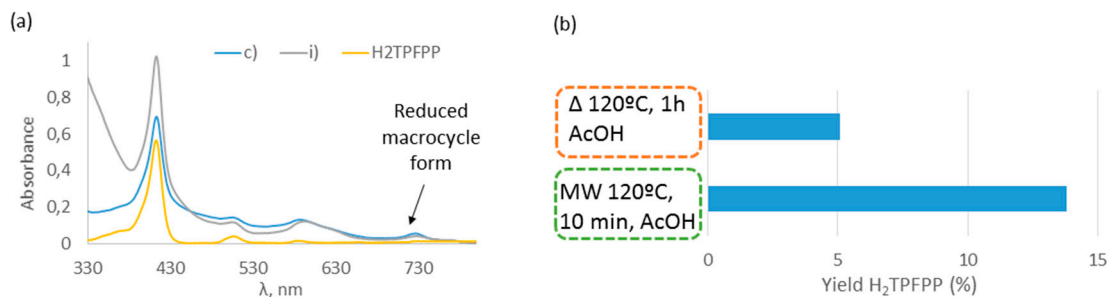
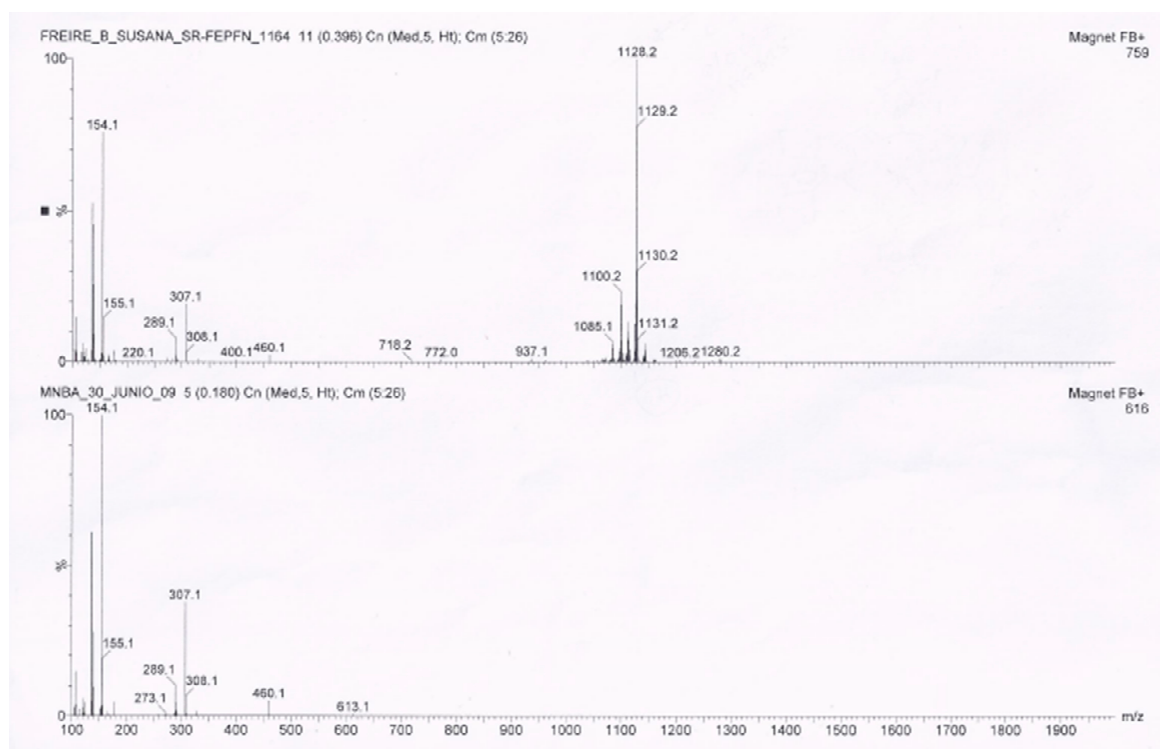


# Supplementary Material: Iron(III) Fluorinated Porphyrins: Greener Chemistry from Synthesis to Oxidative Catalysis Reactions

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**Figure S1.** (a) UV-Vis spectra of the reactions performed in microwave heating under conditions c and i of Figure 2; (b) comparison of the isolated yields of H<sub>2</sub>TPFPP under conventional (upper) and microwave (lower) heating using acetic acid as the reaction solvent and 0.1 mol dm<sup>-3</sup> reactant concentrations.



