Current CE Extramural Research Projects

**Environmental**

4. Smart Adaptation of Enriched Microbiomes in Recovered Nutrient Products (bio-fertilizers) from Anaerobic Wastewater Treatment to the Native Soil. Paremeswaran, P., PI. Sponsor: National Science Foundation.

**Geotechnical**

4. Predicting Critical Shear Stress of Fine-Grained Soils in Kansas. Kulesza, PI. Sponsor: Kansas Department of Transportation.
7. EAGER SitS: Sustainable Biosensor Integration for Precision Management of Agricultural Soils. Welch, PI; Hansen; Hetteriarchchi, Kulesza, Paramewaran, Co-PI. Sponsor: National Science Foundation.
8. Building Field Based Ecophysiological Genome-to-Phenome Prediction. Welch, PI; Asebedo, Flippo, Duke, Alvarez Santos, Hettiarachchi, Fritz, Poland, Albin, Bellow, Dunn, Kulesza, Co-PI. National Science Foundation.

9. Implementation AASHTOWare Pavement ME Design Software for KDOT. Hossain, M., PI; Kulesza, Co-PI. Kansas Department of Transportation.


Materials


2. Optimum AC Overlay Thickness over FDR of Existing AC Pavements. Hossain, M. PI. Sponsor: Kansas Department of Transportation.


5. Durable High Early Strength Concrete. Jones, C., PI. Sponsor: Kansas Department of Transportation.


Structures


Transportation


4. Developing Vehicle Speed Profiles for Typical Kansas Work Zones with Unseen Hazards or Sudden Changes in Horizontal Alignment after Advance Warning. Fitzsimmons, E., PI. Sponsor: Kansas Department of Transportation.


Water Resources


2. INFEWS/Track 1: Mesoscale Data Fusion to Map and Model the U.S. FEW system (INFEWSion). Marston et al. Sponsor: National Science Foundation.