



**Esther S. Takeuchi**

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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

I am writing this letter in strong support of the "Electricity Storage Innovation Act".

I am a SUNY Distinguished Professor in the Department of Materials Science and Engineering and the Department of Chemistry at Stony Brook University. I also have a joint appointment at Brookhaven National Laboratory. I entered academics after a successful industrial career with Greatbatch, Inc. While at Greatbatch, I was active in the research and development of power sources for medical devices. My work has been widely recognized and I have more than 150 patents. I have received local, national, and international recognition from the premier scientific societies and technical organizations, including the Electrochemical Society (Fellow, Battery Division Technology Award), the American Chemical Society (Jacob Schoellkopf Medal, Astellas Award EV Murphree Award), and the American Institute for Medical and Biological Engineering (Fellow). In 2004, I was inducted into the National Academy of Engineering (NAE). In October 2009 I was awarded the National Medal of Technology and Innovation by President Obama and in 2011 was inducted into the National Inventors Hall of Fame. I am also a past 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, continuously available and thus viable for widespread adoption. Additionally, new generations of batteries are critical to the widespread adoption of electrified vehicles.

Implementation of batteries demands understanding at a fundamental level. Further, the understanding of how manufacturing processes impact function must be known before widespread implementation. Advances in characterization now make it possible to probe battery systems in unprecedented ways.



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It is imperative that the United States command leadership in this field. Sources of reliable energy will impact economic security and technological leadership. Acting on this important issue will help pave the way toward a secure and more prosperous future.

Sincerely,

A handwritten signature in cursive script that reads "Esther S. Takeuchi".

Esther S. Takeuchi, Ph.D.  
2009 National Medal of Technology  
2004 National Academy of Engineering