**Figure S2.** FAB<sup>+</sup> mass spectrum of Compound V [Fe(TF<sub>4</sub>NMe<sub>2</sub>PP)Cl] resulting from the reaction in Entry 1, Table 1 and comparison with the MNBA reference.

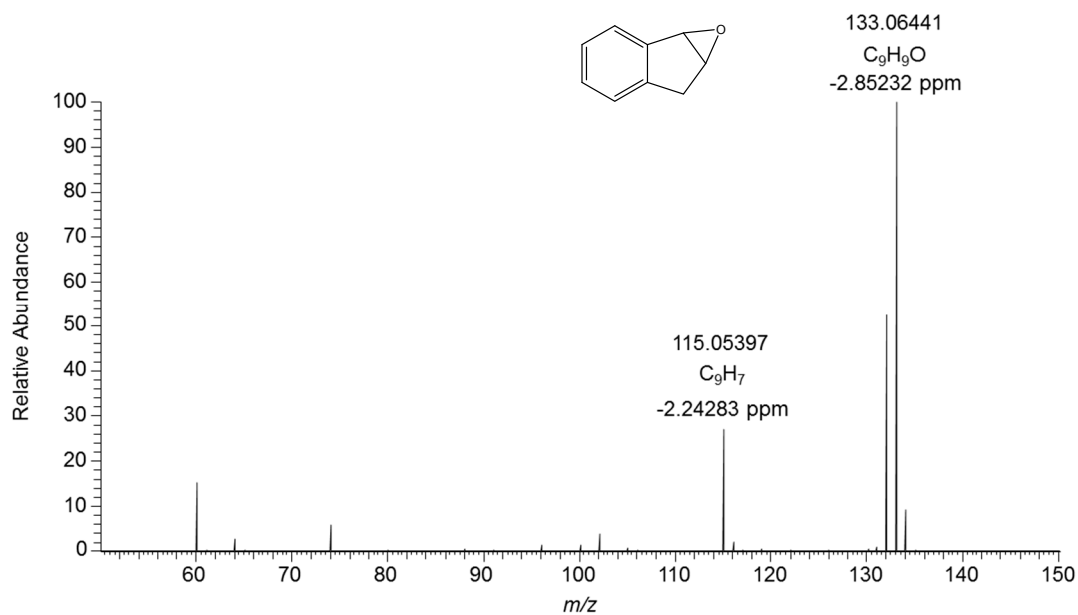


Figure S3. High resolution ESI<sup>+</sup> mass spectrum of the final reaction mixture of compound 1 oxidation.

