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Reply to “Letter to Editor” by F. Ruiz and A. Marcilla on *J. Chem. Eng. Data* 1996, 41, 2–5

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Ruiz and Marcilla explain the objections to considering quaternary systems as pseudoternary systems, in their comment on our work, *J. Chem. Eng. Data* **1996**, *41*, 2–5.

We would like to indicate that we totally agree with their thesis since, in fact, as they state in their letter “there is no reason for the ends of the tie line prepared on a given quaternary plane to lie on such a plane”. However, in the quaternary system, whose three quaternary solubility curves were experimentally determined in our work, the aqueous surface which limits the two phase zone is very narrow and almost coincident with the water–2,3-butane-diol tetrahedron edge, as can be easily deduced from the qualitative Figure 6 of our work and by observing that the aqueous phase in the three quaternary solubility curves

measured are nearly coincident (Figures 3–5 of our work). This is the reason why all the aqueous phase ends of the tie lines can be considered to be in a line, without significant error, thus permitting us to treat the quaternary system as a pseudoternary one.

In any case, we are now studying the ternary systems resulting from the quaternary system studied in our previous work and a more complete study will soon be published.

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