Biomass Conversion to Biofuel and Biobased Product

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Location: Holmes Hall 244, Date: Thursday, October 22, 2009, Time: 4:30 – 5:30 pm

About the speaker: Dr. Samir Kumar Khanal is an Assistant Professor of Bioengineering in Molecular Biosciences and Bioengineering Department at University of Hawai'i at Mānoa and Collaborating Assistant Professor at Iowa State University. Dr. Khanal obtained Ph.D. in Civil Engineering with focus in Environmental Biotechnology from the Hong Kong University of Science and Technology, Hong Kong in 2002. Dr. Khanal’s research focuses on application of physical, chemical and biological principles for the production of biofuel/bioenergy and bio-based products from biomass. Dr. Khanal has over 30 refereed journal publications since 2003. He is a co-recipient of R&D 100 Award in 2008. Dr. Khanal also recently published a book "Anaerobic Biotechnology for Bioenergy Production: Principles and Application" (Wiley-Blackwell) and is a lead editor of another book entitled "Biofuel and Bioenergy from Biowastes and Biomass" (American Society of Civil Engineers (ASCE)). Dr. Khanal is a registered professional engineer in the state of Iowa.

Abstract

We are faced with concerns of climate change, increased global demand on fossil fuels, national energy insecurity, and continuous exploitation of limited natural resources. Sustainability requires research efforts that will address growing energy insecurity, global environmental issues, and depleted natural resources. This presentation is about a new paradigm: examining an integrated approach in converting biomass into biofuel and biobased products. The speaker will share some of his on-going research works on biofuel and biobased product in College of Tropical Agriculture and Human Resources (CTAHR).