

# Industrial Assessment Centers

*IAC Student and Alumni Newsletter*

**October 2003**

Visit us at: [www.IACforum.org](http://www.IACforum.org)



## ***Fellow IAC/EADC Students and Alumni—***



I hope you enjoy this edition of the IAC newsletter! The IAC program has evolved in recent years to include new and exciting opportunities for our students and alumni. Under the IAC student development effort, we now have our own student/alumni website

([www.IACforum.org](http://www.IACforum.org)). Alumni and lead students from all 26 IACs gather to attend annual meetings in Washington D.C., and the program has supported student travel to attend professional conferences including AEE's WEEC and ASHRAE Society Meetings.

As an IAC/EADC alumna and energy professional, I have been given the role of IAC Student Activities Coordinator. Over the past few years, I have been working to implement these new opportunities to enhance our students' experiences in the program and to help transition our students into careers in energy. I encourage all students and alumni to take advantage of the new opportunities that the program offers. If you have any suggestions or questions, or would like to contribute to our next newsletter (we're aiming for two per year), please contact me at [martinma@ornl.gov](mailto:martinma@ornl.gov) or 865-574-8688.

*Michaela Martin, PE, CEM  
IAC Student Activities Coordinator  
Oak Ridge National Laboratory*

## ***AEE Offers Opportunities for IAC/EADC Alumni***

New opportunities are now available to IAC students through AEE. Student memberships as well as World Energy Engineering Congress (WEEC) registration are offered at a reduced cost. Access to AEE's Job Center web site is also available for IAC students to post resumes, at no cost, for a 2 month period. Students are invited to participate in their local chapter of AEE or create their own student chapter, and participation in local AEE chapters has lead to opportunities for AEE scholarship funds for some IAC students.

AEE has agreed to recognize IAC experience as qualifying experience for AEE's Certified Energy

Manager (CEM) certification. Requirements call for three years of related experience along with successful completion of a written exam. IAC alumni may completely fulfill the requirement with 3 years of their IAC experience.

Al Thumann, Executive Director of AEE, has written a letter detailing these and other opportunities. It is available for download through the student website at [www.IACforum.org](http://www.IACforum.org) in the news section. Further information on AEE can be found at [www.aeecenter.org](http://www.aeecenter.org).



## Technical Tools and Training for Energy Geeks

### DOE FEMP

The popular Building Life Cycle Cost (BLCC) software, New Technology Demonstration Reports and Buying Efficient Product Tip Sheets may be downloaded FREE from this web site for the DOE's Federal Energy Management Program (FEMP). Check it out at: <http://www.eere.energy.gov/femp/>.

### DOE BestPractices

The home for popular FREE DOE-supported software including MotorMaster, Pumping System Analyzer Tool, AirMaster and Steam System Analyzer Tool is DOE BestPractices. In addition to the great software, technical publications on steam, compressed air, pumping systems and others are available. Schedules for upcoming BestPractices workshops and training sessions are also available (a great opportunity for PE's to acquire CEU's on DOE's dime!). Visit BestPractices at: <http://www.oit.doe.gov/bestpractices/>.

### \*New\* IAC Database

In the fall of 2003, DOE will introduce a new on-line, interactive version of the IAC database. With over 11,000 assessments and 80,000 recommendations the interactive version is a great tool for identifying savings opportunities for industrial customers. Keep an eye open for its introduction on DOE's IAC web site at: <http://www.oit.doe.gov/iac/>.

### New IAC Study Helps to Uncover Requirements for Professional Licensure



Over 50% of IAC/EADC alumni are either EITs or licensed PEs. A recent report for the IAC conducted by Oak Ridge National Lab, (*"A Study of Experience Credit for Professional Engineering Licensure"*, ORNL 2003), looks at experience-credit requirements for each of the fifty

states and the District of Columbia. Experience credit is defined as the experience, generally gained after graduation, which indicates to a state board that an applicant for the PE exam is competent to practice engineering. State boards have adopted regulations for experience requirements based on a document called the Model Law, but state boards can and have amended regulations causing requirements to vary from state to state.

