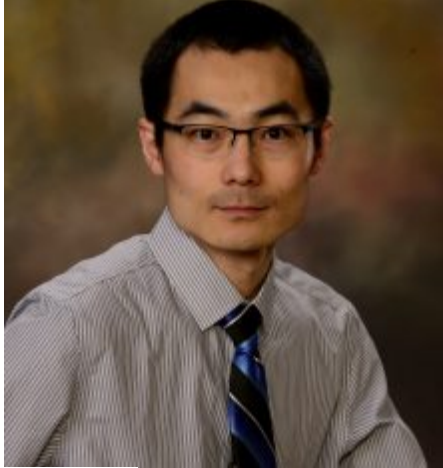


Meet the 2018 Key Note Speaker-  
Topic: Bioenergy and Biofuel for The Sustainable Future of US



Yi Wang

### EDUCATION

Ph.D., Agricultural and Biological Engineering 08/2012

University of Illinois at Urbana-Champaign (UIUC)

M.S., Environmental Engineering, 06/2006

University of Science and Technology of China (USTC)

B.S., Environmental Engineering, 06/2003

University of Science and Technology Beijing (USTB)

### PROFESSIONAL EXPERIENCE

Assistant Professor, 01/2015-present

Biosystems Engineering Department, Auburn University

Post-Doc Research Associate, 06/2012-12/2014

Center for Advanced BioEnergy Research (CABER), Institute for Genomic Biology, UIUC

### HONORS AND AWARDS

Auburn University New Faculty Scholar, Biggio Center for the Enhancement of Teaching Learning (09/2015-05/2016)

ASABE Young Professionals Community "Get to the AIM 2013" Incentive (07/2013)

Young Presenter Award at Clostridium XII Conference (09/2012)

Scholarship of Renewable Fuels Association (RFA) at 17th National Ethanol Conference

Gamma Sigma Delta-The Honor Society of Agriculture, Illinois Chapter (03/2011)

Abbott Laboratories Fellowship for Graduate students, UIUC (08/2006-07/2007)

Excellent Thesis for Master's Degree in Anhui Province, Anhui, China (08/2006)

## PROFESSIONAL AFFILIATIONS

American Society of Agricultural and Biological Engineers (ASABE) (2009-present)  
Society for Industrial Microbiology and Biotechnology (SIMB) (2010-present)



## PROFILE OF ADENIKE BOYO

Adenike Boyo, fifty years of age, born on 11th December 1963. I have been living in Lagos, Nigeria all my life. Professor of physics working with Lagos state university, Nigeria for the past twenty four years. As a lecturer and researcher, I specialize in solar energy physics, teaching undergraduate and postgraduate students and extensively researching in this field to provide knowledge, educate and enhance quality of life in solving problems of energy and power in the environment. Also as a specialist in this area, I have work with state government as a Director in the Ministry of Science and Technology promoting science, formulating policy and electrification of rural villages with photovoltaics cells. I have attended several conferences, presented papers on solar energy and most of the articles are published in reputable journals. I received the merit award for outstanding contribution to the Development of Science and Technology by Lagos State Ministry of Science and Technology 21<sup>st</sup> April, 2005

## RESEARCH

### I. Completed

#### ◆ SOLAR ENERGY STUDIES

- ◆.I. Modeling of Global Radiation on horizontal surfaces
- ◆.II. Construction and Analysis of Solar Still, Solar Dryer, Solar Hot Water Heater and Cookers

#### B SOLID STATE PHYSICS

Electrical Properties of Iron Clay Composite Resistors

### II. IN PROGRESS

#### A. SOLAR ENERGY STUDIES

- ◆ Albedo Measurements

- ◆ Computational / Modeling of Global Solar Radiation on Inclined Surface
- ◆ Modeling / Measurements of Direct and Diffuse Radiation
- ◆ Solar Electrification of Rural Villages
- ◆ Solar Powered Traffic Light

## B SOLID STATE PHYSICS

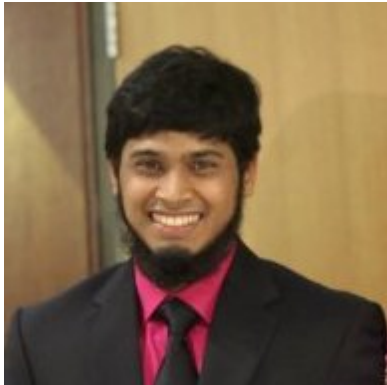
- ◆ Thermodynamics properties of Binary Alloys
- (II) Material Characterization using Chemical Bath Deposition
  - i.e. An Electrical, Optical and Mechanical Properties of Materials in general
  - III. Thermodynamics properties of Ternary Alloys
  - IV. Dye Sensitized Solar Cells

## PROFESSIONAL BODIES

- ◆ Member International Solar Energy Society
- ◆ Member Solar Energy Society of Nigeria
- ◆ Member of Nigerian Materials Research Society
- ◆ Member Nigeria Institute of Physics
- ◆ Member Africa Network Of Solar Energy
- ◆ Third World Organization for Women in Science

V.

## 2. Mohammad Biswas



Title: Assistant Professor  
 Department: Mechanical Engineering  
 Building: HEC A214  
 Email: mbiswas@uttyler.edu  
 Phone: 903.566.6115

### **Degrees**

- Ph.D., University of Florida, 2013
- B.Che., Auburn University, 2008

### **Biography**

Dr. Biswas has interests in fuel cell and other alternative energy systems, and process control and modeling. He is currently assisting in Rapid

Prototyping Laboratory projects as a Visiting Professor at NASA Johnson Space Center. He is a member of ASEE, ASHRAE and ASME. He received his Doctor of Philosophy in Chemical Engineering from the University of Florida. He received his Bachelor of Chemical Engineering from Auburn University. He is a co-inventor of a patent and has co-authored four journal and conference publications involving topics on fuel cell systems and empirical model development. Dr. Biswas came on as an adjunct faculty in Fall 2013 prior to joining the full-time UT-Tyler faculty in January 2014. My research areas of interest are in process and system-level model and control development including fuel cell, aerospace and building energy applications. Current work has been on the simulation and control development of a fuel cell and battery powered unmanned aerial vehicles such as quadcopters. We are not only developing and analyzing the fuel cell, battery and quadcopter motors models, but also comparing advanced control strategies such as model predictive control with classical PID controllers for power management. Such an approach can be of benefit to increase battery lifetime in various applications ranging from search and rescue missions to chemical plant hazard and leak inspections. We are also developing empirical and semi-analytical models for a direct methanol fuel cell to better predict the performance and design a more robust control strategy in small portable device applications. In addition, I am collaborating with NASA on software development and verification of Orion Cockpit display units for the Mars mission. M. A. Rafe Biswas, Ph.D.

Dr. Okeke is a Professor in the Department of Biology. His research interests include: biofuel, biosensors, bioremediation, effects of pollutants on microbial communities, indicators of microbiological safety of water and food, microbial enzymes and genetic engineering. He teaches industrial microbiology, environmental microbiology, general microbiology and principles of biology.

- Chemical Engineering Applications to Study the Chemical Evolution and Biological Degradation of the Oil-Dispersant Systems and Subsequent Interaction with the Marine and Coastal Ecosystems (Year One Block Grant-MESC)