



## ICC's Annual Engineering Design Competition Sponsored by the Society of Automotive Engineers

Thursday, Nov. 17, 2005, 6 pm

### Speaker:

**Geoff Turk**

Past 6 Sigma Champion and  
Remanufacturing General Mgr  
Caterpillar Inc.

**Location: Illinois Central College  
East Peoria Campus  
Lorene Ramsey Gymnasium**

**5:30 – 6:00 PM** Student set up/design check  
**6:00 – 6:30 PM** Speaker Geoff Turk  
**6:30 – 7:45 PM** Competition  
**7:45 – 8:00 PM** Awards Ceremony



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

Design teams will compete to see who's **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**

The following **design criteria** must be met:

1. The design must be original
2. Total weight must not exceed 10 pounds
3. Total cost must not exceed \$50
4. Must be powered only by gravity (any elastic components used must not contribute energy to the throw).

All students are invited to form teams and enter the competition. Each team must have between two and five members. Entry forms must be submitted no later than November 17, 4 pm. To enter, or for more information, contact:

Prof. Ray Spilsbury  
Office 317C  
694-8449  
[rspilsbury@icc.edu](mailto:rspilsbury@icc.edu)

## Let's Hurl!

### 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.

### Cost:

There is no cost to attend this meeting. No RSVP's are required. **If you would like to be a judge for this event, contact Kim Ingles.**

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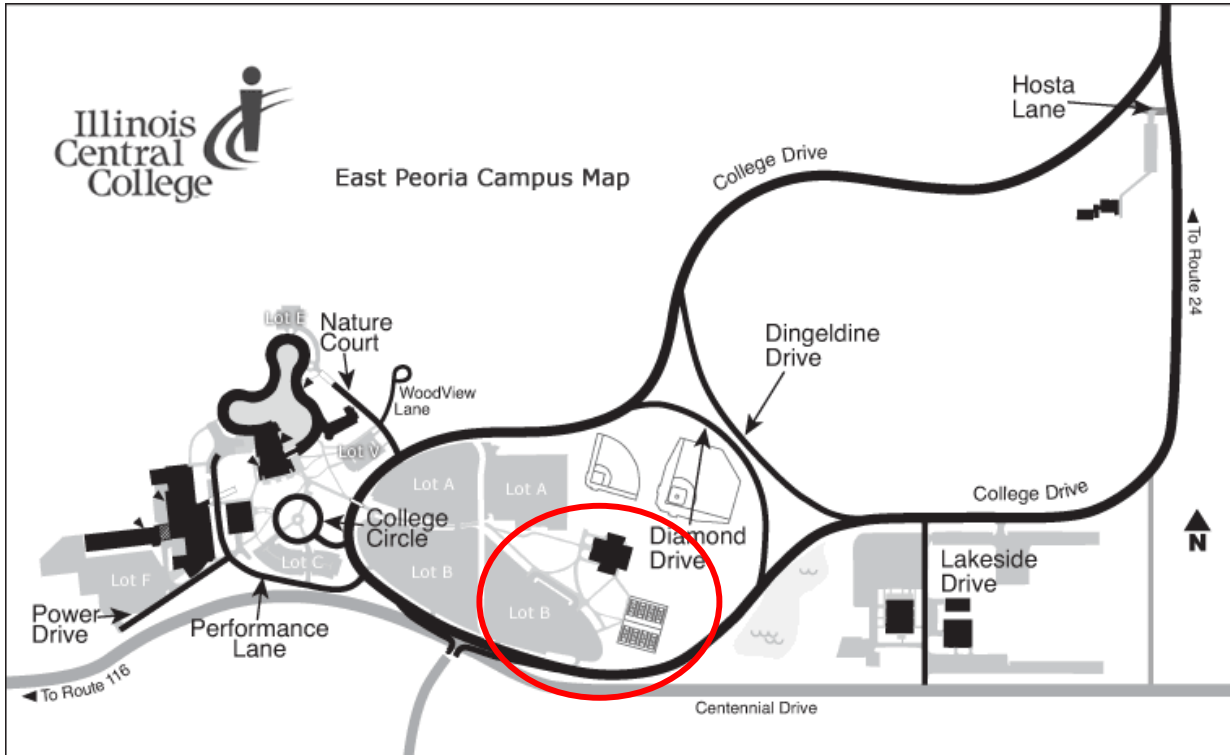
Andy Berberich  
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ICC Map:



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**Editor's Note**

I was fortunate to spend last week at the SAE Commercial Vehicle Congress up near Chicago. I had never been to this industry-focused event, so it was a great opportunity to learn more about the event and meet people from all over the world. The most interesting session for me was the "Global CEO Panel"—four CEO's from international Commercial Vehicle companies, giving their perspective on the role of the engineer in the future, and how critical it is that we continue to fill the pipeline of engineering and science talent in this country.



