



Student Design Competition

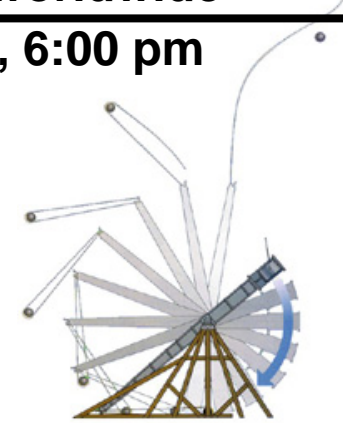


ICC's Annual Engineering Design Competition

Sponsored by SAE International, the society dedicated to advancing mobility engineering worldwide

Thursday, November 15, 2007, 6:00 pm

treb•u•chet
noun. gravity-powered catapults used in the Middle Ages to lay siege to castle walls.

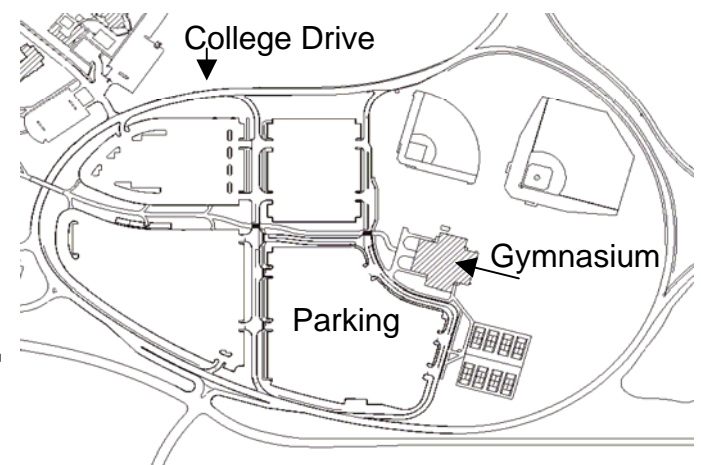


Schedule:

- 6:00-6:45 Students set up/design check
- 6:45-7:00 "Trebuchets and Teamwork: from the Classroom to the Design Room."
Jennifer Leustek
- 7:00-8:00 Design Competition
- 8:00-9:00 pm Competition Completion and Awards

Location:

Illinois Central College (ICC)
East Peoria Campus
Lorene Ramsey Gymnasium
One College Drive
East Peoria, IL 61635
See map for parking and gymnasium location.



Details:

Design teams will compete to see whose trebuchet can throw a tennis ball the farthest. In addition, a team of independent judges will evaluate each trebuchet for quality of engineering. These two factors will be combined to determine winning entries. Cash prizes will be awarded, courtesy of SAE:

- 1st: \$125
- 2nd: \$75
- 3rd: \$50
- Best Design: \$50

SAE members and guests are invited compliments of CIS SAE to observe this event and listen to the speaker. For more information, contact:

Matt Fletcher (Fletcher_Matthew_P@cat.com; 309-578-8784)



