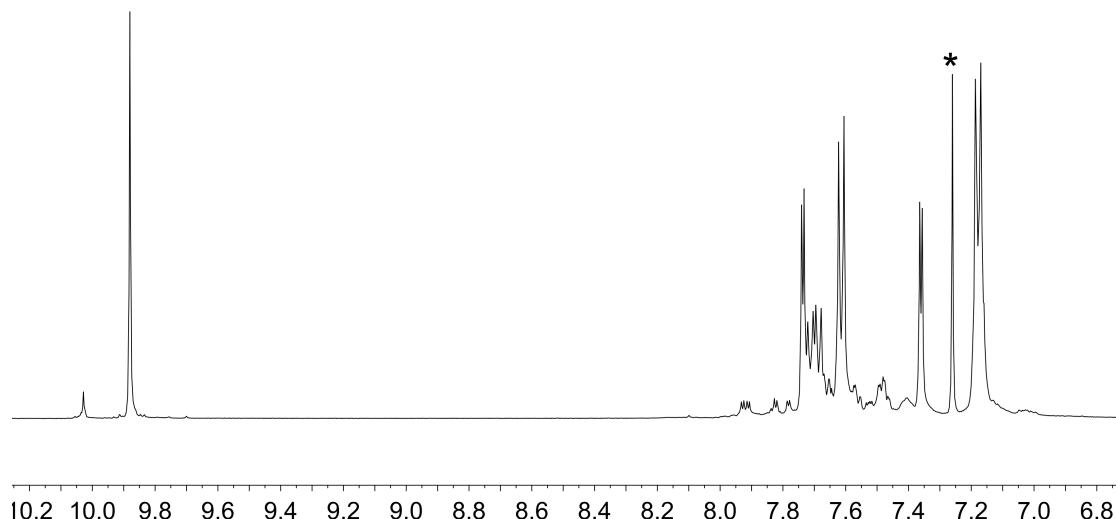


Fig. S3. Aromatic region of the <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of compound 3. \* = residual CHCl<sub>3</sub>.

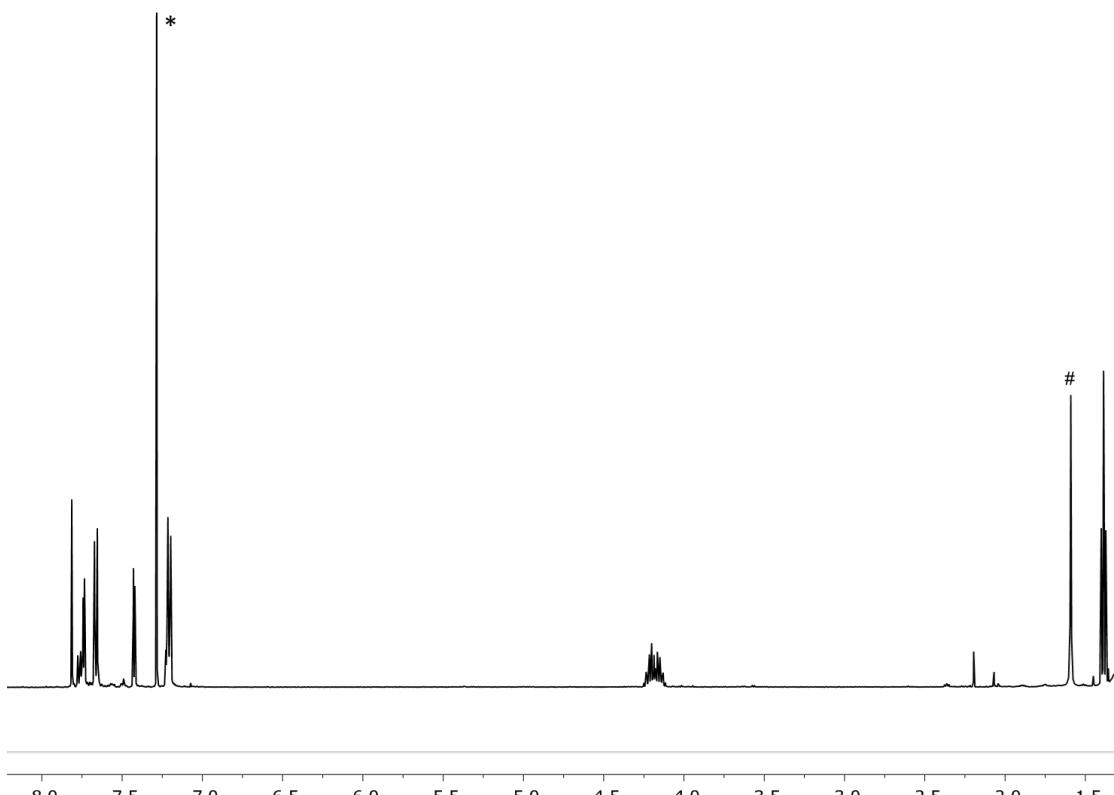


Fig. S4.  ${}^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of compound 4. \* = residual  $\text{CHCl}_3$ , # =  $\text{H}_2\text{O}$ .

