ELECTRON PARAMAGNETIC RESONANCE (EPR) SPECTRAL COMPONENTS OF SPIN-LABELED LIPIDS IN SATURATED PHOSPHOLIPID BILAYERS. EFFECT OF CHOLESTEROL

Heverton Silva Camargos[#] and Antonio Alonso*
Instituto de Física, Universidade Federal de Goiás, 74001-970 Goiânia - GO, Brasil

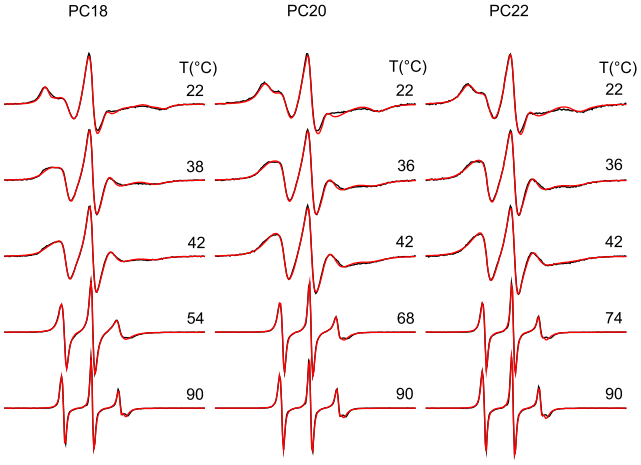

Figure 1S. *Experimental (black line) and best-fit (red line) EPR spectra of 5-DMS in PC-18, PC-20 and PC-22 at temperatures indicated. The best-fit spectra were obtained by NLLS fitting, using a simulation model with one or two spectral components*

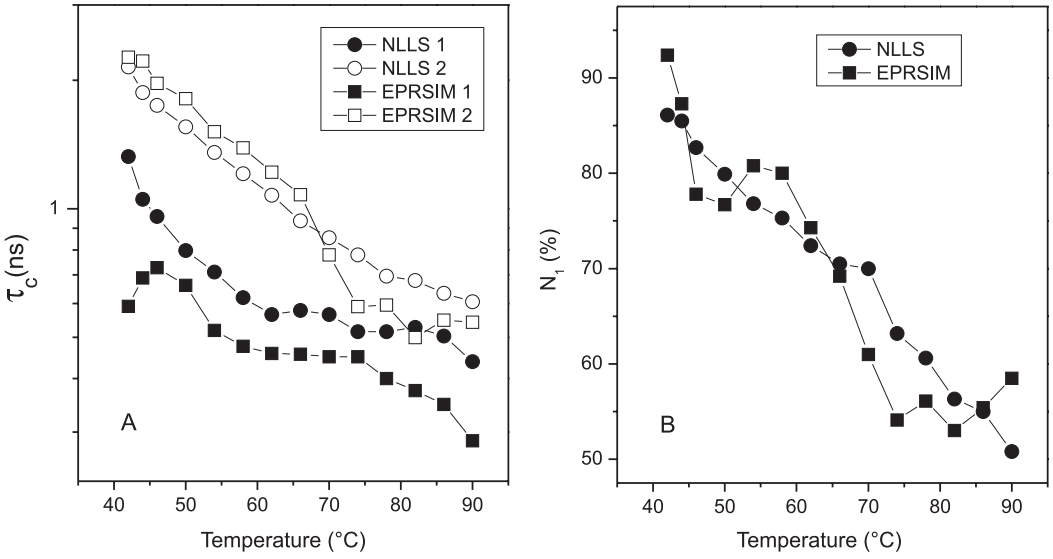

Figure 2S. *Comparison of results obtained with the NLLS and EPRSIM fitting programs for the temperature dependence of the rotational correlation time, t_c, and relative population of component 1, N_1, in the EPR spectra of 5-DMS in DPPC*

*e-mail: alonso@if.ufg.br
[#]Alternative address: Engenharia Elétrica, Fundação Universidade Federal do Tocantins, 77001 - 090 Palmas - TO, Brasil

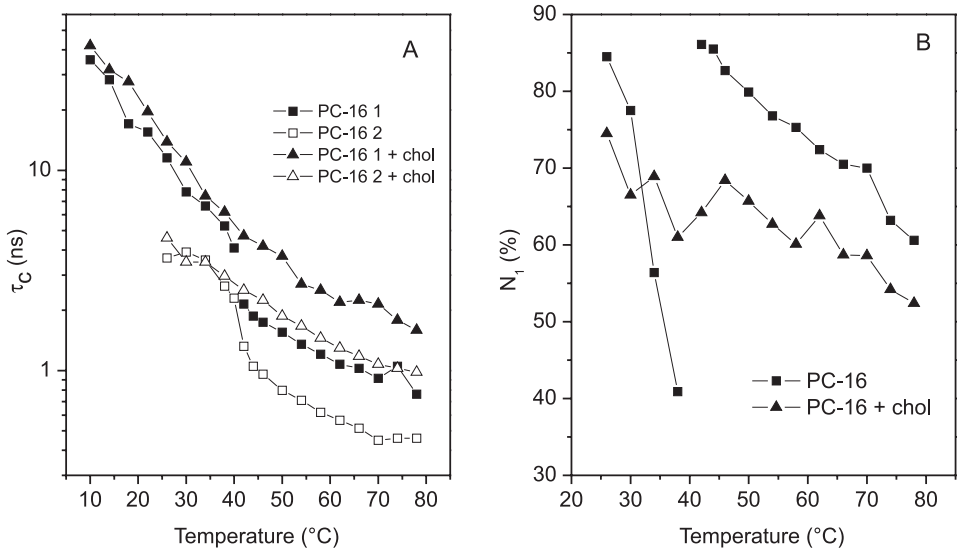

Figure 3S. *Temperature dependencies of best-fit parameters of 5-DMS in DPPC and DPPC with 40 mol % cholesterol: (A) rotational correlation time, t_c, and (B) percentage of component 1, N_1*

Table 1S. Principal components of the magnetic tensors g (g-factor) and A (hyperfine splitting) used in the nonlinear least-squares fitting program (NLLS)

Parameter	Component 1		Component 2
	below T_m	above T_m	
g_{xx}	2.0080	2.0080	2.0082
g_{yy}	2.0060	2.0060	2.0062
g_{zz}	2.0020	2.0020	2.0027
A_{xx} (G)	6.9	5.5	5.8
A_{yy} (G)	6.0	5.4	5.7
A_{zz} (G)	31.6[a]	34.1	31.6
a_0 (G)[b]	14.8	15.0	14.4

[a] For samples containing 40 mol % cholesterol the A_{zz} used was of 32.5 G. [b] $a_0 = 1/3(A_{xx} + A_{yy} + A_{zz})$.