

**Electrochemistry: One of the Pillars of Measurement Science invited paper in Physical Echem Division Symposium on "Progress in Methods Used to Solve Electrochemical Problems: a Historical Perspective"**

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Measurement Science that reports on chemical properties or quantities (a.k.a. Analytical Chemistry) is a huge field that stretches beyond the Chemical Sciences into Physics, Astronomy, Biology, Genomics, and many other disciplines. Its traditional sectors include spectroscopy (of many forms), mass spectrometry, separations, kinetics, imaging, and electrochemistry. All of these sectors of measurement science have seen enormous changes over the past several decades. This lecture will present an outline of some of the changes that have occurred in electrochemical methodology and the ways in which electrochemistry has been applied to solve chemical problems. The outline will include the diminished size of electrodes, the development of chemically modified electrodes, applications of electrophoretic phenomena, and different forms of electrochemical sensors, among other topics.