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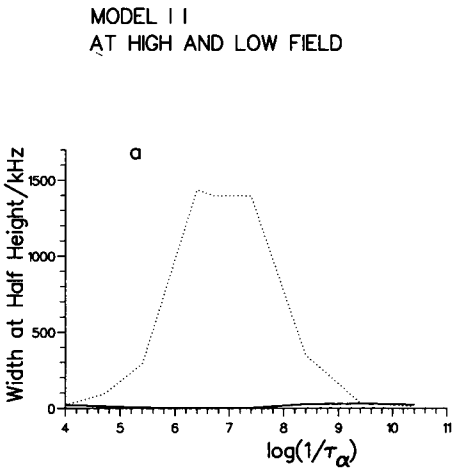

FIGURE 5

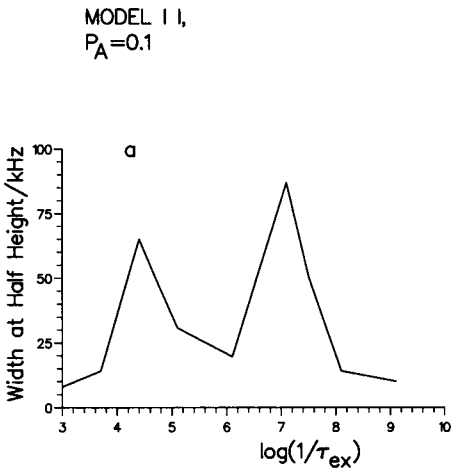

FIGURE 6

Page 169, second column, line 35: for model II, described in this section, the operator $|000)11)_A$ is exchanging with $|000)11)_B$. As it is written in the paper, model II is only valid in the extreme narrowing regime. The operator $|000)31)_A$ should also be exchanging with $|000)31)_B$. This is the correct model II in the slow motion regime according to our operator representation. This mistake also affects the results.

Fig. 1, *A–D*. The two models are identical for all the chemical exchange times, i.e., only the solid lines in the figure are valid, but for both model I and model II. The dashed lines should be removed.

Page 171, first column, line 12: exclude 'model II'. Line 13. Fig. 1, *A–D* should be Fig. 1, *A–C*.

Fig. 4 should be excluded because the results of the model are identical with those of model I presented in Fig. 3.

Page 172, first column, line 12: change 'which is presented in Fig. 4' to 'which is also presented in Fig. 3, though the results from the two models are identical'. Lines 13–21 should be excluded.

Fig. 5 *a* is corrected and presented here. The figure includes the high and low field cases of model II. The low field case (*dotted line*) is correct in the published figure in the paper. This is the case when the extreme narrowing conditions are valid for all the range of chemical exchange rates. The high field case (*solid line*) is out of extreme narrowing over the whole range of chemical exchange rates. Fig. 5 *b* is unchanged from the published one.

Page 173, first column, line 5: 'one broader' should be 'only one browd'.

Fig. 6 *a* is corrected and presented here. Fig. 6 *b* is unchanged from the published one.

Page 173, first column, line 14: 'Fig. 4 *a*' should be exchanged to 'Fig. 3 *a*'.

Page 173, section 5, has been rewritten:

5. CONCLUSIONS

In this work we have studied the lineshapes and the relative intensities obtained from two different chemical exchange models. Both models are valid in the fast chemical exchange limit but differ in the influence of the exchange process. The

first model (Eliav et al., 1988) treats the orientation of the molecular fixed frame as unchanged when the spin changes sites, whilst the second model (Marshall, 1970, and Vasavada et al., 1985) allows randomization of the electrical field gradient. The two models describe strictly different dynamic situations. The first model could be most appropriate for chemical exchange between sites in an intramolecular environment, whilst the second model is a more correct description of an intracellular chemical exchange. However, for the cases studied in this paper, the two models are not discernable by analysis neither of the width at half height, WHH, of the lineshape nor of the relative intensity, I/I_0. From the experimental point of view the observation of the two maxima in the WHH variation with temperature is an indication of the existence of a slow-motion site, but this is not necessarily true. The relative intensity is very sensitive to the effect of a slow-motion site, and its analysis is a valuable complement to the analysis of the linewidth.

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