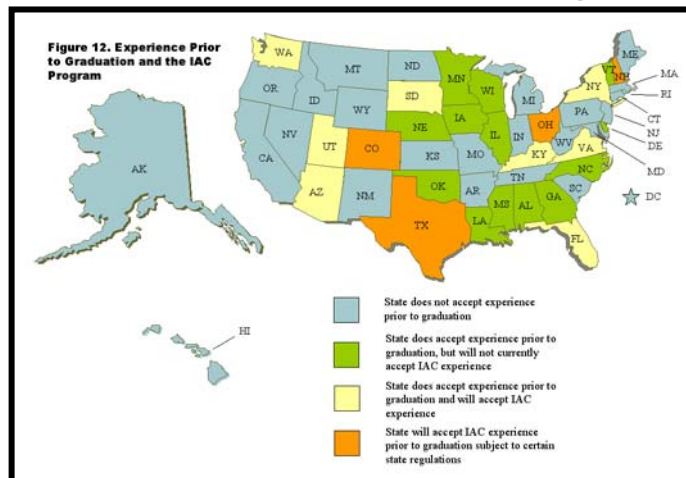
The study attempts to describe and map out trends in experience credit. Six questions were posed to each of the state boards. These questions covered topics including general requirements to sit for the PE exam, credit for PhD and masters degrees, teaching credit, experience prior to graduation, and FE and PE

exam waivers. The report also includes color-coded U.S. maps and graphics that detail how states responded to these questions.

During the study, each state board was given information on the IAC program in an attempt to gain experience credit for a student's time spent in the program. It was later determined that several states would accept IAC experience; a few states even issued formal statements on IAC experience.

The report is available for downloading through the IAC student website at [www.IACforum.org](http://www.IACforum.org) in the News section.

Report Contact: Kurt Stafford, ORNL Intern, [kstaffo1@utk.edu](mailto:kstaffo1@utk.edu)



## Ellie's Corner



Welcome to Ellie's Corner. This column is intended as a forum to discuss our goal of promoting energy efficiency and conservation within the industrial sector. As the Business Specialist at Bradley University Industrial Assessment Center (BUIAC), I hope to share with you

practices that have proven effective. While attending the IAC meeting in New York (Aug. 2003), I met many very enthusiastic people dedicated to the goal of promoting energy conservation. One of these people was Michaela Martin. During a brainstorming session with Michaela, we came up with the idea of developing this newsletter. Although this column is named "Ellie's Corner," we hope it becomes a corner for all to exchange useful ideas for marketing your IAC services and increasing client implementation.

**Recruiting New Clients.** In this article, I would like to share our approach to recruiting new clients. The method, implemented at Bradley for the last three years, has proven very effective in soliciting industrial clients. We are required to recruit a minimum of 25 companies every fiscal year. I have found that the most effective approach is to meet face to face with the prospective clients, ideally a plant manager or an HR director. Initially, I try to identify locations by targeting a high density of prospective industrial companies. This allows for maximum meetings from a given field trip, which consists of a scheduled meeting with one of the potential clients followed by a series of unscheduled visits to other clients. During these visits, I leave a copy of the energy assessment package and a sample energy report, and if I get the chance, I will go over both with the potential client. You may be surprised to know that I am usually successful in meeting with a person in either HR or engineering. I attribute this to the fact that most companies are truly

interested in knowing how they can cut back on their energy expenditures.

After a field trip, it is essential to follow up by phone with companies that expressed interest in receiving a free energy assessment. Planning and organization are crucial to ensure optimal time management and client recruitment on the day of the field trip. The IAC representative should exhibit a positive attitude and a coherent presentation to engage clients. The basic point to remember is that although a free industrial assessment is a great opportunity for manufacturers, it will not automatically be taken advantage of. It's not always up to the companies to find the IAC—we often have to go to them. Once found, they are motivated to participate upon the realization that there indeed is potential for significant improvements to the bottom line. It is our responsibility to find ways of providing that motivation for the clients. The field trip approach outlined above will bring the free assessment to their attention. In my experience, this approach is more effective than the "cold call".

