ERRATA

Beyond the Rigid-Ion Approximation with Spherically Symmetric Ions. L. L. BOYER, M. J. MEHL, J. L. FELDMAN, J. R. HARDY, J. W. FLOCKEN, and C. Y. FONG [Phys. Rev. Lett. **54**, 1940 (1985)].

In our recent Letter we introduced an *ab initio* model for spherically symmetric charge relaxation of ions in a crystal, called potential-induced breathing (PIB), and demonstrated its importance in the calculation of elastic constants. We also investigated the splitting of the longitudinal optic (LO) and transverse optic (TO) mode frequencies, which results from the macroscopic field associated with longitudinal modes. In the discussion immediately before and after Eq. (5) we argued, incorrectly, that the only contributions to the LO-TO splitting from PIB were from terms involving S_k', the derivative of the self-energy of the kth ion with respect to the electrostatic potential at the kth-ion site. In fact, other terms within the PIB model contribute as well. Further study has shown that the treatment of macroscopic field effects in the PIB model is not straightforward. This will be discussed in a future paper (R. E. Cohen, L. L. Boyer, and M. J. Mehl, to be published).

Stability of the High-Pressure Body-Centered-Cubic Phase of Helium. D. FRENKEL [Phys. Rev. Lett. **56**, 858 (1986)].

In Table I, incorrect values are given for the excess free energy of the fcc phase of Aziz helium at coexistence with the bcc phase. The correct values are as follows: classical, $F_{\rm fcc}^{\rm ex}/NkT = 9.736(2)$; quantum mechanical, $F_{\rm fcc}^{\rm ex}/NkT = 9.685(2)$. The latter values were used in the calculations reported in the Letter. Hence the conclusions of the paper remain unaffected.

I thank Dr. F. H. Ree for drawing my attention to the fact that the original numbers given in row 9 of Table I deviated by an unexpectedly large amount from his theoretical predictions.

Sharp Diffraction Maxima from an Icosahedral Glass. PETER W. STEPHENS and ALAN I. GOLDMAN [Phys. Rev. Lett. **56**, 1168 (1986)].

In this Letter we stated that a collection of icosahedra of identical orientations, randomly packed face to face, gave a diffraction pattern which generally matches that of icosahedral Al-Mn alloys, although several of the weaker observed peaks were missing from the calculated spectra. We have since discovered an error in the computer code used to perform these calculations. Correcting this error gives a diffraction pattern in which every experimentally observed peak appears (Fig. 1). Together with the identification of the size of the face-packed icosahedral unit with that present in crystalline Al-Mn-Si, this result provides strong evidence that the face-packed icosahedral glass is the correct description of icosahedral Al-Mn alloys.

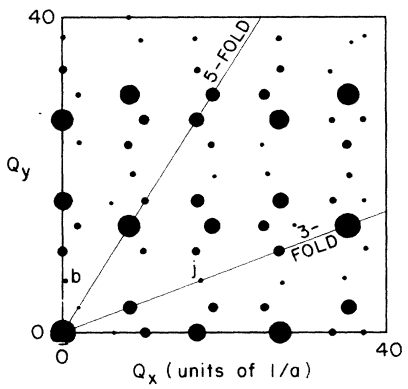

FIG. 1. One quadrant of the diffraction pattern of a face-packed icosahedral glass, viewed along the two-fold axis. The area of each spot is proportional to its intensity.

Observation of Interference Oscillations in Helium Scattering from Single Surface Defects. A. M. LAHEE, J. R. MANSON, J. P. TOENNIES, and CH. WÖLL [Phys. Rev. Lett. **57**, 471 (1986)].

In the third line from the bottom of column one on p. 471 the unit of energy should read meV and not MeV.

In Eq. (5) on p. 473 the minus sign at the beginning of the right-hand side should be omitted. The equation then reads

$$f(\theta) = \left(\frac{a\sin\theta/2}{2}\right)^{1/2} e^{-2ika\sin\theta/2} + \frac{e^{-i\pi/4}}{(2K\pi)^{1/2}}\left(\frac{\cos\theta+1}{\sin\theta}\right)\sin(ka\sin\theta). \quad (5)$$