binding wave function used also gives reasonable values for the cohesive energy and the lattice parameter⁴ and the x-ray scattering factors.^{5,6} The present calculations shows that the distribution in momentum space is broader than the one obtained from a superposition of free-ion solutions.

Note added in proof. After the submission of this

work another calculation of the Compton profile in LiH has appeared [W. Brandt, Phys. Rev. B $\underline{2}$, 561 (1970)]. The wave function of Brandt, Eder, and Lundqvist (Ref. 5) is also found to account in a satisfactory way for the measured Compton profile. We are indebted to Professor Werner Brandt for sending us a copy of his work.

of the x-ray scattering factors in W. Brandt, L. Eder, and S. O. Lundqvist, Phys. Rev. 142, 165 (1966).

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ERRATA

Electronic Properties of Liquid Metals. N. W. Ashcroft and W. Schaich [Phys. Rev. B 1, 1370 (1970)]. The following typographical errors have been found: In Eq. (39), $-\delta_{l_1,l_2}\cdots$ should be replaced by $+\delta_{l_1,l_2}\cdots$; in Eq. (40), $-\delta_{l_1,l_2}\cdots$ should be replaced by $+\delta_{l_1,l_2}\cdots$; Eqs. (51)–(53) should all include on the right-hand side an extra factor of $(-\hbar^2/2mk_F)$ multiplying the derivative of s_l ; Eq. (56) should include a factor of v(x) in the second term on the right-hand side; Eq. (B6), instead of $\frac{1}{2}\pi(2mk_F/\hbar)\cdots$, should have $-\frac{1}{2}\pi(2mk_F/\hbar^2)$; and Eq. (B8), instead of a factor $(1/\epsilon)$, should have (i/ϵ) . We have also discovered an algebraic error in Eq. (B11). Instead of the factor $(-2i/3\pi Z)$, one should have $(-2/3\pi Z)$. The definitions of the G^{12} and G^{21} [Eq. (42)] are then changed to

$$G^{21}(l_1, l_2) = G^{12}(l_1, l_2) = + (2/3\pi Z)(2l_1 + 1)^{1/2}(2l_2 + 1)^{1/2}$$
.

These corrections substantially change the numerical results as presented in Sec. IV, Figs. 1-4, and Table I. For instance, the iterated resistivity [still within the muffin-tin approximation and using Eq. (49)] now appears to tend to 5.9, 1.15, and 4.7 times the experimental value for Na, Zn, and Al, respectively. The difficulty with the optical theorem is, however, almost eliminated. For further discussion of the corrected numerical results see W. Schaich, thesis, Cornell University, 1970 (unpublished).

Ge-Aqueous-Electrolyte Interface: Electrical Properties and Electroreflectance at the Fundamental Direct Threshold. D. E. Aspnes and A. Frova [Phys. Rev. B 2, 1037 (1970)]. The numerical prefactor in Eq. (4.3), which relates the field-induced reflectivity change $\Delta R/R$ to the field-induced change in the real part of the effective dielectric function $\langle \Delta E_1 \rangle$, should be 0.0432 instead of 0.0109 as shown in Eq. (4.3). This change does not affect the experimental electroreflectance data (given as $\Delta R/R$ vs photon energy or electric field strength), or conclusions based on features of the experimental electroreflectance line shape. The theoretical amplitude predicted by each of the three simple models will change as follows.

In the low-field limit, the peak-to-peak amplitude of $\Delta R/R$ predicted by the n=1 exciton line, continuum exciton, and Franz-Keldysh models are now calculated to be 72×10^{-4} , 6.3×10^{-4} , and 1.25×10^{-4} , respectively, compared to the experimentally observed value of 7×10^{-4} at this field ($\mathcal{E}_s=1000$ V/cm). In the high-field limit, the discrepancy between experimental measurement and the predictions of the Franz-Keldysh theory modified by the field inhomogeneity is now 3 to 4 instead of 13 to 15, with the experimental number being larger.

This correction does not change the main conclusion of this section: that experimentally observed changes in $\Delta R/R$ are much too large to be described by the Franz-Keldysh mechanism, and

^{*}Present address: Cavendish Laboratory, Cambridge, England (until Oct., 1971).

 $^{^{1}}$ W. C. Phillips and R. J. Weiss, Phys. Rev. $\underline{171}$, 790 (1968).

²W. C. Phillips and R. J. Weiss, Phys. Rev. <u>182</u>, 923 (1969).

³R. P. Hurst, Phys. Rev. <u>114</u>, 746 (1959).

⁴S. O. Lundqvist, Arkiv Fysik <u>8</u>, 177 (1953). For the cohesive energy, Lundqvist reports-205 kcal/mole compared to observed - 217 kcal/mole.

⁵I. Waller and S. O. Lundqvist, Arkiv Fysik <u>7</u>, 121 (1953); A. Westin, I. Waller, and S. O. Lundqvist, *ibid*. 22, 371 (1962). See also the remarks on the calculation

⁶R. S. Calder, W. Cochran, D. Griffiths, and R. D. Lowde, J. Phys. Chem. Solids <u>23</u>, 621 (1962). In Fig. 4 of this reference the experimental x-ray scattering factors are compared with the theoretical values of Waller and Lundqvist in Ref. 5.

⁷A. Messiah, *Mécanique Quantique* (Dunod, Paris, 1962), Vol. I, p. 107.

⁸P. O. Löwdin, Phys. Rev. <u>97</u>, 1474 (1955).

⁹P. O. Löwdin, Phys. Rev. <u>97</u>, 1490 (1955); Phil. Mag. Suppl. <u>5</u>, 1 (1956).