Supporting Information for

Chemiluminescence-based Energy Uphill Upconversion

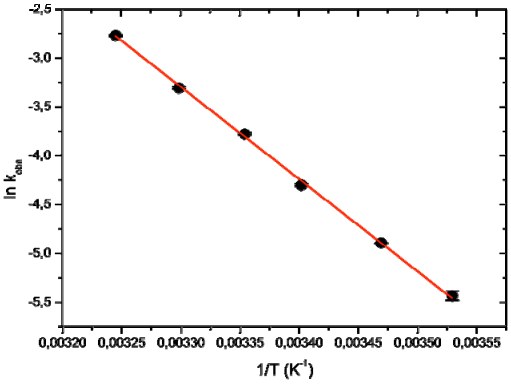
Luiz Francisco M. L. Ciscato, Dieter Weiss, Rainer Beckert, Erick L. Bastos, Fernando H. Bartoloni and Wilhelm J. Baader

1) Kinetic data and activation parameters for the unimolecular decomposition of 1,2-dioxetanes **1** and **2**.

1.1) 10-methyl-4'-phenyl-10*H*-spiro[acridine-9,3'-[1,2]dioxetane] (**1**)

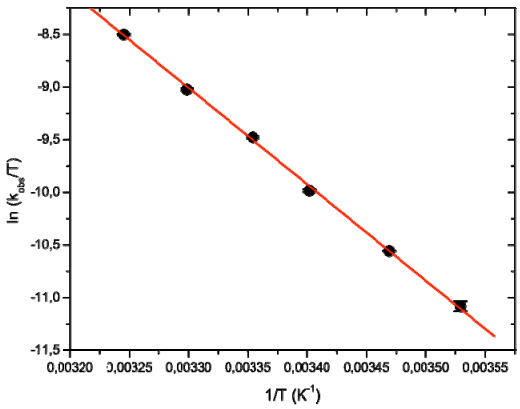
Temperature (^{o}C)	k_{obs} (s^{-1})
10.2	0.0044 ± 0.0002
15.1	0.0075 ± 0.0001
20.8	0.0136 ± 0.0001
25.0	0.0228 ± 0.0002
30.0	0.0366 ± 0.0004
35.0	0.0626 ± 0.0004

Arrhenius



y = -9444 (± 30) x + 27.9 (± 0.1)

Eyring

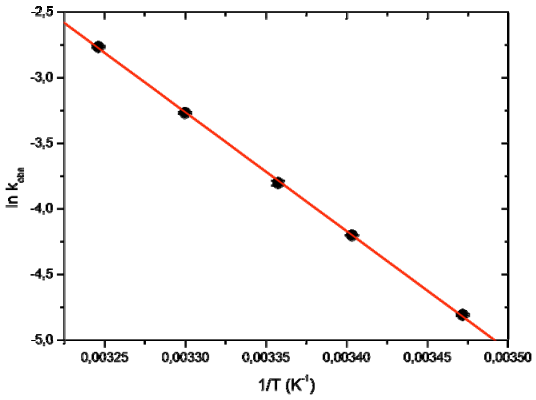


y = -9146 (± 28) x + 21.2 (± 0.1)

1.2) Spiro[adamantane-1,3´-(4´-(*m*-hydroxyphenyl)-4´-methoxy-1´,2´-dioxetane)] (**2**)

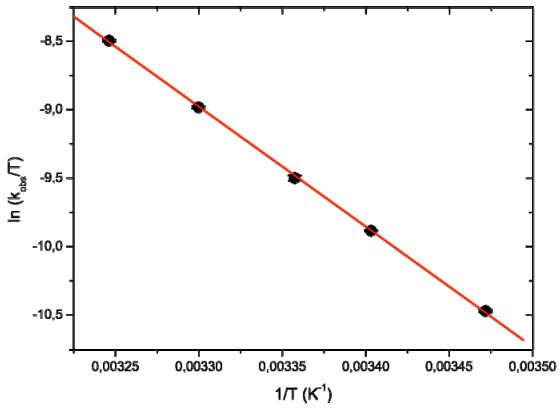
Temperature (^{o}C)	k_{obs} (s^{-1})
14.9	0.0082 ± 0.0001
20.7	0.0150 ± 0.0001
24.7	0.0223 ± 0.0004
29.9	0.0381 ± 0.0003
34.9	0.0630 ± 0.0005

Arrhenius



y = -9080 (± 40) x + 26.7 (± 0.2)

Eyring



y = -8781 (± 40) x + 20.0 (± 0.1)