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Letter to the editor

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Letter to the Editor

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In their recent paper¹ on "The Effect of a Chemical Reaction on the Damping of the Hydrodynamic Modes and the Spectrum of Scattered Light" Lekkerkerker distribution of scattered light "...suggest that a chemical reaction can be taken as affecting only one of the non-propagating modes." Though my previous work² on the problem was cited, I am forced to conclude that it was not read. In Eq. 37 of my paper and in the ensuing discussion the existence, and conditions for existence (apart from one or two typographical errors), of Brillouin doublets were noted, and the resulting shifting and provided that no additional comments were felt necessary.

It is clear that Lekkerkerker and Laidlaw have made a new contribution by their extraction of the roots of the dispersion equation and in their discussion of the roots of the dispersion equation and in their discussion of the composition of the "normal" modes, but they should not assume priority in the matter of noting the effect of chemical relaxation on either the width (or position) of the Brillouin doublets. Furthermore, they are not first to be aware of the problem of coupling mass-diffusion and thermal diffusion in the Rayleigh peak in the intermediate frequency region. The limiting cases of my general solution were those that precisely bracketted this difficult region.

References

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2. J. M. Schurr, *J. Phys. Chem.*, **73**, 2820 (1969).