RESEARCH FOCUS ON DR. SANDRA EKSIOGLU

In the last few years we have seen a shift from the consumption of fossil fuels toward clean and renewable forms of energy. This shift has been driven by technological advancements and the need to reduce greenhouse gas emissions, improve energy security, and enhance energy access.

Dr. Sandra Eksioglu of Clemson University received funding from NSF to develop models which will lead to the enhancement of bioenergy supply chains. Bioenergy, that being fuel or power, is generated using biomass (e.g., agricultural products and residues, forest products and residues, animal waste, etc.). Due to the physical and chemical characteristics of biomass, its collection, storage, transportation and processing is challenging. Sandra and her team of students from the Industrial Engineering Department develop mathematical models to identify innovative biomass supply options and logistical arrangements that lead to reductions in costs, emissions and

PROJECT TITLE
NSF CAREER: Models for Supply Chain Design and Logistics Management of Biofuels

AIM
The research objective is to build integrated supply chain design and management models for biofuels. The goal is to improve the performance of this supply chain, and consequently increase the practicality of biofuels as a source of energy.

AWARD ABSTRACT
https://www.nsf.gov/awardsearch/showAward?AWD_ID=1462420

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uncertainties in the supply chain. In the course of this research, some of her undergraduate and graduate students have had the chance to intern and/or land a job at the Idaho National Laboratory which is one of the US Department of Energy Research Laboratories that leads current research in this field.

Picture features Dr. Eksioglu and the two PhD students at Clemson working on this project.

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