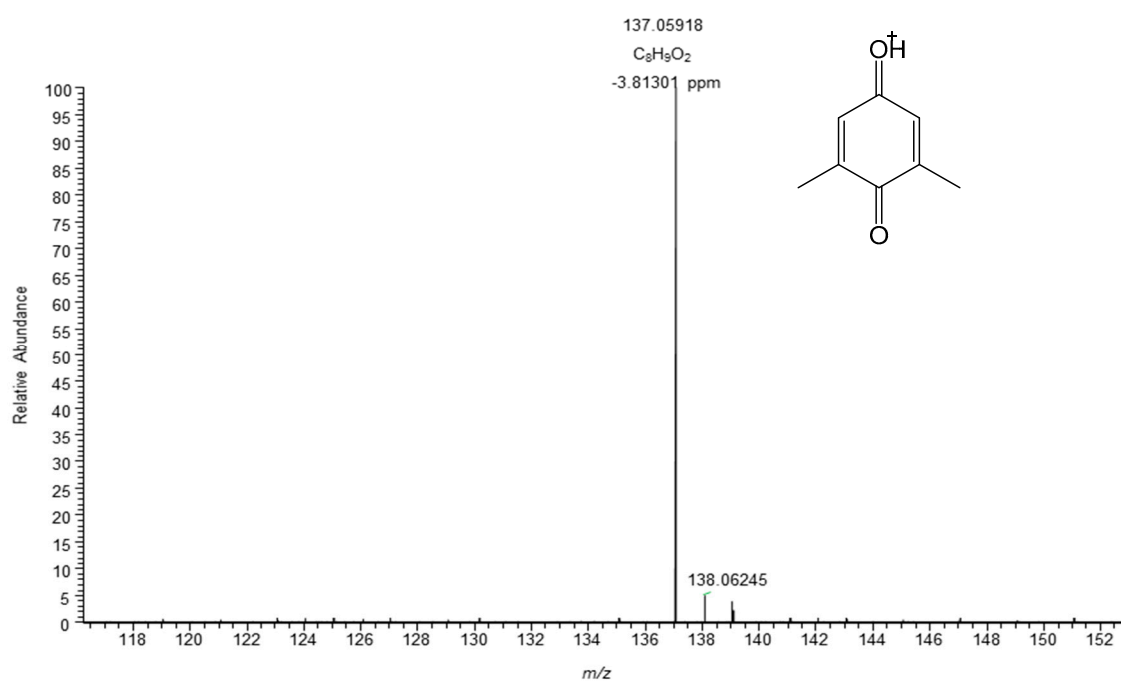
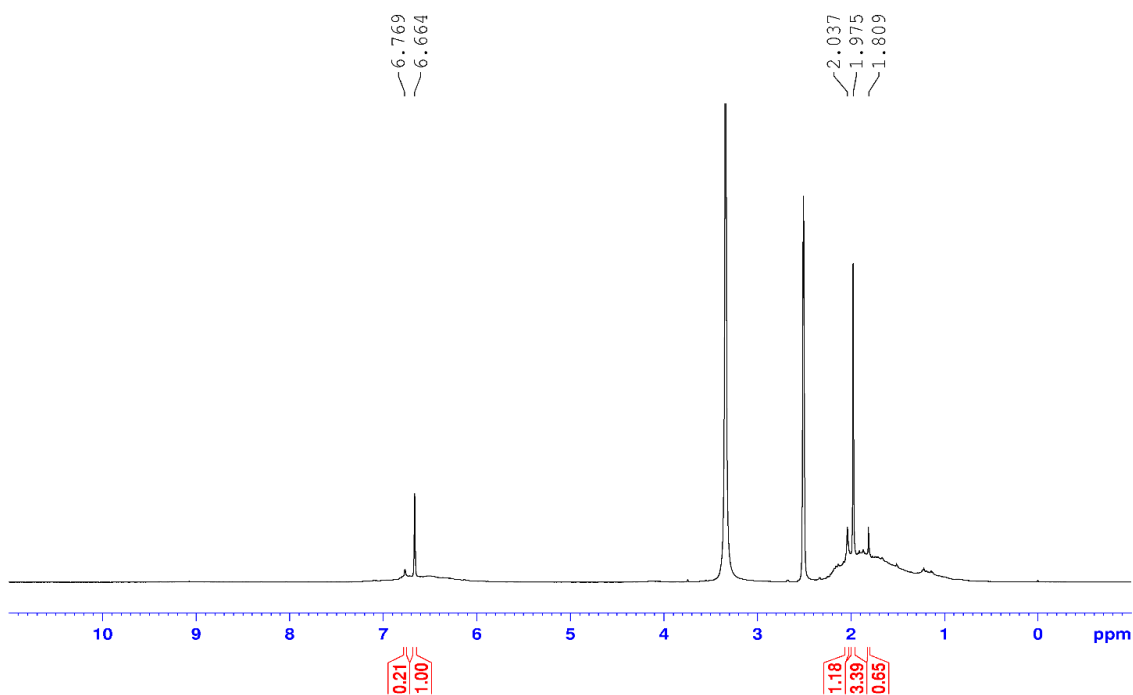
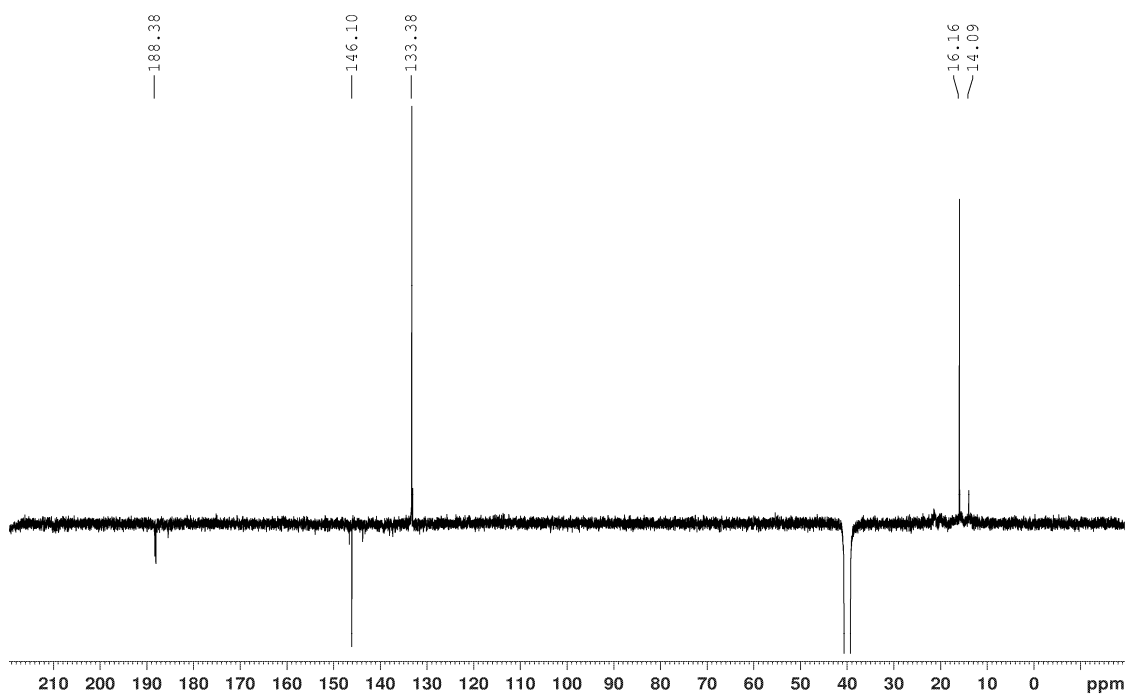


