



M. Toufiq Reza

M. Toufiq Reza, is the 2022 recipient of the New Holland Young Researcher award for his role as an emerging global leader connecting diverse fields of agricultural, chemical, and environmental engineering on biomass conversion.

Reza is an assistant professor of chemical engineering in the Department of Biomedical Engineering and Sciences at the Florida Institute of Technology. He currently teaches courses in introduction to environmental engineering, heat transfer processes, industrial safety, and chemical reaction engineering. Reza also leads a research group seeking to apply fundamental chemical engineering concepts and hydrothermal processes to recover energy and value-added products from unwanted wet biowastes in a sustainable manner.

He has acquired external funding totaling more than \$6 million from numerous sources. This includes funding from the USDA to pursue agricultural residue reduction and mitigation harmful algal blooms. He also received funding from the National Science Foundation to pursue organic fraction of municipal solid wastes and carbon capture from biogas and Ohio Coal Development Office funds research in coal waste. He is also supported by the Western Sungrant Initiative to pursue cow manure for nutrient recovery, Sugarbush Foundation to pursue septic tank waste to reclaim phosphorus, and Florida Sea Grant to mitigate harmful algal blooms in Florida. Reza recently received a United

States Agency for International Development grant to develop sustainable technology to convert waste biomass to hydrogen in Bangladesh. These projects have been featured in a number of publications.

Reza contributes as a member on a number of ASABE committees including the Energy Systems Bio-based Energy, Fuels, and Products and the Processing Systems Food and Organic Waste Management and Utilization committees. He is also active in the ASABE Florida section. Reza has served on panels and as an ad hoc reviewer for the National Science Foundation, Department of Energy, American Chemical Society, and other national and global technical organizations.

Reza has authored or coauthored more than 170 peer-reviewed articles, book chapters, conference proceeding papers, and popular press articles and his work has been cited very frequently. He also holds two US patents and has three more pending. Throughout his career, Reza has received a number of awards. He was rated in the top 2% of world researchers in 2020. In 2021, he joined the Industrial and Engineering Chemistry Research Class of Influential Researchers. In 2019, he received the American Chemical Society Petroleum Research Fund award and the Marvan E. and Ann D. White Research award from the Russ College of Engineering from Ohio University.

