Rheol. Acta 13, 891 (1974)

From the Department of Civil Engineering, Queen's University, Kingston (Canada)

Pore water pressures in secondary consolidation

By M.M. Azzouz, E.W. Brooker and G.P. Raymond

(Received October 27, 1972)

Abstract

This paper describes the work carried out to investigate the pore pressures occurring in secondary consolidation. A theoretical approach and an experimental technique was developed in order to conduct the study.

By considering compression to occur only due to water leaving the soil it was possible to derive an expression for the dissipation of pore pressure in the secondary phase. By further simplified assumptions which are based on experimental observations, the above general solution was reduced to a simple formula which predicted the observed behaviour of pore water pressures during secondary consolidation.

APPENDIX

Errata

Since it has been very difficult receiving the many proofs of the papers of the Proceedings of the VIth International Congress of Rheology in time for printing, some proofs reached the editors, publishers and printers too late. So some mistakes or errors could not be eliminated before printing. The main errors now are corrected by the following Appendix.

The page numbers quoted mean the **bold type page numbers** of the complete special issue of the proceedings *shown at the bottom of each page!*

Further remark: In this Appendix there are published mainly corrections of misleading mistakes in equations, of wrong values, ratios or numbers etc. but no merely stylistic or linguistic corrections of the text passages and of smaller misprints respectionly and easy to correct when reading.

Theoretical studies of a suspension of rigid particles affected by Brownian couples

By L. G. Leal *(Pasadena, Calif.)* and E. J. Hinch *(Cambridge)*

Rheol. Acta **12**, **43–48** (1973)

p. **43**, *Introduction*, first paragraph, second sentence: read correctly:

The particles are rigid, axially symmetric, *free of external couples or forces, and sufficiently small so that they and their disturbance flow are inertialess.*

p. **43**, after eq. [1] read correctly:

where r is the *aspect ratio* ...

p. **43**, Eq. [3], second line read correctly:

$B[\langle \underline{p}\underline{p} \rangle \cdot \underline{\underline{E}} + \underline{\underline{E}} \cdot \langle \underline{p}\underline{p} \rangle]$

p. **44**, right column, fifth line read correctly:

... flows, $\|\underline{\underline{E}}\|/\omega \to 0$, leads to the linear viscoelastic ...

Last sentence of the same paragraph read correctly:

... tion in the limit $(r^2 - 1)/(r^2 + 1) \sim 0$.

p. **48**, add the following *Summary:*

We consider the rheology of a dilute suspension of rigid, axially symmetric particles which is undergoing a general time-dependent linear bulk flow. The particle orientation is determined as a balance between random *Brownian* rotations and the motion induced by flow of the suspending fluid. After outlining various approximate solutions of the resulting *Fokker-Planck* equation for the orientation distribution function, we consider the rheological behavior of the suspension for three specific bulk flows; steady axially symmetric extensional motion, steady simple shear flow, and start-up of a simple shear flow from rest.