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ON THE INTERACTIONS OF TEMPO RADICALS WITH GOLD NANOSTRUCTURES

Carolina Aliaga[1,2]*, Sebastián Michea[2], Camila Pastenes[1], Javier Salazar[3], and Marcos Caroli Rezende[1]*

[1] Departamento de Ciencias del Ambiente, Facultad de Química y Biología, Universidad de Santiago de Chile, Casilla 40 Correo 33, Santiago de Chile.

[2] *Centro para el Desarrollo de la Nanociencia y la Nanotecnología, CEDENNA.*

[3] Universidad Andrés Bello, Center for Bioinformatics and Integrative Biology, Facultad de Ciencias Biológicas, Av Republica 239, Santiago, Chile

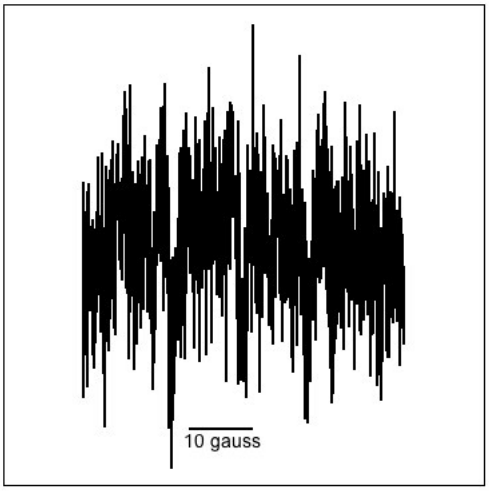


Figure 1- Epr spectrum of 4-aminoTEMPO **1** in water at a concentration of 1 μM employing the following operating conditions; microwave power: 1 mW; field modulation, 100 kHz; modulation amplitude, 5 G; time constant, 10.24 ms; and conversion time, 40.96 ms.
When a 0.16 G amplitude modulation was used, as in reference 7, no spectral changes were observed.

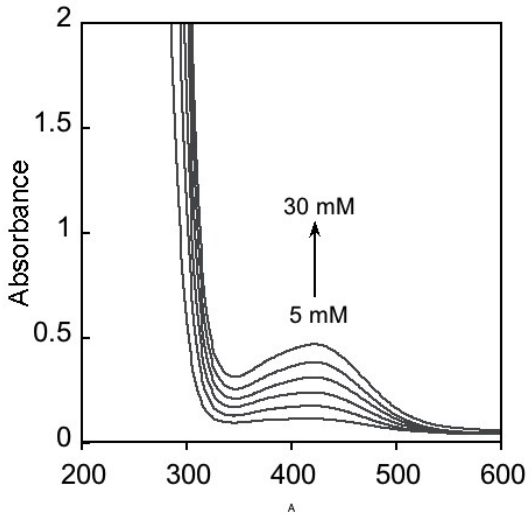
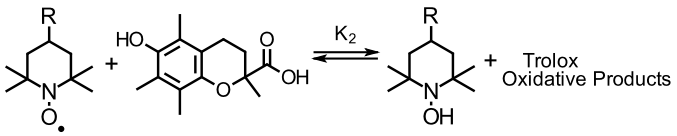


Figure 2 -Absorption spectra of 4-aminoTEMPO **1** in water at increased concentrations (5-30mM).



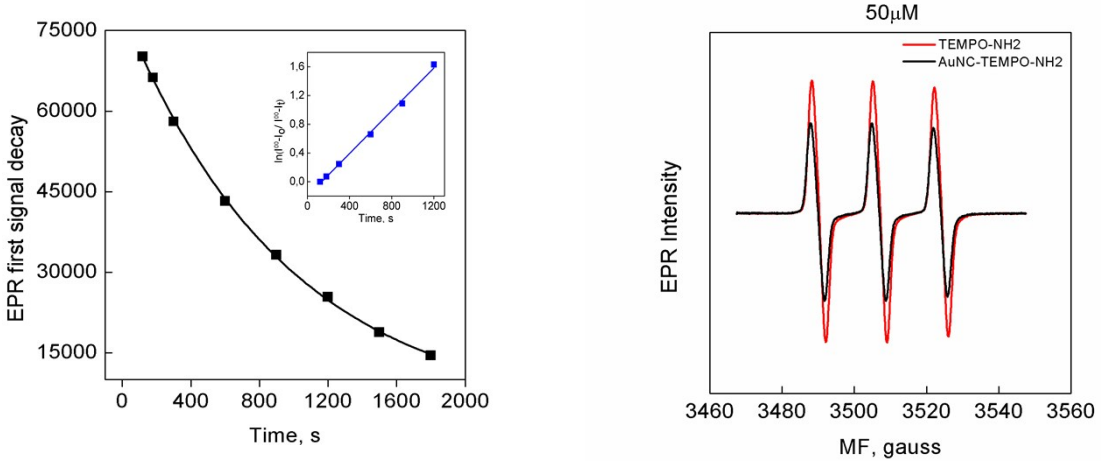


Figure 3 – Left: decay with time of the intensity of the first signal of the epr triplet of **1** (50 μM) in the presence of AuNC ([$HAuCl_4$] = 0.8 μM), after addition of 10 mM of Trolox. The corresponding linear plot for obtaining the k_{obs} value is shown in the inset. Right: EPR signal of compound **1** (50 μM) in the presence of AuNC ([$HAuCl_4$] = 0.8 μM), after addition of Trolox (10 mM), at time zero and after 600 s of reaction.