way Lliboutry requires on transforming to a rotating frame. It does of course do so when $\boldsymbol{R}$ is constant, as it is in the standard definition of a tensor which Lliboutry himself gives on the previous page. This confusion continues in Chapter 15 and I found the whole discussion of this important subject unintelligible.

Another area in which I hoped Lliboutry would provide a good account of our present understanding was the response of the Earth to glacial loading and unloading. During the last glaciation the icecaps on Finland, Scandinavia and Canada depressed the continents by as much as 1 km. When the ice melted a considerable amount of this depression remained, and has since slowly been removed by flow within the mantle. The problem involves both glaciological issues, since only the extent and not the thickness of the ice load can be directly observed, and also the problem of how best to describe the mantle deformation. Lliboutry gives an extensive discussion of the early work on this problem in Chapter 6, all of which is included as special cases of the more recent work on Peltier. With regard to Peltier's work Lliboutry remarks that he will restrict himself 'to some indications of its successive steps' since 'the theory is thoroughly exposed in the literature'. Yet Lliboutry can scarcely be ignorant of how controversial Peltier's work is at present, and a careful analysis of the reasons why would have been particularly useful from an informed and disinterested author.

To me the most useful part of this book are the references at the end of the chapters. These are often to major works where the arguments of the chapter concerned are developed further, and are generally well chosen. Several are to works with which I am not familiar, which is scarcely surprising in such an extensive field.

The discussion of slip-line theory and its application to continental tectonics is also well presented, and indeed is better than the original papers on the subject. But I was disappointed that there was no discussion of why such an approach is not satisfactory (because it is restricted to plane strain and therefore does not allow crustal thickening) and of the recent application of ideas originally developed for floating ice shelves to this problem.

Disappointing though this book is, it is the only one I know which attempts to cover this area. Sadly it does not do so at all well, and is outrageously expensive.

D. McKenzie

CORRIGENDUM

Spreading of the interface at the top of a slightly polydisperse sedimenting suspension. By Robert H. Davis and Mark A. Hassen

Journal of Fluid Mechanics, vol. 196 (1988), pp. 107–134

An error was made in the analysis of our measurements of the rate of spread of the diffuse interface at the top of a sedimenting suspension. This led to reported values of the hydrodynamic diffusivity which are too high by a factor of two. The source of the error is that the correct solution for the one-dimensional convective diffusion

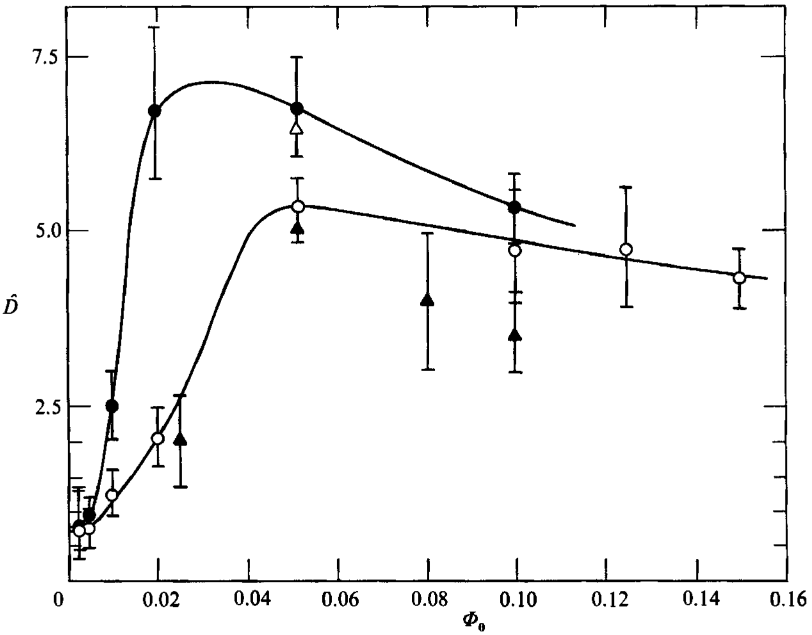

FIGURE 16. Measured values of the dimensionless self-induced hydrodynamic diffusivity versus the particle volume fraction in the bulk suspension: ●, $a = 70$ μm (type 1); ○, $a = 61$ μm (type 2); ▲, $a = 325$ μm (Ham & Homsy); △, $a = 235$ μm (Ham & Homsy). Error bars on the experimental values represent 90% confidence intervals.

equation for the spreading of an initially sharp front moving with constant velocity is

$$\frac{\Phi}{\Phi_0} = F(y) = \frac{1}{(2\pi)^{\frac{1}{2}}} \int_{-\infty}^{y} e^{-\epsilon^2/2}\, d\epsilon,$$

with $y \equiv (h - u_{\frac{1}{2}} t)/(2Dt)^{\frac{1}{2}}$, whereas we erroneously left out the factor 2 multiplying D (see p. 128, third line above (6.1)). Thus, the values for D given in table 1 and for $\hat{D}$ in figure 16 should be reduced by a factor 2, and the coefficient 1.35 appearing in (6.1) and (6.3) and at the head of the third column in table 1 should be replaced by $1.35\sqrt{2} = 1.91$.

The corrected dimensionless diffusion coefficients are shown in the revised version of figure 16. Also shown are values reported by Ham & Homsy (1988) that are based on their observation of fluctuations in the fall speed of a single marked sphere settling due to gravity in the midst of unmarked but otherwise identical spheres.

REFERENCE

HAM, J. M. & HOMSY, G. M. 1988 Hindered settling and hydrodynamic dispersion in quiescent sedimenting suspensions. *Intl J. Multiphase Flow* **14**, 533–546.