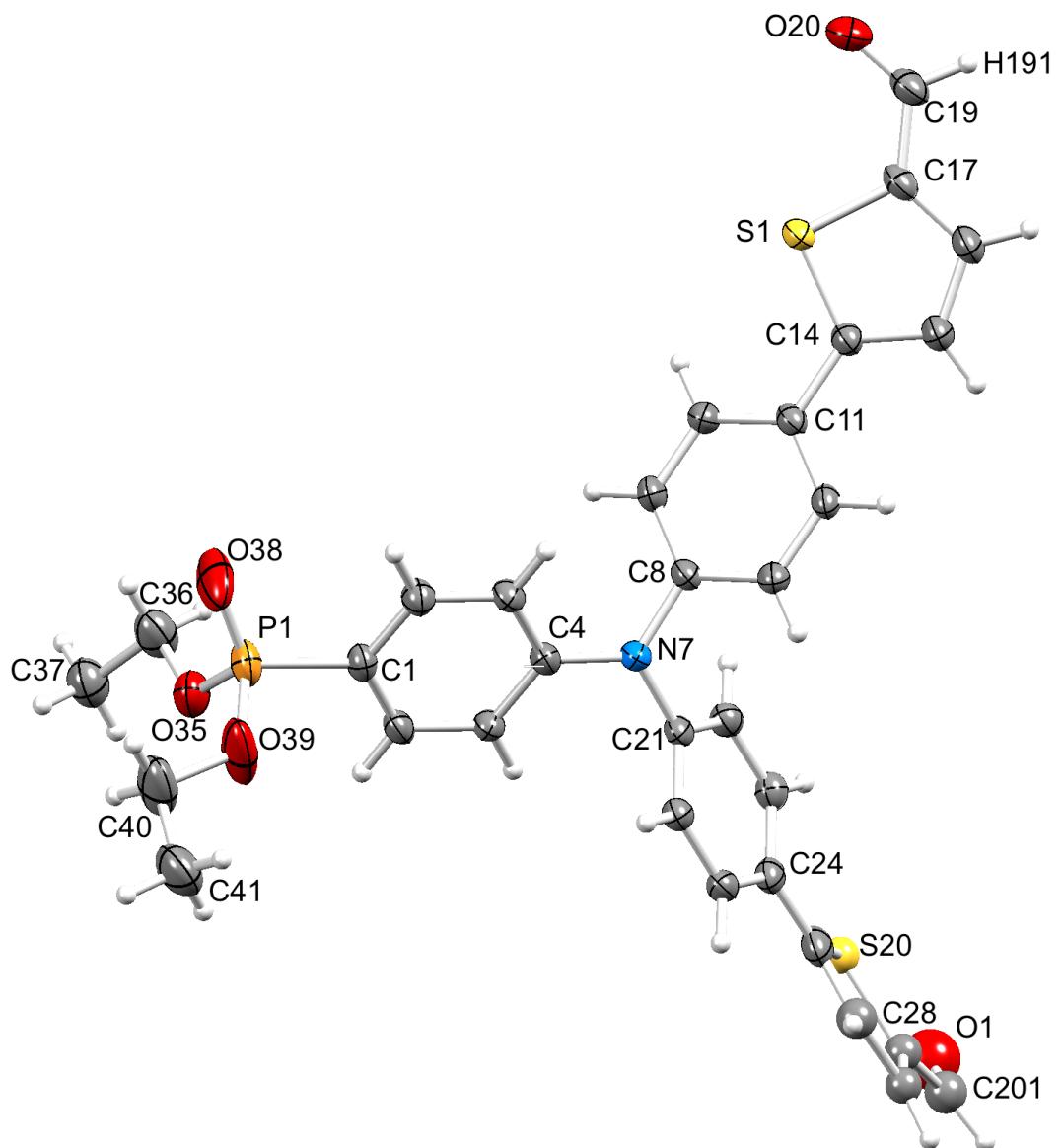


Fig. S5. ORTEP-style plot of compound **3** with ellipsoids are plotted at a 40% probability level.