

2011-2012

# Special Seminar

## The Department of Mechanical Engineering – Engineering Mechanics

Proudly Presents

**Ida Ngambeki**

**School of Engineering Education  
Purdue University**



Ida Ngambeki is a doctoral candidate in the School of Engineering Education at Purdue University with a concentration in Ecological Sciences and Engineering. Originally from Uganda, she got her B.S. in Engineering from Smith College in Northampton MA in 2007. She is Vice Chair of the Graduate Engineering Education Consortium for Students and an associate member of the Sigma Xi Scientific Research Society. Her research interests include motivation and interest in engineering, engineering and public policy, the use of artifacts in engineering, and the development of engineering cognition.

**Thursday, April 19, 2012 2:00 – 3:00 p.m. Room 302, ME-EM Bldg.**

### *Exploring the relationship between person and thing orientations and technical aptitudes*

One of the most prominent problems in engineering today is the low level of retention of engineering students and persistence into engineering careers. Technical aptitudes are believed to be a contributing factor to engineering students' success and therefore, persistence. While in other professional fields a number of studies have demonstrated a strong relationship between student interests and abilities and professional entrance and retention, little is understood about how interest affects career preferences in engineering. This seminar will examine the interaction between technical aptitudes, specifically spatial and mechanical aptitudes, and interest operationalized as a differential orientation to persons called Person Orientation (PO), distinguished by an interest in interpersonal interactions, and an orientation to things called Thing Orientation (TO), distinguished by a desire for mastery over objects. The implications of the interactions between aptitudes and interests for persistence in engineering will be discussed.