

## 4<sup>TH</sup>-ANNUAL SPE® ACCE STUDENT POSTER COMPETITION

*For* the fourth time in as many years, the SPE® ACCE is hosting a student poster competition showcasing emerging technologies in the area of automotive and ground-transportation composites. This year's competition features 16 graduate students from 10 universities – the largest pool of entrants yet. The competition is being co-sponsored by SPE's Automotive and Composites Divisions (who co-organize the conference). Students of winning posters judged to be in the Top 3 of the show will receive monetary awards and plaques. All students will be recognized and winners will be awarded in a ceremony on the second day of the conference.

Judges made up of media, industry experts, and SPE board members will review all posters on the first day of the conference. Students and their posters will be judged on 10 aspects, including:

- **content** (student and poster demonstrate clarity of topic, objectives, and background);
- **motivation** for research and technical relevance to conference theme;
- **methodology** and approach to problem;
- **quality** of proposed research results/findings;
- **conclusion** are supported by information presented);
- **presentation** (display aesthetics are pleasing; there is a logical flow between sections);
- presenter has a good grasp of the subject; plus
- **understandability** of poster, which is effective even without student being present to explain it); and overall rank vs. other posters and presenters.

The SPE ACCE poster competition is organized annually by Dr. Uday Vaidya, SPE Composites Division Board Member and Education Chair, and Professor and Director-Engineered Plastics & Composites Group in the Department of Materials Science & Engineering at University of Alabama at Birmingham (UAB).

Topics, student authors, and schools include:

- *Microcrystalline Cellulose Fiber-Filled Engineering Thermoplastic Composites for Automotive Applications*, [Alper Kiziltas](#), Douglas J. Gardner and Yousoo Han, **University of Maine**
- *Evaluation of Coal Fly Ash as a Filler for Thermoplastic Polymer Composite Blends*, [Kendal Novak](#), Scott Shermataro, and J. David Schall, **Oakland University**
- *Cure Kinetics of Partially Bio-Based Polyester Resins with Variable Mixtures of Peroxide Initiators*, [Eldon D. Triggs II](#), **Tuskegee University**
- *All Composite Liner-less CNG Tanks for Transportation and Storage*, [Aaron Laney](#), **Oklahoma State University**

- *Improvement of Fire Retardancy and Durability of Recycled Post-Consumer Carpet*, [Aaron Laney](#), **Oklahoma State University**
- *Prolonging the Structural Integrity of Poly-Lactic Acid Based Natural Fabric Composites*, [Zachary Block](#), **Winona State University**
- *Utilization of Hybridized Fiber Lay-Up in Biobased Sandwich Structures for Mass Transit Applications*, [Sethu Munusamy](#), **North Dakota State University**
- *Thermoplastic Pultrusion Modeling and Experimental Studies*, [Khongor Jaamiyana](#), **University of Alabama at Birmingham**
- *Investigation on Tensile and Thermal Properties of MWCNT Modified Carbon /Epoxy Composites*, [Nusrat Jahan](#), **Tuskegee University**
- *Investigation on the Effect of Fabrication Technique on the Microstructural and Mechanical Properties of the Nickel based Metal Matrix Composite*, [Tharaka Chandanayaka](#), **North Dakota State University**
- *Effect of Changing Molecular Weight Between Crosslinks on Material Properties A Molecular Dynamics Study*, [Christopher Childers](#), **University of Southern Mississippi**
- *Grain Boundary Coalescence in Binary Alloys Using Phase-field Crystal Model*, [Elizabeth Rowan](#), **McMaster University**
- *Temperature Effects on the Impact Performance of Self-Reinforced Polypropylene Composite Laminate*, Sean Severson, [Benjamin Willis](#), **Washington State University**
- *Flax and Hemp Fiber Thermoplastic Composites Process-Performance Correlations*, [Theresa Bayush](#), **University of Alabama at Birmingham**
- *Composite Tooling from Recycled Post-Consumer Carpet*, [Ranji Vaidyanathan](#), **Oklahoma State University**
- *Development and Characterization of Carbon/Carbon Nanographene Composites*, [Dhruv Bansal](#), **University of Alabama at Birmingham**

Please join us in welcoming the students and taking a good look at their hard work.