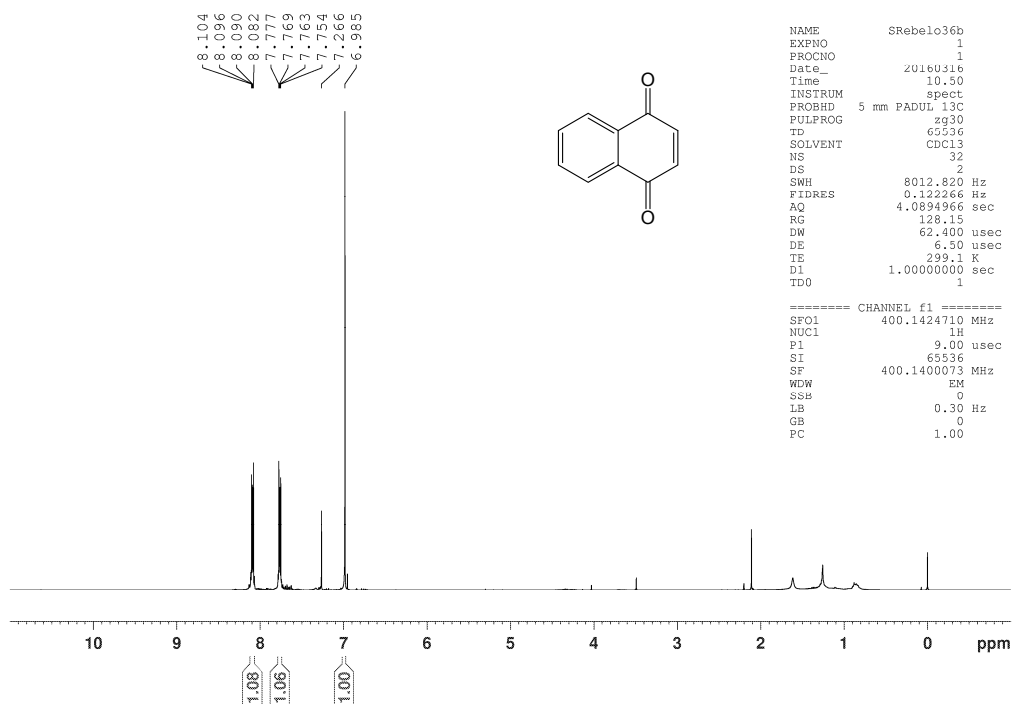
Figure S4. High resolution ESI<sup>+</sup> mass spectrum of the final reaction mixture of compound 3 oxidation.



