PHYSICAL REVIEW B **69**, 189904(E) (2004)

Erratum: Features of supercooled glycerol dynamics [Phys. Rev. B 67, 132202 (2003)]

Ya. E. Ryabov, Y. Hayashi, A. Gutina, and Y. Feldman

(Received 12 March 2004; published 28 May 2004)

DOI: 10.1103/PhysRevB.69.189904 PACS number(s): 64.70.Pf, 65.60.+a, 77.22.Gm, 99.10.Cd

In our paper[1] we used Eq. (2) representing the Kirkwood correlation factor g where instead of the dipole moment of the molecule in the gas phase μ_G, we substituted by mistake the dipole moment of glycerol measured in the liquid phase μ. The relationship[2] between these two dipole moments is $\mu_G = 3\mu/(\varepsilon_\infty + 2)$. This leads to the correct expression for the Kirkwood correlation factor [Eq. (2)] of an associated liquid in the following form

$$g = \frac{\varepsilon_0 MkT}{\rho N_a \mu^2} \frac{(\varepsilon_s - \varepsilon_\infty)(2\varepsilon_s + \varepsilon_\infty)}{\varepsilon_s}. \tag{2}$$

In addition we must report a misprint in the value of molar glycerol that should have been $M = 0.0921\ \mathrm{kg\,mol}^{-1}$.

These two mistakes lead to a change in Fig. 3. The corrected Fig. 3 is given below.

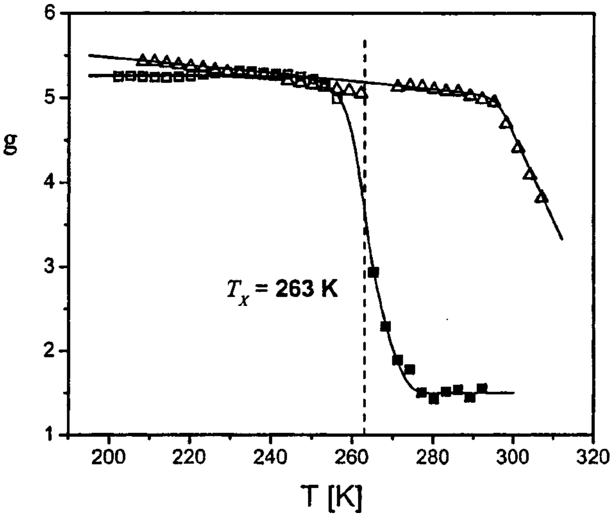

FIG. 3. The temperature dependence of the g, the Kirkwood correlation factor. Open boxes correspond to the relaxation process I in sample A. Full boxes correspond to the relaxation process II in sample A, while triangles correspond to the sample B. Values of ε_s and ε_∞ for g calculation were fitted with Eq. (1).

These mentioned corrections do not affect qualitatively the dependencies of g vs temperature and, consequently, do not change the discussion and conclusions of our work.[1]

We appreciate the help of Mr. I. Balin whose astute reading noticed these mistakes.

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[1] Ya. E. Ryabov, Y. Hayashi, A. Gutina, and Y. Feldman, Phys. Rev. B **67**, 132202 (2003).

[2] H. Fröhlich, *Theory of Dielectrics* (Clarendon, Oxford, 1958).