In one of my previous columns, I discussed the need for staying competitive, by taking projects to broaden experience, learning the "softer skills," taking yourself outside your comfort zone, so that your skills will always be in demand in the marketplace. What I thought was interesting was that many of the CEO's mentioned that very thing—not only will engineers continue to be in demand, but they will need additional skills, such as communication, project management, and teamwork. But what is most important is that we continue to feel our pipeline with talent for the future.

That is the purpose of this month's program, the ICC Student Design Competition, and our continuous involvement in SAE's A World in Motion (AWIM). These programs are designed to get school children of all ages interested and excited about math, science, and engineering. Contact Carrie Pickens for more info on AWIM. For this month's program, if you have never attended one of our ICC Student Design Competitions, I encourage you to attend. The professors incorporate this event into their "Engineering 101" curriculum. The students are very excited to work on this project each year, and their enthusiasm and inventiveness reminds me of why I went into engineering in the first place. Too often that excitement in being an engineer gets lost in the deadlines and meetings, but these students always bring it back for me. So please attend and talk with the students. If not at this event, then in a school in your own community.

Best Regards,

Andrea Brazzale  
Communications Manager and  
Former CIS Section Chair

**Upcoming Program Topics:**

*Below, find potential program topics for CIS. The Program Team has outlined an outstanding line-up for this year, so keep a look-out for future program announcements:*

- January Remanufacturing Technology
- February Engineers Week Lakeview Museum
- March Ford GT or Harley
- April Career Development
- May NASA Speaker on Challenger Disaster



### SAE Commercial Vehicle Congress Nov. 1-3, 2005, Metro Chicago

<http://www.sae.org/comvec>

The SAE Commercial Vehicle Congress was held Nov. 1-3 in Rosemont, IL. It was a tremendous success, with great technical sessions and industry forums. Some of the “themes” heard throughout the Congress include:

- The demand for engineers continues to grow, and there is concern about the pipeline of young students entering the engineering and science fields.
- Emissions 2010: how are we going to get there? We must find a technology breakthrough.
- Systems integration is critical and a continuing challenge
- Globalization: our markets, our operations, our engineers

#### Event at a Glance:

Monday October 31	Tuesday November 1	Wednesday November 2	Thursday November 3
	8:00 a.m. – 10:00 a.m. Technical Sessions	8:00 a.m. – 10:00 a.m. Technical Sessions	8:00 a.m. – 10:00 a.m. Buckendale Lecture / Technical Sessions
	10:00 a.m. – 10:30 a.m. Networking	10:00 a.m. – 10:30 a.m. Networking	10:00 a.m. – 10:30 a.m. Networking
	10:30 a.m. – Noon Industry Forum “Advanced Electronics”	10:30 a.m. – Noon Industry Forum “Global CEO Panel”	10:30 a.m. – Noon Industry Forum “Hybrid Vehicles”
Noon – 5:30 p.m.  Technical Tours	Noon – 1:30 p.m. Luncheon Forum Guest Speaker Subject: Electronics	Noon – 1:30 p.m. Luncheon Forum Guest Speaker	Noon – 1:30 p.m. Lunch in Exhibition Hall
Registration	1:30 p.m. – 3:00 p.m. Industry Forum “Intelligent Vehicle Technology”	1:30 p.m. – 3:00 p.m. Industry Forum “Diesel Engines - 2010”	1:30 p.m. – 3:30 p.m. Technical Sessions
	3:00 p.m. – 3:30 p.m. Networking	3:00 p.m. – 3:30 p.m. Networking	
	3:30 p.m. – 5:30 p.m. Technical Sessions	3:30 p.m. – 5:30 p.m. Technical Sessions	
	5:30 p.m. – 6:30 p.m. Welcome Reception Exhibit Hall	5:30 p.m. – 9:00 p.m. Reception and Banquet	

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**CIS Members on the SAE Sections Board**

SAE has seven key operating boards, one of which is the Sections Board. CIS has a history of board membership. Andrea Brazzale, 2003-2004 CIS Section Chair, was just elected to the board in March 2005, starting with the board meeting at SAE World Congress. Alex Kott, 2002-2003 CIS Section Chair is a veteran of the board. Bob Heitzman, former CIS Section Chair from the 1990's, has just completed his 3-year commitment and has elected to retire from the board.

The Sections Board provides guidance to SAE's network of sections in meeting the technical needs of their members and serves the SAE Board of Directors in an advisory capacity on policy matters relating to section and student activities. The Sections Board supports SAE's Vision, its ENDS and their sub-ends, and the Sections Board Program Plan, which details activities the Sections Board will undertake to work toward achieving its part of the vision.

There are 25 voting Sections Board members. Each year, eight members begin a three-year term on the Board. The Board is led by the chair, who actually serves a four-year term—the first year as a member of the Sections Board, second year as Sections Board Vice Chair, third year as Sections Board Chair, and an additional year as Sections Board Past Chair.

