

FIG. 8. Curves of intersection of velocity surfaces for CdS in any plane containing the Z axis.

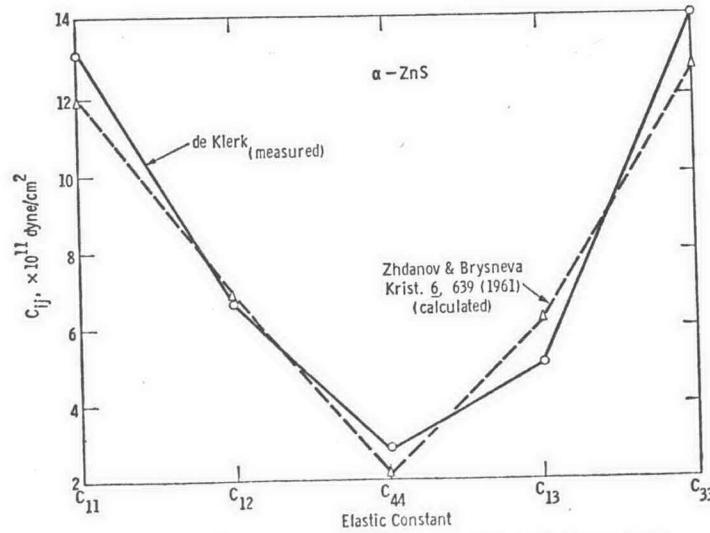


FIG. 9. Comparison of experimental and theoretical values of c_{ij} .

any plane containing the Z axis. Data used for this curve were obtained from measurements made by BOLEF, MELAMED and MENES.⁽⁵⁾ The anisotropy is slightly greater in ZnS than in CdS. Figure 9 compares the measured values of c_{ij} with theoretical values calculated by ZHDANOV and BRYSNIEVA⁽⁶⁾ from measurements on cubic ZnS made by BHAGAVANTAM and SURYANARAYANA.⁽⁷⁾

Acknowledgements—The author would like to thank Dr. W. LEHMANN for supplying the ZnS boule, R. FARICH for preparing the ZnS sample, and Miss

BRENDA J. KAGLE for setting up the computer program used for obtaining Figs. 2, 4, 5, 6, 7, 8.

REFERENCES

1. DE KLERK J., *Phys. Rev.* 139, A1635 (1965).
2. DE KLERK J., *Rev. scient. Instrum.* 36, 1540 (1965); 37, 240 (1966)
3. MUSGRAVE M. J. P., *Proc. R. Soc. A226*, 339 (1954).
4. NYE J. F., *Physical Properties of Crystals*. Oxford, London (1960).
5. BOLEF D. I., MELAMED N. T. and MENES M., *J. Phys. Chem. Solids* 17, 143 (1960).
6. ZHDANOV V. A. and BRYSNIEVA L. A., *Kristallografiya* 6, 639 (1961).
7. BHAGAVANTAM S. and SURYANARAYANA D., *Proc. Indian Acad. Sci. A42*, 304 (1944).