COMMENT ON THE PAPER "SIMPLE EVALUATION OF ENANTIOMER-SELECTIVITY OF CROWN ETHER USING MEMBRANE ELECTRODE" BY Y. YASAKA ET AL. 1)

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In the paper mentioned in the title the authors describe the evaluation of enantiomer-selectivity of chiral crown ethers by measuring electrical potential differences on electrochemical cell assemblies with PVC membranes containing these chiral ionophores. Their communication gives the impression that the evaluation of enantiomer-selectivity of chiral ionophores by electrochemical methods, which were developed in our laboratory beginning 1966^{2} , is a novel one because they do not refer to our previous work. We would like to point out that we published our first paper on electrochemical detection of enantiomer-selectivity in 1975^{3} , and that several subsequent papers from our laboratory appeared since then not only in the primary and referring journals, but also in review articles 4 , 5 , 6 , 7 , 8 .

References

- 1) Y. Yasaka, T. Yamamoto, K. Kimura and T. Shono, Chem. Lett., 1980, 769.
- 2) Z. Štefanac and W. Simon, Chimia(Switzerland), <u>20</u>, 436 (1966); Microchem. J., 12, 125 (1967).
- 3) A. P. Thoma, Z. Cimerman, U. Fiedler, D. Bedeković, M. Güggi, P. Jordan, K. May, E. Pretsch, V. Prelog and W. Simon, Chimia(Switzerland), 29, 344 (1975); Chem. Abstr., 84, 411 (1976): abstr. no. 43145c.
- 4) A. P. Thoma, A. Viviani-Nauer, K. H. Schellenberg, D. Bedeković, E. Pretsch, V. Prelog and W. Simon, Helv. Chim. Acta, <u>62</u>, 2303 (1979); Chem. Abstr., 92, 226 (1980): abstr. no. 71441e.
- V. Prelog, Pure & Appl. Chem., 50, 893 (1978). Plenary Lecture of the XXVIth International Congress of Pure and Applied Chemistry, Tokyo,
 4-10 September 1977; Chem. Abstr., 91, 563 (1979): abstr. no. 38653g

- 6) W. Simon, in "Molecular Movements and Chemical Reactivity as Conditioned by Membranes, Enzymes and Other Macromolecules". R. Lefever and A. Goldbeter Ed., John Wiley & Sons, New York 1978, pp. 287.
- 7) A. P. Thoma, E. Pretsch, G. Horvai and W. Simon, FEBS-Symposium No. 42, "Biochemistry of Membrane Transport". G. Semenza and E. Carafoli Ed., Springer-Verlag, Heidelberg 1977, pp. 116; Chem. Abstr., <u>87</u>, 246 (1977), abstr. no. 97755g.
- 8) A. P. Thoma and W. Simon, in "Metal-Ligand Interactions in Organic Chemistry and Biochemistry", Part 2., B. Pullman and N. Goldblum Ed., D. Riedel Publishing Company, Dordrecht, 1977, pp. 37.

(Received November 4, 1980)

Reply to comment.

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We believe that our compound is one of a few examples that shows distinct enantiomer-selectivity by the electrochemical method with a membrane electrode. We regret that we failed to refer to the previous works, and have no intention to insist on the priority to the electrochemical method itself.

(Received December 25, 1980)