Yale *Energy Sciences Institute*

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July 5, 2016

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

The 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,

We, the faculty of the Yale Energy Sciences Institute at Yale's West Campus, are writing to thank you for sponsoring and introducing the Solar Fuels Innovation Act, amendment of Section 973 of the Energy Policy Act of 2005 (42 U.S.C. 16313). This bill will enable the United States to continue leading the scientific research and technological development frontier in Artificial Photosynthesis – the direct production of fuels from sunlight.

We find the bill to be well aligned with the core mission of our education and research programs at Yale, prioritizing the basic and applied sciences of direct solar energy conversion and storage with improved efficiency, stability and lower cost. In the past few years, our university has reached a campus-wide consensus to promote Solar Energy research and development at all fronts. Yale's Energy Sciences Institute, located at the 140-acre Yale West Campus, represents the commitments of Yale students, faculty and stakeholders. We recognize that innovations in solar fuels production would allow for grid-scale energy storage, and for carbon-neutral transportation fuels, both of which are critical gaps at present towards reaching a carbon-neutral society. Currently, molecular photocatalysts mimicking Nature's photosynthesis, inorganic materials like those used in solar panels, and catalysts that are coupled to those devices are growing programs at Yale. We focus on not only solar hydrogen production, but also alternative fuel concepts such as nitrogen fixation to ammonia.

With a focus on energy as a driving force in the physical sciences, researchers at Yale's Energy Sciences Institute conduct interdisciplinary research of renewable energy and carbon mitigation. This has been attracting undergraduate, graduate students and post-doctoral fellows from across the departments of Chemistry, Geology & Geophysics, Mechanical Engineering & Materials Science, Applied Physics, Physics, Chemical & Environmental Engineering and Electrical Engineering. The open-concept lab space serves as an incubator for next-generation scientists, engineers and leaders to take on societal challenges.

The Energy Sciences Institute faculty at Yale University appreciates your consideration for the Solar Fuels innovation Act. We look forward to supporting all the hard work and interests by you and your staff in the months and years to come.

Sincerely,

Gary W. Brudvig
Director, Yale Energy Sciences Institute
Benjamin Silliman Professor and
Chair of Chemistry

Scott A. Strobel
Vice President West Campus Planning and Program Development
Henry Ford II Professor of Molecular Biophysics & Biochemistry

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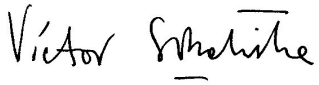

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