

# The Nuclear Quadrupole Interaction of $^{187}\text{W}(\beta^-)^{187}\text{Re}$ in W(VI)-EDTA Complexes

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The nuclear quadrupole interaction of  $^{187}\text{W}(\beta^-)^{187}\text{Re}$  in W(VI)-EDTA complexes at room temperature was determined by time differential perturbed angular correlations (TDPAC) to be  $\nu_Q = 1270(8)$  MHz with an asymmetry parameter  $\eta = 0.403(4)$ . While the coordination geometry of the Mo(VI)-EDTA complex is known, there appears to be none for the W-analogue. The rather similar asymmetry parameters for the  $^{187}\text{W}(\beta^-)^{187}\text{Re}$  in W(VI)-EDTA complex and for the  $^{99}\text{Mo}(\beta^-)^{99}\text{Tc}$  in Mo(VI)-EDTA complex, determined previously, supports the idea that the coordination geometries in the Mo- and W-complexes are similar.

*Key words:* Nuclear Quadrupole Interactions; W-Complexes.