## Erratum: Phonons from Powder Diffraction: A Quantitative Model-Independent Evaluation [Phys. Rev. Lett. 93, 075502 (2004)]

Andrew L. Goodwin, Matthew G. Tucker, Martin T. Dove, and David A. Keen (Received 12 August 2005; published 7 September 2005)

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We have discovered a computer programing error that affects the scale of two figures in our recent Letter. The data plotted in Figs. 1(a), 2(a), and 2(b) should be corrected by a factor of  $\sqrt{10}/2\pi \approx 0.5$ ; the new figures (for which the



FIG. 1. (a) MgO phonon dispersion curves from INS experiments [1] ([17] in the original Letter) are shown as data points and those calculated using a shell lattice dynamical model [2] ([13] in the original Letter) are shown as solid lines. (b) Our analysis of reverse Monte Carlo (RMC) configurations derived from neutron powder diffraction (NPD) data. The filled (open) circles correspond to modes with longitudinal (transverse) character. The lines are guides to the eye; each traces data with similar eigenvectors.



FIG. 2. MgO phonon dispersion curves from our analysis of (a) molecular dynamcis (MD) configurations and (b) RMC configurations refined against MD-derived diffraction data. The filled (open) circles correspond to modes with predominantly longitudinal (transverse) character. The lines are guides to the eye; each traces data with similar eigenvectors.

captions remain unchanged from the original Letter) are given below. This change in scale in fact improves the fit to inelastic neutron scattering (INS) data reported in the text, and has no effect on the results or conclusions of the Letter.

- [1] G. Peckham, Proc. Phys. Soc. London 90, 657 (1967).
- [2] M.J.L. Sangster, G. Peckham, and D.H. Saunderson, J. Phys. C 3, 1026 (1970).