**A Beginner’s Guide to Electrochemical Impedance Spectroscopy**

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Electrochemical impedance spectroscopy is an experimental technique that is used extensively in all aspects of electrochemical research, including batteries, fuel cells, corrosion, sensors. In 2014, over 5,000 journal articles used some aspect of electrochemical impedance spectroscopy. This presentation will provide a beginners perspective of impedance spectroscopy, including the history of its development, the principles of the technique, and some examples which demonstrate the manner in which it may be used.

Biographical Sketch

Mark Orazem obtained his BS and MS degrees from Kansas State University and his doctorate in 1983 from the University of California, Berkeley. In 1988 he joined the faculty of the University of Florida where he holds the position of Distinguished Professor of Chemical Engineering along with the ExxonMobil Gator Chemical Engineering Alumni and the University of Florida Research Foundation term professorships. Prof. Orazem is a Fellow of The Electrochemical Society and is a former President of the International Society of Electrochemistry. He has over 180 refereed publications and has co-authored, with Bernard Tribollet of the CNRS in Paris, a textbook entitled *Electrochemical Impedance Spectroscopy*. This book, published by Wiley in 2008, was translated into Chinese and published by Chemical Industry Press in 2014. In 2012, Prof. Orazem received the ECS Henry B. Linford Award for Distinguished Teaching. His edited book on *Underground Pipeline Corrosion* was published by Woodhead in 2014.