Central Illinois Section Centroid News – November 2006



Program Dates

October 16

Kress Corporation
Presentation and
Tour

November 15

ICC Design
Competition

December 7

AWIM Party in
Par-A-Dice

January

Corvette,
America's Sports
Car

February

ARES Engine

March

Donaldson Mufflers
and Aftertreatment

April

Auto Show –
Student Projects

April

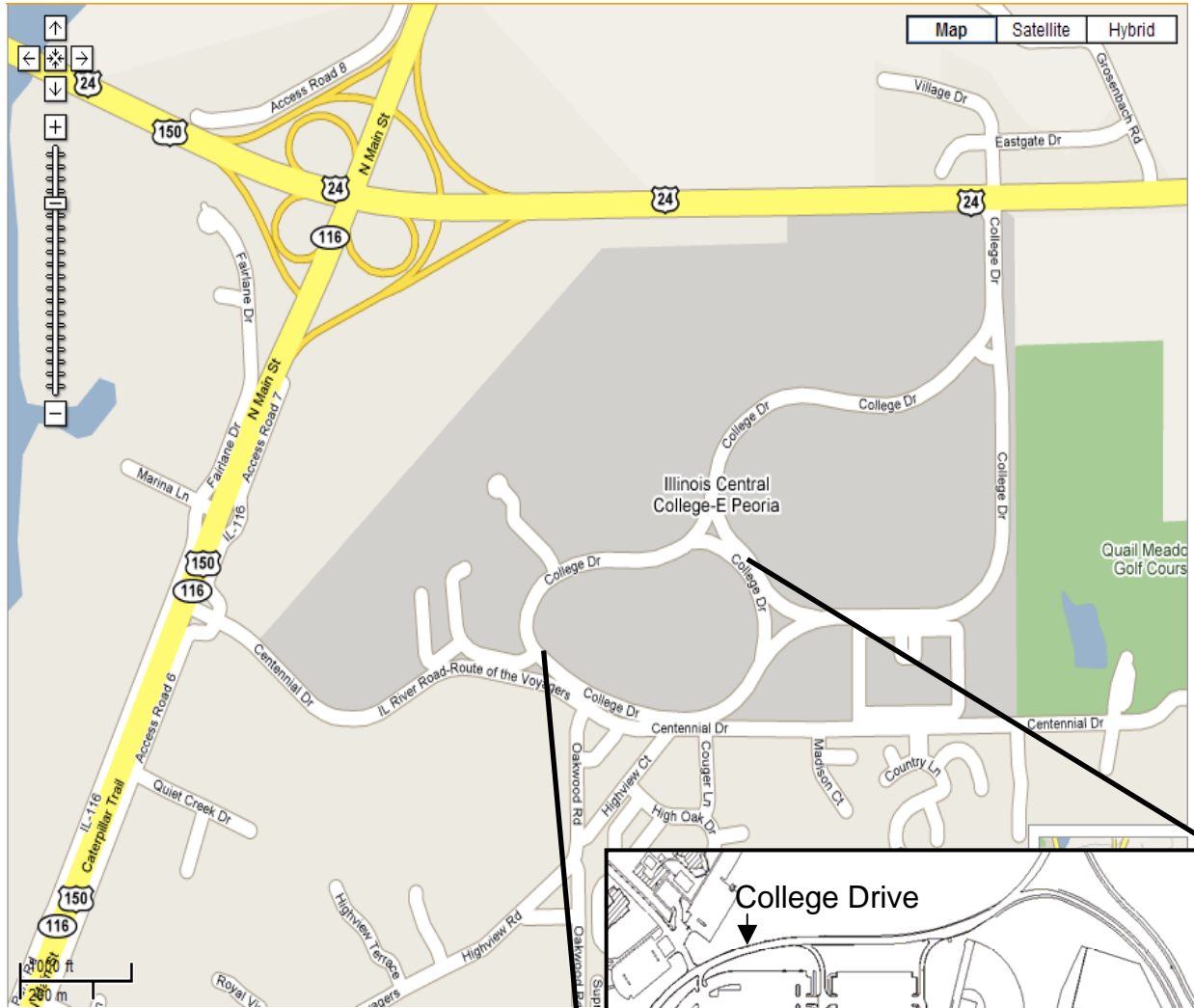
SWE Leadership

May

Precision Driving
School

Directions:

ICC is near the intersection of Route 116 and Route 24 in East Peoria. From the 150/McCluggage Bridge headed East, cross over the Illinois River. Take Route 24 East. The first stop-light past the river is College Drive. Take a right and follow around to parking lot B, where you should park. See map below and on previous page.



Sponsor:



SAE Central Illinois Section

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Chairman's Note:

Thank you for participating in SAE. My name is David Patterson, and I am your section chairman this year. A major deliverable of the section this year is the mini-baja competition, hosted by CIS SAE at the Caterpillar Edwards demonstration area in May 2008. Your support and help will be invaluable to conduct a successful event. Another goal is to make our programs available to a wider audience. Any suggestions would be appreciated. As Mustafa communicated last month, the program team is hard at work planning quite interesting programs for you. Please feel free to let me or any other member of your governing board know how we can better serve you this year. I can be reached at pattedj@cat.com or 309/578-6632. It is a pleasure and an honor to be given this opportunity.



