

July 5<sup>th</sup>, 2016

Honorable Lamar Smith  
Chairman  
House Committee on Science, Space & Technology  
2409 Rayburn House Office Building  
Washington, D.C. 20515

Honorable Eddie Bernice Johnson  
Ranking Member House Committee on Science, Space & Technology  
2468 Rayburn House Office Building  
Washington, D.C. 20515

Daniel A. Scherson  
Frank Hovorka Professor of  
Chemistry

Director, *Ernest B. Yeager Center  
for Electrochemical Sciences*

Department of Chemistry

10900 Euclid Avenue  
Cleveland, OH 44106-7078

Phone 216.368.5186  
Fax 216.368.3006  
Email [daniel.scherson@case.edu](mailto:daniel.scherson@case.edu)  
[www.case.edu/artsci/chem/](http://www.case.edu/artsci/chem/)

Dear Chairman Smith and Ranking Member Johnson,

I am writing this letter in strong support of the "Electricity Storage Innovation Act". I am the Frank Hovorka Professor of Chemistry at Case Western Reserve University, former Editor of The Electrochemical Society Journal, and, until very recently, President of the Electrochemical Society. The development of safe and efficient energy storage devices is essential to the sustainability of the planet, as they provide means of making energy derived from intermittent sources, such as wind and solar radiation, continuously available. Among the most promising devices of this type are conventional and redox flow batteries, which are expected to impact markedly transportation and revolutionize the way in which we manage the US electrical grid. Meeting the technical and economic demands of these batteries requires an atomic and molecular level understanding of the elementary events associated with electrochemical energy storage. Indeed, exciting new prospects toward accomplishing these goals have been recently opened owed to the advent of sophisticated theoretical and experimental techniques which have made it possible to predict and probe both structural and dynamic aspects of the processes involved with unparalleled detail and reliability. Such advancements are making it possible to identify novel materials displaying optimum properties based strictly on theoretical calculations, which can then be synthesized and characterized. This interplay between theory and experiment will lead to the rational search of multivalent metals for batteries for transportation, and redox couples and electrolytes for high voltage flow batteries for grid applications. A vigorous support from the Government of both basic and applied research will not only accelerate progress in energy storage technology, and thereby shorten the path between discovery and commercialization, but also contribute to slow down the depletion of earth's natural resources, protect our fragile environment, leading ultimately to economic growth and prosperity.

Sincerely yours,



Daniel A. Scherson