



# Institute of Industrial Engineers Rensselaer Chapter

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Happy holidays, I hope that everyone's semester is going well. On behalf of the Officers of The Institute of Industrial Engineers, I would like to wish you the best of luck on your up coming Projects and Finals.

We have created the position of Freshman Liaison elected our Webmaster and Vice-President. We have begun our back test collection, and we ask you to donate your tests from this semester. In preparation for the Spring Career Fair we will be compiling our first IIE Resume Book when we return from Winter Break. We are also looking for people interested going to the upcoming Regional Conference at RIT. Finally, by press time we will have [IIE-L@rpi.edu](mailto:IIE-L@rpi.edu) which will allow anyone to contact the officers to request back tests.

I hope you all have a safe trip home and I look foreword to seeing you all in the spring.

Sincerely,

WILLIAM LYNCH  
President

# From the Podium

By Professor William Foley

The last column I wrote was called “From the Chairlift”. For this column, I thought I would anchor on the ground and address things from the classroom podium position where the teacher occupies the near side. You know the position because you observe from the opposite side, the far side. But do you really understand the podium’s role in learning?

The view from the near side of the podium is one of exhilaration and despair with the rise and fall of each emotion occurring frequently in the course of a class and switching in an instant. The exhilaration comes from the responsibility of the teaching position to lead a discovery process by all in the room. The beginning of the process is staged by the teacher using verbal cues, the visual stimulation of Powerpoint, examples of applications, and the assumed interaction with the far side audience with the intention of moving them closer to the podium. For it is through moving them closer the teacher discovers the knowledge again and how it is understood and perceived. With this student movement closer to the podium, the teacher changes from staging discovery to becoming a participant with the student in discovery, the now closer far side, by moving past the podium crossing over to just outside the near side. As the discovery process accelerates, both parties change position, the students moving closer to the podium sharing and contributing to the exhilaration of learning and the teacher moving farther away. The acceleration in discovery comes from both parties moving. If either party holds their ground or retreats, discovery decelerates almost stopping instantaneously, despair takes over, the teacher crosses back to the near side and the students move deeper into the far side. Discovery runs hot when it is running at all, it can never be just warm and discovery requires full participation to be hot.

To move from despair back to exhilaration requires getting some acceleration back with the teacher again using staging tools used before. But the starting position of both the teacher and the student are farther away from the podium. The students are asking why the teacher isn’t teaching them anything and the teacher is asking why the students aren’t interested in learning?

So while physical podiums exist in many Rensselaer classrooms, the most important podium that divides the near and far side is in the heart of both the teacher and the student. The real podium is the hurdle that must be crossed and run away from for real learning to take place.

# Working Professional Profile

*Ashley Philips*

I am a May 2006 Graduate and I currently work for Pratt & Whitney Aircraft, a United Technologies Company, in Connecticut. Pratt is a worldwide company that makes many of the existing commercial and military aircraft engines. Currently, I am in my first rotation in the Manufacturing Engineering Development Program. This program consists of four rotations over 2-years in manufacturing or quality engineering. My job functions in this program can vary depending on the assignment and my interests. On this rotation, in a manufacturing engineering role, I am working on commercial fan cases and composite materials. During a typical week my projects and tasks include creating and designing machining process operations and process sheets, ordering and repairing tooling, first article inspections and some design. I am acting as a junior manufacturing engineer in my department. Many of the manufacturing engineers I work with have varied backgrounds of mechanical, industrial and manufacturing engineering. Since the facility is unionized, I don't physically machine the parts, but I design the processes for the operators to follow when making the cases.

This job is less of a "typical" IE position where I have a chance to use different aspects of engineering. Some of the classes that I am able to apply on the job include General Manufacturing Processes, Design of Manufacturing Systems, Engineering Processes, CAD (even though we use different software), and some Statistical Analysis and Quality Control. The most useful class for this rotation is GMP since I am involved with a lot of manufacturing processes.

I found out about this company and the program through the fall NSBE/SHPE career fair at RPI. From there, I applied on the Red Hawk Joblink for the on-campus interviews. After that, I was selected for a secondary on-site interview in late November and was offered a position.

One of the best perks of the job, or for being a part of UTC (a 40 Billion Dollar company), is the employee scholar program. Employees have the option, and are encouraged, to pursue continuing education. Through this program, I am currently attending RPI Hartford part time and I am pursuing a Masters in Management with a specialization in Operations Management. The company covers all of my costs; tuition, books and fees, with no out-of pocket expenses. Also, upon graduation, everyone receives a \$10,000 stock option per degree pursued. Another plus is that as an engineer I have the opportunity to get a masters in management or some other non-engineering fields.

Overall, I have enjoyed my move to Connecticut and the program and the opportunities that lie ahead.

# Awards and Accolades

## Congratulations to DSES Faculty and Students!

At the 13<sup>th</sup> Annual Honors Convocation held on October 13, 2006, many DSES students were honored with some of the most prestigious awards RPI has to offer. Adrienne Peltz received the 4.0 Award. Graduate students Shari Thompson and Derek Robinson received the GEM Fellowship and the Chauncey and Doris Starr Fellowship, respectively. The following students received the Founders Award of Excellence, the highest honor of the Convocation ceremony: junior Lyndsay Rivnyak; seniors Meaghan Faraca, Scott Friedman, and Sebastian Gomez; and graduate students Jennifer Cengelosi, Hui Fan, and Adam Petrie.

The DSES department was also recognized on a national level by IIE. Ram Ramakrishnan and Professor Ananth Krishnamurthy authored the IERC 2006 Best Paper Award for Production Planning and Scheduling entitled "Analytical Models for Production Networks with Assembly Operations". Professor Krishnamurthy and Kumar Satyam won the IERC 2006 Best Paper Award for Manufacturing and Design with their paper entitled "Analytical Models for Multi-product Pull Systems with Batch Sizes". Professor Wai Kin (Victor) Chan received 1<sup>st</sup> place for the Pritsker Doctoral Dissertation Award. Also, the C.B. Gambrell Undergraduate Scholarship was awarded to senior Meaghan Faraca.

Last, but not least, our student chapters received awards. The RPI Chapter of IIE received a Bronze Award for the 2005-2006 Chapter Recognition Program, under the leadership of President Meaghan Faraca and Faculty Advisor Professor Mohamed Aboul-Seoud. The RPI Chapter of Alpha Pi Mu (APM) placed 4<sup>th</sup> for the Annual Outstanding Chapter Award under the leadership of Presidents Meaghan Doran and Kiley Dean and faculty advisor Professor Charles Malmborg.

## SUDOKU

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## Upcoming Event!

### DSES Undergrad Social & First Annual Faculty Bake-Off



**Date: Monday, December 11, 2006 (reading day)**

**Time: 2:00-4:00pm**

**Location: JEC Ansell Lounge**

Faculty will be making homemade desserts.  
Come and taste their delicious treats and vote on the best!

Take a break from studying!  
Meet other students in your class and talk to the DSES professors.

Contact [faracm@rpi.edu](mailto:faracm@rpi.edu) with any questions.

### SUDOKU SOLUTION

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