The Sections Board holds meetings twice annually, typically at World Congress in the spring and Commercial Vehicle Congress in the fall. The Sections Board addresses new trends and establishes the general direction for the entire Board, ensuring the Board and its programs and activities are in harmony with the direction and ENDS established by SAE's Board of Directors. Section officers are welcome to attend the Sections Board meetings.

If you are interested in learning more about the Sections Board and how it serves SAE members, please contact Andrea Brazzale at [cis\\_sae@yahoo.com](mailto:cis_sae@yahoo.com), or 800-512-1919.

**Career Corner—"Many Companies Bring 'EQ' Into Hiring Decisions"**

*Career Corner is provided by SAE and written by Tracy Fedkoe, Product Manager for SAE Career and Member Services. Below is the June 2005 edition of "Career Corner." You can access "Career Corner" at any time by going to [www.sae.org](http://www.sae.org), and clicking on "Careers and Employment" in the upper right corner of the home page.*

**Many companies bring "EQ" into hiring decisions**

The world of business is not the same as it was 10, or even five, years ago. "In fact, the one thing that remains constant in today's automotive industry is change," said John Tenerowicz, Vice President of Aerotek Automotive, at the SAE 2004 World Congress Career Development Session. Aerotek is the third largest staffing company in the U.S. and employs 5000 people and 40,000 temporaries per week. Interviewing thousands of candidates for jobs in the automotive, manufacturing, and service industries, they have found that companies are focusing more on competencies, or the softer skills of a job, rather than just technical ability.

Employees need to have certain competencies—more than just the job description or nuts and bolts of the job, "it's the knowledge, skills, and abilities that a person needs to succeed in that particular role," said Tenerowicz. That's where EQ comes into play, he explained. Where IQ measures intellectual ability or "head" skills, EQ, or emotional quotient, measures emotional intelligence, or "heart" skills.

He went on to explain that IQ is linked to the abilities of verbal comprehension, number facility, spatial ability, memory, perception, and reasoning. Intellectual abilities are what an individual has at birth. An individual can gain new skills and knowledge, but his/her capacity pretty much remains steady throughout life. Only 20% of the factors needed to succeed come from an individual's IQ. The remaining 80% of factors that affect success come from the EQ side.

EQ includes emotional awareness, self regulation, empathy, motivation, and social skills. Emotionally intelligent individuals are better at listening and oral communication, adapting to different situations, responding positively to



# Central Illinois Section

## Centroid News • November 2005



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obstacles and setbacks, managing their emotions, and working with others. These competencies or softer skills are needed to be an effective team member and leader. The good news is that these skills can be easily developed through training, education, and experience.

“In the past, most interviews were focused on the technical side. Now we’re spending more time focusing on EQ competencies because companies want to see how well candidates are developed on their emotional side,” said Tenerowicz. There are four social skills that enhance emotional intelligence and are sought after in hiring decisions: the ability to organize groups, negotiate, make personal connections, and perform social analyses to build rapport by reading others’ feelings.

This does not mean that basic skills are not important. Every job is composed of three different types of skills: self, interpersonal, and fundamental. Self skills are comprised of confidence and self-esteem that come from life experiences—an individual’s “being skills.” Interpersonal skills include building relationships, the ability to delegate and manage, and are defined as an individual’s “understanding skills,” according to Tenerowicz. Fundamental skills are the basic skills needed to get the job done. The balance between these skill sets is different depending on an individual’s role in the organization, but every position requires skills from each group.

Whether you’re looking for your first job, or hoping to advance to executive level, brushing up on your soft skills can go a long way. Tenerowicz closed the presentation with a helpful hint for anyone in the job market “IQ may get you hired, but EQ will get you promoted.”

### The SAE Story Available through CIS:

CIS has arranged for *The SAE Story: One Hundred Years of Mobility* to be available for sale at the section meetings. Member price is \$24, and by purchasing it at the meeting, you avoid shipping and handling charges. This is a great gift for anyone on your holiday shopping list. Contact Andrea Brazzale at [cis\\_sae@yahoo.com](mailto:cis_sae@yahoo.com) or 800-512-1919.

*The SAE Story: One Hundred Years of Mobility* combines an iconic collage of 20th-century popular culture with a view to the future role SAE International will play at the forefront of technical engineering advances -- advances that again will ultimately help to shape the world in which we will live.

True to the rich genre of "coffee-table books," *The SAE Story* is filled with archival images, historical background, and is punctuated with the personalities and pivotal moments in transportation technology. As told by Robert Post, a former transportation curator at the Smithsonian Institution and author of more than a dozen titles including *Technology, Transport, and Travel in American History* and *High Performance: The Culture and Technology of Drag Racing*, household names such as Henry Ford, Orville Wright and Mario Andretti become the architects in the building of an industry.

