

## **Amgad Elgowainy, Ph.D.**



Senior Scientist and Group Leader, Argonne National Laboratory, USA

1994 Ph.D. Mechanical Engineering, State University of New York, Buffalo, USA

2002- Senior Scientist and Electrification & Infrastructure Group Leader, Argonne

1999-2002 Visiting Professor, Purdue Northwest University

1996-1999 Senior Project Engineer, Advanced R&D, Rheem Manufacturing Company

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Dr. Amgad Elgowainy is leading a team of 25 researchers covering engineering process modeling, environmental life cycle analysis and techno-economic analysis of hydrogen technologies and end use applications. His research projects support governmental agencies, OEMs, energy industries, and utility and gas companies. He is serving as a technical expert on several Technical Teams of the US DRIVE and the 21<sup>st</sup> Century Truck Partnerships. He also served as a technical expert in several of the International Energy Agency (IEA) Technical Collaboration Programs on electric vehicles, hydrogen, and fuel-cell vehicles, and is currently supporting the development of greenhouse gas (GHG) emissions accounting methodology for the International Partnership of Hydrogen Economy (IPHE). Dr. Elgowainy has contributed to the development of the environmental life cycle analysis models (GREET®) and has led the development of hydrogen infrastructure techno-economic suite of models (HDSAM and HDRSAM). Dr. Elgowainy authored and coauthored more than 200 technical publications, edited a volume on Electric, Hybrid and Fuel Cell Vehicles, and authored several book chapters. He developed several licensed patents related to fueling methods. Dr. Elgowainy received numerous government and industry awards and taught undergraduate and graduate engineering and environmental courses at University of Chicago, Purdue University Northwest, Tennessee State University, and University at Buffalo.