



The figure shows a simulation of the effect of altering  $\tau_M$  on relaxivity at four different magnetic fields for a gadolinium chelate with restricted rotation. It is apparent that as the magnetic field increases so the maximum relaxivity is achieved with increasingly short  $\tau_M$  values. A value of  $\tau_M$  of 6 ns as exhibited by GdS-SSS-NO<sub>2</sub>BnDO<sub>3</sub>MA-1A seems likely to be a particularly effect value at magnetic fields in the region of 100 MHz.