Communication's Note:

Greetings to all CIS SAE members and friends. I am Will Easley, the incoming Communications Chair. I am looking forward to a very exciting year as part of the CIS SAE team. We are very fortunate to have Guillermo Herrera and Girish Parvate-Patil from last year's communications team returning and Matt Wolk as a new member. Our goal is to provide you with timely notification of upcoming CIS SAE events and monthly news letters in the form of our Centroids that are posted on our web site. The Centroids provide an excellent method to find out what's going on in CIS SAE and offer a way of hearing from various members each month. If you have suggestions in regards to our communications or would like to join our team please contact us at: CIS_SAE_Communications@yahoo.com
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I have been an SAE member for over 7 years, though I have just become active in the CIS in this past year. I originally got involved with SAE while conducting research at Vanderbilt University because it provides a forum to present research findings and to learn of others research. It is the preeminent source of engine and automotive information. SAE provides its members with reduced rates for its numerous conferences and published works. These are just a few of the many benefits. Please visit the SAE website to see all of the other benefits SAE provides its members. At the CIS level, the meetings and events provide an excellent opportunity to network with others in the central Illinois engineering community and learn about some of the cool engineering going on in the central Illinois area. It also provides an opportunity to give back to the community in the forms of A World in Motion (AWIM), our yearly design competition at ICC, and other events we sponsor in the area.

I look forward to seeing you at our upcoming events.

Will Easley
Central Illinois Section - Communications Chair

Kress Corporation – Presentation and Plant Tour:



The Central Illinois Section of SAE organized a visit to Kress Corporation of Brimfield, IL on Tuesday, October, 16th for dinner, a presentation, and plant tour.

The event began with a delicious dinner of subs, chips, and fruit salad. Nathan Kress, Marketing Manager of Kress, then took the floor and provided the audience with an overview of the products that Kress supplies, the engineering tools that it uses to design its products, and some statistics about the company. Some of the products that Kress builds are: ladle carriers, slag pot carriers, multi-purpose carriers, pallet carriers, slab carriers, straddle carriers, and bottom dump coal haulers. Many of the machines in each of these categories are tailor made to fit the customer's needs. Kress also produces various custom machines that do not fit into the above categories such as military vehicles, cold weather machine alterations, other production machine alterations, and so on.

Kress markets and provides product support for its machines both independently and through Caterpillar dealers. Kress and Caterpillar work closely on many projects to deliver high customer value solutions, with many Kress machines utilizing Caterpillar parts and sub-assemblies.

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On the tour the group was able to see various types of machines in different stages of completion. Perhaps the most impressive machine was the bottom dump coal hauler (shown below) of which three were under construction. The frame/bed assembly of one was suspended for welding while another was nearing completion with only wheel and axle assemblies missing. Those on the tour were able to inspect each closely to examine the designs and method of assembly.

Kress Corporation was founded by Edward S. Kress in 1965 with its first product being a slag pot carrier. Ralph H. Kress, father of the founder, began working at Kress Corporation in 1969 on the bottom dump coal hauler (see picture) after retiring from the mining machine industry. During his career Ralph worked on advanced technology equipment at several companies including General Motors, WABCO (now Komatsu), Dart, and Caterpillar. He was inducted into the Mining Hall of Fame in 2001 (www.mininghalloffame.org). The company is now run by Edward's son, Nathan Kress and wife Rita Kress. The company currently employs 220 people, 28 of which are engineers. For more information about Kress please visit their website at: www.kresscarrier.com/index.php

The SAE CIS would like to thank Kress Corporation for sponsoring this event and for their gracious hospitality.



Figure: A bottom dump coal hauler manufactured by Kress.



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Upcoming CIS SAE Event:

Come join CIS SAE Friday, December 7th, 6:00 PM
for a party in paradise – we mean Par-A-Dice.

We have scheduled a social event for all CIS SAE members and their families at the Par-A-Dice Hotel to benefit A World in Motion, a program that encourages and stimulates interest in math, science and technology in grade school children. We will have a nice dinner, learn about the technical aspects of running a casino on a marine vessel, and raise money for A World In Motion (AWIM) through a balloon powered car race. So, come get to know your fellow SAE members, and benefit children in the Central Illinois area at the same time! Additional details to follow.

Sponsors are:



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