Letter to the Editor

A Reply to the Comments of Jackson on the Articles of Flores and Bonner and of McCullough and Lemmon

J. J. McCULLOUGH

Chemistry Department, McMaster University, Hamilton

Received March 12, 1975

Sir:

I am writing on account of the letter of Jackson, concerning the reported failure of Flores & Bonner (1974) and of McCullough & Lemmon (1974) to confirm an earlier report of the stereoselective polymerization of L-aspartic acid on kaolinite (Degens et al., 1970).

In the experiments of Lemmon and this author, we were trying to confirm the claim made in the above letter in Nature (Degens et al., 1970). The supportive evidence for this claim was extremely weak. Rates of disappearance of D- versus L-aspartic acid were measured using chromatographic amino acid analysis, without the use of an internal standard; the polymer claimed to be formed was not isolated or characterized; no mention was made of precautions to exclude microorganisms; and the interconversion of D- and L-aspartic acid (racemization) at the temperature used received only a passing comment.

The recent letter (Jackson,T.A., J.Mol.Evol., 1975) seems to offer no further explanation as to why careful, independent work in two other laboratories failed to confirm the reported catalytic effect of kaolinite. The onus is now on Jackson and co-workers to show why their early experiments could not be reproduced.

REFERENCES

Degens,E.T., Matheja,J., Jackson,T.A. (1970). Nature 227, 492 Flores,J.J., Bonner,W.A. (1974). J.Mol.Evol.3, 49 McCullough,J.J., Lemmon,R.M. (1974). J.Mol.Evol.3, 57

John J.McCullough, Chemistry Department, McMaster University, Hamilton, Ontario L8S 4M1, Canada