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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 in firm support of the Solar Fuels Innovation Act. This research initiative will enable fundamental research that draws inspiration from biology to capture, convert, and store solar energy, providing a path to understanding and applying these underlying principles to technological applications.

Funding of this initiative will further the international competitiveness of the United States in basic energy conversion research by promoting increased laboratory participation in the field of solar fuels research. The integration of human-engineered components for the solar-to-fuels process allows a temporally transient energy source to be converted to valuable chemicals or fuels deployable on demand while minimizing land and resource needs. These approaches hold promise for developing sustainable schemes to photochemically generate a range of value-added products relevant to a renewable energy economy, providing avenues for the energy security of the United States.

The development of synthetic solar technologies requires effective interfaces not only between the relevant components at the construct and device level but also between researchers, team managers and leaders at the organizational level. As our modern world's economies and well-being are tightly linked to energy production and use, there is an urgent need for scientists trained in this field. Renewable energy is a topic that appeals to graduate and undergraduate students, as the motivation for the research is clear and compelling. This initiative will provide training opportunities for a new generation of scientists by integrating various fields of solar energy, including chemistry, biology, physics, material science and engineering to train multi-disciplinary students so that they can further address real-life societal challenges of energy use and distribution.

As an assistant professor at the School of Molecular Sciences at Arizona State University, I am committed to the progress and success of solar fuels research. Funding opportunities such as those proposed in the Solar Fuels Innovation Act ensure that the United States continues to compete as a global leader in solar energy technologies, which provide benefits to our economy, security, and environment. I applaud the efforts outlined in the Solar Fuels Innovation Act and advocate for its success.

Sincerely,



Gary F. Moore

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