

Ramon Gonzalez, Ph.D.

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Dr. Ramon Gonzalez is a Program Director at the Advanced Research Projects Agency-Energy (ARPA-E) of the U.S. Department of Energy. His areas of technical focus include biological conversion of natural gas and other sources of methane to liquid fuels as well as direct synthesis of liquid fuels from carbon dioxide and energy sources (such as electricity and hydrogen). Dr. Gonzalez recently led the development of the program REMOTE, whose acronym stands for Reducing Emissions using Methanotrophic Organisms for Transportation Energy. REMOTE is a first-of-its-kind program that focuses on the development of advanced bioconversion technologies to produce liquid transportation fuels from methane, the main component of natural gas, at high energy efficiency and with a low carbon footprint (Conrado and Gonzalez, *Science* 343: 621-623, 2014). These transformational technologies will support natural gas bioconversion facilities with a low capital cost and able to operate efficiently at small scales, which in turn would enable the use of any natural gas resource, including those frequently flared, vented, or emitted. As a Program Director at ARPA-E, Dr. Gonzalez has also managed the Electrofuels program, which focuses on the development of non-photosynthetic autotrophic organisms for the conversion of CO₂ and electricity to infrastructure-compatible liquid fuels.

Dr. Gonzalez is also an Associate Professor in the Department of Chemical & Biomolecular Engineering at Rice University, where he leads the Metabolic Engineering and Synthetic & Systems Biology Laboratory. He is the co-founder of Glycos Biotechnologies, Inc., a Houston-based technology company commercializing sustainable chemicals produced from diverse renewable feedstocks. Dr. Gonzalez received a Ph.D. in Chemical Engineering from the University of Chile, a M.S. in Biochemical Engineering from the Pontifical Catholic University of Valparaiso (Chile), and a B.S. in Chemical Engineering from the Central University of Las Villas (Cuba).