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

1. Use of Vegetation Enhanced by Green Soil Stabilization for Protection of Kansas Roadsides against Erosion, Peric, PI; Hoyle, Co-PI. Sponsor: Kansas Department of Transportation.
5. Predicting Critical Shear Stress of Fine-Grained Soils in Kansas. Kulesza, PI. Sponsor: Kansas Department of Transportation.
8. EAGER SitS: Sustainable Biosensor Integration for Precision Management of Agricultural Soils. Welch, PI; Hansen; Hetteriarchchi, Kulesza, Paramewaran, Co-PI. Sponsor: National Science Foundation.
9. 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.

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


15. Water Management to Sustain the Economic Activity from the Ogallala Aquifer on the Southern High Plains - KSU. Kulesza et al., US Department of Agriculture.

**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.