# ASEE Illinois/Indiana Section Conference Paper Presentation Schedule

#### Session 1A: 9:00-10:15 AM --- Fawick Hall (Room 119)

An Evaluation of the Critical Engineering Literacy Test Instrument through Item Analysis and Comparison to the Critical Assessment Test by Ruth E. H. Wertz, Austin Saragih, Michael J. Fosmire, Şenay Purzer, and Amy S. Van Epps (Purdue University)

**Interdisciplinary Collaboration to Address Mechanical Engineering Students' Writing** by James V. Canino, Sara Young (Trine University)

**Problem-Based Learning to Promote Student Creativity** by Douglas Tougaw, Jeffrey D. Will (Valparaiso University)

**Towards Evaluating the Content, Assessment, and Pedagogy in Instructional Laboratories** by Nicholas D. Fila, Ruth E. H. Wertz (Purdue University)

# <u>Session 1B: 9:00-10:15 AM --- Fawick Hall (Room 122)</u>

Multidisciplinary Instrumentation Student Projects by Andrea Mitofsky (Trine University)

**Identifying Reflective Practice In One Engineering Design Meeting** by John Mendoza-Garcia (Purdue University)

The Development of a Radio Frequency Identification based Interactive Academic Advising System by Joseph Chen, Hui Zhang, Kerry Melton (Bradley University)

**Analogy and Humor as Tools for Understanding and Retention** by Kerry R. Widder, Jeff Will (Valparaiso University)

### Session 1C: 9:00-10:15 AM --- Fawick Hall (Room 125)

**Convergence - Engineering and Business Education Enhancements** by Lex A. Akers, Darrell Radson (Bradley University)

**STEM Thinking in Informal Environments: Integration and Recommendations for Formal Settings** by Dana Denick, Emily Dringenberg, Farrah Fayyaz, Lindsey Nelson, Nicole Pitterson, DeLean Tolbert, Michele Yatchmeneff, Monica Cardella (Purdue University)

An In-Class Demonstration Used as an Introduction to the First Law of Thermodynamics for an Open System by Robert Edwards (Penn State Erie)

**Introducing Design of Experiments in a Civil Engineering Junior Level Laboratory Course** by S. Immanuel Selvaraj (University of Evansville)

# <u>Session 2A: 1:30-2:30 PM --- Fawick Hall (Room 119)</u>

**Design Of A Phototvoltaic Panel Experiment For An Undergraduate Heat Transfer Lab** by Andrew McCormick, Jason Davis, Donald W. Mueller, Hosni I. Abu-Mulaweh (Indiana University-Purdue University, Fort Wayne)

The Future of Energy: Analyzing the Topography of Solar Cells by Amanda M. Kollak, Helen A. McNally (Purdue University)

**TSAT Solid State Detector and Plasma Probe Particle Detectors** by Daniel McClure, Seth Foote, Hank Voss (Taylor University)

#### Session 2B: 1:30-2:30 PM --- Fawick Hall (Room 122)

Views on Flipping Engineering Thermodynamics by James V. Canino (Trine University)

Simulation For Teaching Organizational Culture by Terry Schumacher (Rose-Hulman Institute of Technology)

The Use of Undergraduates as Research Assistants by Carmine Polito (Valparaiso University)

## <u>Session 2C: 1:30-2:30 PM --- Fawick Hall (Room 125)</u>

**Thermal and Ultraviolet Modeling, Balancing, and Sensing** by Adam Kilmer, David Boyajian (Taylor University)

Exploring the Efficacy of Interactive Classroom Methods Assessed by the Competencies of Information Transference by Brian W. Loss, Steve Schaffner (Purdue University)

**Incorporation of Sustainability in the Senior Design Project: a Multimedia Water Filtration System** by Dong Chen, Tyler Bourdon, Zachery Estes, Emily Hauter, Suleiman Ashur (Indiana University-Purdue University, Fort Wayne)

# <u>Session 3A: 2:40-3:25 PM --- Fawick Hall (Room 119)</u>

Incorporating Different Design Aspects of Land Transportation in the Introductory Level Undergraduate Transportation Engineering Course by S. Immanuel Selvaraj (University of Evansville)

**TSAT Student Flight Processor and Ground Support Equipment** by David J. Lew, Jacob L. Baranowski, Richard Min (Taylor University)

A result of two accrediting agencies: Integrating machine burden and customer demand analysis into group technology by Yan Liang, Dennis E. Kroll (Bradley University)

#### Session 3B: 2:40-3:25 PM --- Fawick Hall (Room 122)

Analysis of a Worker Assignment Model in a Lean Manufacturing Environment by Matthew Waltz, Tom McDonald (University of Southern Indiana)

**TSAT VLF and Electric Field Sensor on Boom System** by Matt Orvis, Kevin Seifert, Jeff Dailey (Taylor University)

Finite Element Modules for Demonstrating Critical Concepts in Engineering Vibration Course by Shengyong Zhang (Purdue University North Central)

### Session 3C: 2:40-3:25 PM --- Fawick Hall (Room 125)

Competitive Problem Based Learning in an Environmental Engineering Laboratory Course by A. Jason Hill, and Zane W. Mitchell, Jr. (University of Southern Indiana)

**Updating the Leadership and Team Ideas We Present To Students** by Dina Mansour-Cole (Indiana University-Purdue University, Fort Wayne)

**Development Of Oral Communication Skills In Engineering Education** by Anne-Marie Lerner, Jessica Meulbroek, John Mirth, Tamer Ceylan (University of Wisconsin-Platteville)