





Michael R. Wasielewski

Clare Hamilton Hall Professor of Chemistry Executive Director, Institute for Sustainability and Energy at Northwestern and Solar Fuels Institute Director, Argonne-Northwestern Solar Energy Research (ANSER) Center Department of Chemistry, Northwestern University 2145 Sheridan Road, Evanston, IL 60208-3113 Ph: 847-467-1423; Fax: 847-467-1425 Email: m-wasielewski@northwestern.edu

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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

Dear Chairman Smith and Ranking Member Johnson,

I am writing to let you know that I very strongly support the Solar Fuels Innovation Act. Thank you for your leadership in promoting this important direction in America's energy future.

I have spent the past 40 years contributing to the global effort to obtain a fundamental understanding of how the Sun's energy can be used to develop new technologies critical for energy independence. Solar energy is not only clean and virtually unlimited; it also offers the promise of powering technologies that go far beyond those that most of us recognize, such as solar panels for electricity production. In the past decade, the application of the Sun's energy to directly produce chemical fuels from carbon dioxide and water has been recognized as a route to carbon-neutral clean energy production. Moreover, generating "solar gasoline" can make use of today's fuel distribution and usage infrastructure, thus saving enormously over a dramatic conversion to a new fuel.

The payoff to the United States is enormous, from a national security stance, as well as very significant economic and environmental benefits. The scientific, engineering, and cross-disciplinary fields targeted by this bill are exactly those that are most critical to solving the problem. Moreover, the advocacy of using larger teams of scientists and engineers organized to meet this challenge is already a proven strategy for success. As the current Director of a DOE-sponsored Energy Frontier Research Center, and the founder of the Solar Fuels Institute, a global solar fuels research consortium involving more than 25 industries and research centers, I can vouch from direct experience as to the value of a team approach to solving these challenging problems.

The Solar Fuels Innovation Act will ensure that the United States remains in a leadership position making the discoveries key to implementing successful technologies for a secure, clean energy future.

Sincerely,

Michael R. Wasielewski Clare Hamilton Hall Professor of Chemistry