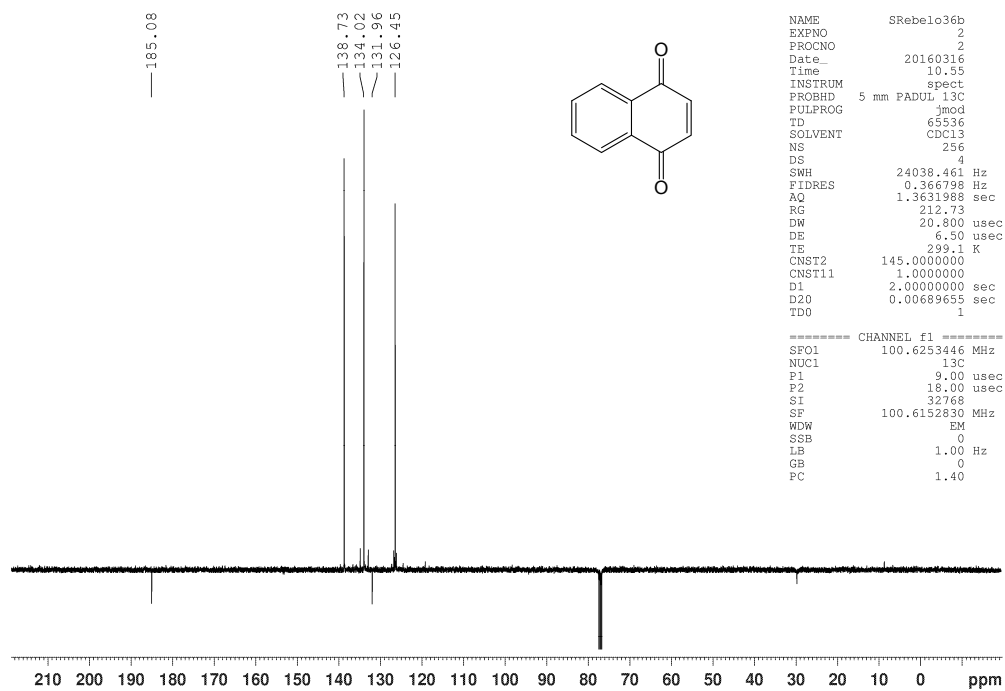
**Figure S5.** <sup>1</sup>H-NMR spectrum (in DMSO-*d*<sub>6</sub>) of the total reaction mixture present at the end of oxidation of compound **3**.



