

Abstract Submitted
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Noise Reduction Techniques for Analyzing Electrochemical Systems KEENAN STONE, ROGER KISNER, Oak Ridge National Laboratory — The ionic noise, emanating from electrochemical reactions, possesses distinct properties that are thought to be indicative of underlying chemical and physical processes. Such Electrochemical Noise (EN) is difficult to differentiate from ambient noise from one's own surroundings and measurement equipment. Many techniques exist that aid in reducing both external and equipment noise, which may involve either data analysis/acquisition methods or the physical alteration of an experimental apparatus. We present measurements of the EN, having implemented several noise reduction techniques, conducted with a setup design intended for use in other research at Oak Ridge National Laboratory.

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