

The results are summarized in the accompanying Figure and Table. The Figure is a histogram of the tip potentials of 126 microelectrodes measured within 2 h of filling. Included are the values from 13 different batches of pipettes. In none of the batches was the median tip potential greater than -5 mV, although in several batches the mean tip potential was greater than -5 mV due to the occurrence of relatively few pipettes which had large tip potentials. For the entire series the mean tip potential was -6.4 mV and the median -2.5 mV; perhaps a more practical statistic is that 75% of the freshly prepared microelectrodes had tip potentials less negative than -5 mV.

The effect of micropipette storage at room temperature and at 6°C on the development of tip potentials is given in the Table. It appears that microelectrodes prepared and stored in the manner described change little at room temperature for 48 h. Thereafter the microelectrodes develop increasingly larger tip potentials, and on the 3rd or 4th day the median tip potential exceeds -5 mV. In contrast microelectrodes stored at 6°C do not alter appreciably in tip potentials for at least 2 weeks. Cold storage, however, does not prevent the eventual development of tip potentials, for microelectrodes stored for 8 months in the cold had a median tip potential of -39.5 mV (range -30.5 to -46.0 mV).

On the basis of these results it appears that the method of filling micropipettes with $3M$ KCl by boiling under reduced pressure not only offers the advantages of speed and of processing large numbers simultaneously, but it also yields micropipettes with small tip potentials. $3/4$ of the pipettes had tip potentials less negative than -5 mV, and the median tip potential did not alter for 48 h at room temperature, or for 2 weeks at 6°C ⁸.

Zusammenfassung. Glasmikroelektroden, mit $3M$ KCl-Lösung gefüllt durch Kochen in Wasserstrahlvakuum, zeigen einen Zentralwert für das Potential an der Elektrodenspitze (tip-potential) von $-2,5$ mV; 75% geben entsprechende Werte niedriger als -5 mV. Lagerung der Elektroden bei 6°C lässt das «tip-potential» mindestens 2 Wochen unverändert, während bei 22°C sein Zentralwert nach 3-4 Tagen grösser als -5 mV wird.

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ADDENDUM

E. DE VITO and J. A. SANTOMÉ: Disc Electrophoresis of Proteins in the Presence of Sodium Dodecyl Sulphate, *Experientia* 22, fasc. 2, p. 124 (1966). In this paper it

was inadvertently omitted to state that in the five pore gel the percentage of acrylamide was 10% for bovine growth hormone, 13% for insulin and 7.5% for aldolase.

CONGRESSUS

France

17ème Réunion annuelle

à Paris du 2 au 6 Mai 1967

de la Société de Chimie Physique sur le sujet suivant:

Macromolécules hélicoïdales en solution.

Pour tous renseignements, s'adresser au Secrétaire Général, Prof. GUY EMSCHWILLER, Société de Chimie Physique, 10, rue Vauquelin, Paris 5ème.