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Comments on "K. L. Cheng, Capacitor Theory for Nonfaradaic Potentiometry. *Microchemical Journal* 1990, 42, 524" and Reply to "Comments on 'E. Pungor, The New Theory of Ion Selective Electrodes. *Sensors* 2001, 1, 1-12' "

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I have sent the cited article [1] to the *Sensors* as a summing contribution, to inform those working in the field of ISE about my results coming from approximately 30 years of research activity. Thus far I used to send detailed publications to newspapers with a wider range of interests. At the time when I was publishing the first ion-selective electrode outside of glass-electrode [2], it was a general opinion that ions diffuse through the membrane.

This was contradicted by the first response-time measurements, which were later further strengthened [3,4].

Conversely to the many times published response-time measurements, we did not use the response-time measurement of electrochemical cells, but the reaction occurring on the measuring electrode. The response-time of the later system is about 20-40 milliseconds. Further investigations certified that the potential-signal appeared only by the surface reactions [5,6]. The question of the surface reaction was confirmed by glass-electrodes as well [7].

In the published article [1] the phenomena were explained through a chemical approach. Cheng's approach [8] is very good; he used a physical model for this. These two do not oppose to each other. We had published already in the 80's that the potential is defined by the surface reactions. The acceptation of this idea has been accepted in the literature as well.

Figures, analogue to that adopted from *Professor Buck* were already published long before in the papers of *Simon* [9] and his colleges in 1972, and therefore I did not think, any rights would valid to this.

References and Note

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