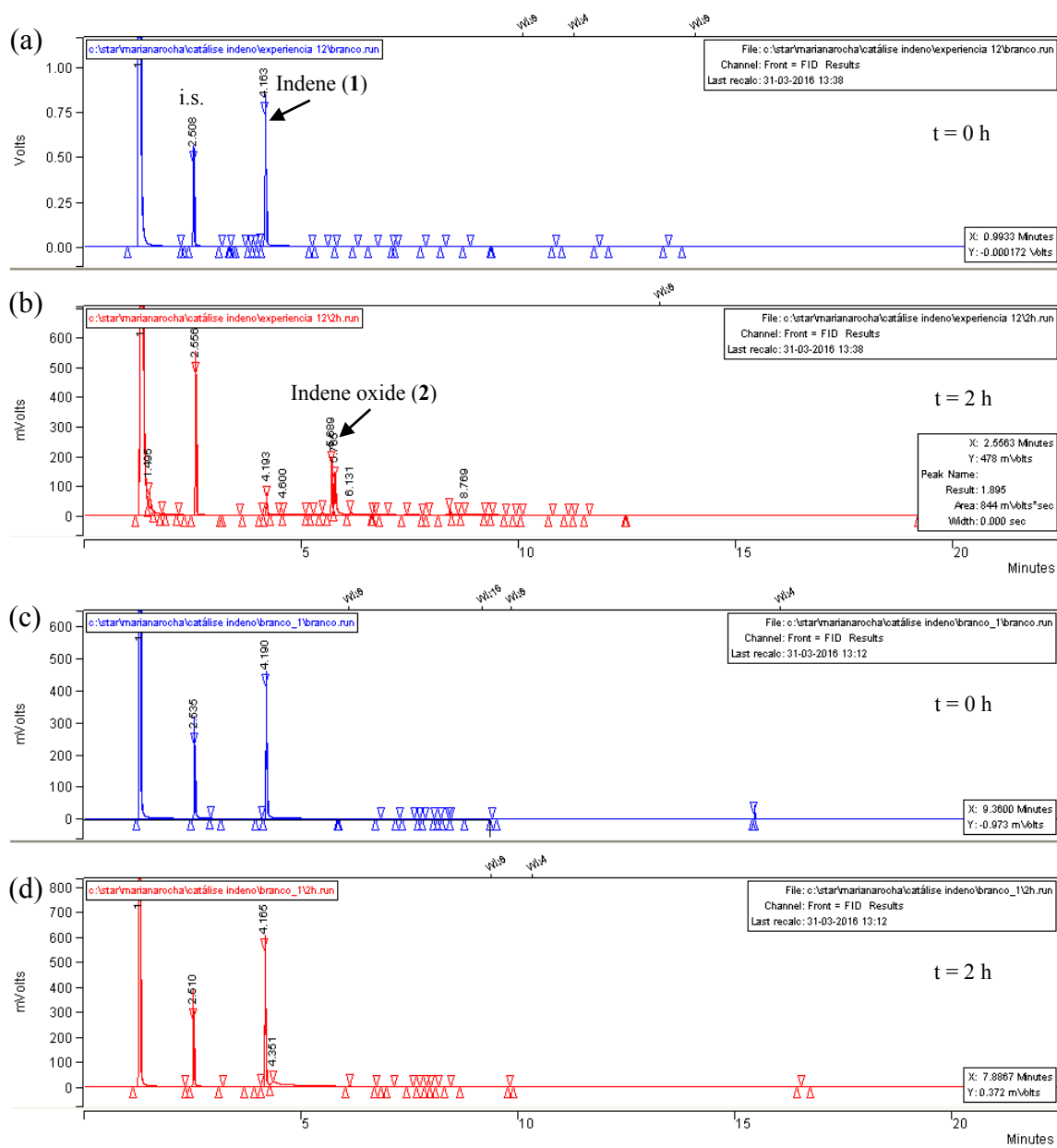
**Figure S6.** APT-NMR spectrum (in DMSO-*d*<sub>6</sub>) of the total reaction mixture present at the end of oxidation of compound **3**.



**Figure S7.**  $^1\text{H-NMR}$  spectrum (in  $\text{CDCl}_3$ ) of the total reaction mixture present at the end of the catalytic oxidation reaction of naphthalene 5.



**Figure S8.** APT-NMR spectrum (in  $\text{CDCl}_3$ ) of the total reaction mixture present at the end of the catalytic oxidation reaction of naphthalene 5.



**Figure S9.** GC chromatograms of indene (1) oxidation at t = 0 h and t = 2 h of reactions in the presence (a and b) and absence (c and d) of catalyst. The relevant peaks are the internal standard (i.s.) chlorobenzene observed at retention time (r.t.) ~ 2.5 min; indene (1) r.t. ~ 4.2 min and indene oxide (2) (r.t. ~ 5.7 min) observed as two peaks due to the presence of two enantiomeric centers in the molecule.