

Past K.K. Barnes Student Paper Award Winners

2019

1st Place – Carrie Sandford, North Carolina State University

“Influence of Carbon Source Preadaptation and pH Adjustment of Soluble Sugar Consumption and Production Formation by *Clostridium autoethanogenum*”

2nd Place – Breuklyn Opp, Iowa State University

“Food Transportation Emissions and Estimation Tools”

3rd Place – Adam Hemmelgarn, Purdue University

“Calibrating the Physical Properties of Corn and Wheat using the Discrete Element Method”

2018

1st Place – Michelle Friedmann, Iowa State University

“Evaluation of Stirring to Control Lesser Grain Borers in Stored Wheat”

2nd Place – Berkley White, Kansas State University

“Biorefining Microalgae: Protein Recovery from *Chlamydomonas reinhardtii*”

3rd Place – Michelle Dixon, Purdue University

“The Effects of Compaction on Reconstitution Characteristics of Dairy Powder”

2017

1st Place – Alison Deviney, North Carolina State University

“Effects of pH on Urease Inhibition in Urea Solution and Urine”

2nd Place – Grace Billy, Pennsylvania State University

“Infiltration Rates in Winter Conditions Impacting Surface Water Runoff at Penn State's Living Filter”

3rd Place – Kayla Kassa, Gonzaga University

“Erodibility Parameters Derived from Jet and Flume Erosion Tests on Root Permeated Soil”

2016

1st Place – Tyler Rau, Iowa State University

“Evaluation of Stirring to Control Weevils in Stored Maize”

2nd Place – Christian Ley, Oklahoma State University

“Microalgae Cultivation for Wastewater Remediation and Bioenergy Production”

3rd Place – Kseniya Sheshukova, Kansas State University

“Absorption Kinetics of Recombinant Human Serum Albumin for Development of an Integrated Purification Process”

2015

1st Place

Kseniya A. Sheshukova – Kansas State University

“Extraction Analysis of Recombinant Human Serum Albumin in Transgenic Rice Extracts

2nd Place

Jonathan C. Overton – Oklahoma State University

“Production of Butanol from Switchgrass Using a Novel Detoxification Process”

3rd Place – Karl Maxwell – University of Florida

“ Validation of Technique to Estimate Logistic Model Parameters from Linear-Plateau”

2014

1st Place

Whitney A. Lisenbee, Oklahoma State University

“Quantifying the Influence of Vegetation Roots on the Erodibility of Streambanks”

2013

1st Place

Jacquelyn E. Neal, University of Florida

“Anaerobic Digester Effluent as Fertilizer for Hydroponically Grown Tomatoes”

2nd Place

Paul R. Schumacher, University of Illinois

“Quantifying Erosion Control Blanket Effectiveness at Reducing Soil Loss”

3rd Place

Aaron J. Matzke, University of Nebraska-Lincoln

“Developing Heat Transfer Modeling of Multi-Component Microwavable Foods”

2012

1st Place

Mikayla Marvin, Oklahoma State University

“Escherchia coli Transport to Subsurface Drains Through Surface-Connected Macropores ”

2ndPlace

Elizabeth Luby, Virginia Tech

“Design of a Research Database in Microsoft Access for Statistical and Geospatial
“Analysis of Virginia Private Water Supply Systems ”

3rd Place

Jeff Askey, Iowa State University

“Oxygen Demand of Bruchids ”

2011

1st Place:

Edel M. Victor, University of Nebraska-Lincoln

“Radio Frequency Assisted Heat Treatment of Egg White Powder”

2nd Place:

Emily M. Matlock, Oklahoma State University

“Infiltration: A Key Process in Escherichia coli Load Reduction from Runoff by Vegetative Strips”

3rd Place:

Anna M. Hodge - University of Missouri

“Profile Estimation of Soil Organic Carbon and Total Nitrogen using Visible and Near Infrared Reflectance Spectroscopy”

2010

1st

Scott W. Wiens, Kansas State University

"Effects of Tensile Stress on Emitter Discharge of SDI Systems"

2nd

Alexander H. Sheridan, University of Missouri

"Estimation of Soil Physical and Chemical Properties through Visible and Near Infrared Reflectance"

3rd

Jacob F. Baker, University of Iowa

"The Use of Phosphorus Sorption Isotherms to Project Vegetative Treatment Area Life Expectancy"

2009

1st

Gayle C. Bishop, Iowa State University

"Evaluation of Laboratory Biochemical Methane Potentials as a Predictor of Anaerobic Dairy Manure Digester Biogas Production"

2nd

Emily C. Mangus, Kansas State University

"An Evaluation of Polar Trees as a Potential Biofuel Source"

3rd

James M. Lindstedt, University of Wisconsin

"Retrofit of a Gantry-style Crane With an Elevated Work Platform"

2008

1st

Benjamin J. Rottinghaus, Iowa State University
"Burning Distillers Grain Pellets in Corn-Fueled Furnaces"

2nd

Ashley E. Clark, Kansas State University
"Subsurface Drip Irrigation: Wastewater Treatment Solutions"

3rd

Elizabeth A. Brooks, University of Illinois, Urbana-Champaign
"An Innovative System for Bioremediation of Agricultural Chemicals for Environmental Sustainability"

2007

1st

Ross V. Muhlbauer, Iowa State University
"Low Cost Method for Monitoring Flow from a Vegetative Treatment System"

2nd

Jacob M. Bolson, Iowa State University
"Temperature Stability of Zeltex AccuHarvest Mobile Near-Infrared Spectroscopy Units"

3rd

Bryan D. Whitman, Iowa State University
"Dairy Windrow Composting Infiltration/Rainfall Simulation"

2006

1st

Karl M. Broer, Iowa State University of Science and Technology
"Modeling Sorbent Canister Breakthrough Time of Toxins to *R. rubrum* In Producer Gas"

2nd

David F. Bevill, Oklahoma State University
"Stilling Basin and Riprap Stability Design for RCC Stepped Spillways"

3rd

Kyle J. Baumgartner, Iowa State University
"Spontaneous Heating of Corn Gluten Feed Pellets"