Supporting Information

The Positive Influence of the Fullerene Derivative Bonded to

Manganese (III) Porphyrin on the Water Protons Relaxation

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Figure S1. MALDI-TOF-MS of 5-(4-Aminophenyl)-10,15,20-tris(4-sulfonatophenyl) porphyrin.



Figure S2. ¹H NMR spectra of APTSPP in d_6 -DMSO.

Figure S2. ¹H NMR (d_6 -DMSO) δ : 8.95 (br, 2H, β -pyrrole), 8.82 (br, 6H, β -pyrrole), 8.16 (m, 6H, ortho triphenyl), 8.05 (m, 6H, meta triphenyl), 7.89 (br, 2H, 4-aminophenyl), 7.02 (br, 2H, 4-aminophenyl), 4.36 (s, 2H, amino), -2.87 (2H, pyrrole NH).



Figure S3. MALDI-TOF-MS of [6, 6]-phenyl-C₆₁-butyric acid.



Figure S4. MALDI-TOF-MS of PC₆₁BA-APTSPP-Mn.



Figure S5. MALDI-TOF-MS of APTSPP-Mn.



Figure S6. FTIR spectra of APTSPP and $PC_{61}BA$ -APTSPP. In Figure S6, compared with IR spectra of APTSPP, $PC_{61}BA$ -APTSPP showed much stronger absorption at 1598, 1407, 1189 cm⁻¹, which should belong to the characteristic absorption of $PC_{61}BA$ (*J. Org. Chem., Vol.60, No. 3, 1995*). The other enhanced absorption may be attributed to the formation of conjugation system between $PC_{61}BA$ and APTSPP, since IR absorption is generally strengthened after formation of conjugation system.



Figure S7. ¹H NMR spectrum of PC₆₁BA-APTSPP in *d*₆-DMSO.

In Figure S7, ¹H NMR (d_6 -DMSO) δ : 8.97 (br, 2H, β -pyrrole), 8.83 (br, 6H, β -pyrrole), 8.18 (m, 6H, ortho triphenyl), 8.05 (m, 6H, meta triphenyl), 7.89 (br, 2H, 4-aminophenyl), 7.02 (br, 2H, 4-aminophenyl), 5.77 (s, 2H, -CONH-), -2.87 (2H, pyrrole NH). Due to the overlapping between PC₆₁BA and APTSPP, it seems difficult to distinguish the chemical shift from the benzene ring of PC₆₁BA, but the chemical shift from alkane of PC₆₁BA can be found around δ 1.6-2.1 ppm.



Figure S8. Linear relationship between T_1 relaxation rates $(1/T_1)$ and manganese concentrations for PC₆₁BA-APTSPP-Mn in water at 3 T and 300 K.



Figure S9. Linear relationship between T_1 relaxation rates $(1/T_1)$ and manganese concentrations for APTSPP-Mn in water at 3 T and 300 K.