**What people hear, they forget, but what people see, they remember.** Certainly, using the two senses of sight and sound together make for a very effective combination (i.e., the field trip and the follow-up). Based on a well-known study in "Edgar Dale's Learning Cone," people are likely to adapt and learn about new ideas based on their senses. We retain 10% of what we read, 20% of what we hear, but 50% of what we see and hear.

**Finally, for a memorable impression, be visual** (...but not too visual.) In client recruitment, the saying goes if you emphasize everything, you emphasize nothing.

Ellie Najafi  
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Business Specialist, Bradley University IAC

## ***Loyola Marymount Offers Unique Approach for Student Pay Scale***

We are proud of the unique organization and management of the LMU IAC, which have received praise from IAC managers. Namely, students are paid per job (writing recommendations and entire reports) rather than per hour. Students are paid only after completing quality work, often after many iterations. This is a remarkably effective system, motivating students to complete quality work in a timely manner. Because of that, IAC faculty can focus on technical and merit-based mentoring rather than serve as timecard gendarmes. No timekeeping records need to be kept. All work must be performed in the IAC office for security reasons. The students volunteering to take part in a given audit have two roles: one student is the "Project Manager" and typically three work as "Student Staff." Student Staff write 1-3 ARs each, and the Project Manager writes all other sections of the Report, including Utilities, Executive Summary and Plant Description. The roles of the faculty are to train, mentor, guide, and check. In addition, the Project Manager is responsible for having the pre-assessment questionnaire sent to the Client, receiving the response, interacting with the Client to make sure that the required plant and utility data is complete and in hand, preparing and packing the instruments and tools for the audit, assisting the faculty in the audit execution, and then serving as the real manager: producing the Report and supervising Student Staff. Together with the Assistant Director, he distributes the AR writing tasks among the students. He serves as the first filter of the quality of the AR drafts. When he decides that the given set of ARs is correct and finished, he accepts them for the Report draft and notifies the Assistant Director to release the payment of \$280 to the author Student Staff. When the Project Manager himself submits a complete draft of the Report to the Assistant



Director and the latter concludes that the draft is indeed complete and of sufficient quality, the PM gets paid 50% of his fee (\$500) for the audit. The remaining 50% (another \$500) is paid after the Report goes through all corrections and edits (including the final readings first by the Assistant Director and then by the Director) and sent to the Client and uploaded to Rutgers. Thus, the Project Managers receive a great practical experience in teamwork and real project management, a great education for engineers. Any and all IAC students can always ask the Assistant Director (who is available full time in the Center, except for class time) for technical mentoring and editorial advice in the areas of energy and waste, and the Director in the area of productivity (and the students use these resources all the time). With this system, we

can efficiently accommodate a large number of participating students (17 undergraduates and one graduate in the Spring of 2003). In a weekly meeting, we ask all students for volunteers to serve on the next audit as Project Manager and Student Staff. Because of the large number of students in the program, we always find enough volunteers. Students like the system because it gives them the

flexibility of participating in an audit when available and not having to participate when they happen to be busy with academics and extracurricular activities. Most of the students are undergraduates, recruited in the sophomore year. We no longer request funds for massive student recruitment effort: now that the Center is well known among the LMU engineering students as a great learning, experience, financial and teamwork resource, students volunteer to work in the Center without special recruitment. Besides the money and experience, all undergraduate students get an academic credit of 3 SH if they perform four Project Manager jobs (at least one PM job is mandatory and four audits as Staff can be substituted for one PM job). Our IAC students are second to none in the nation.

Steve Vasquez

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IAC Lead, Loyola Marymount University

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## ***Alumni Insight: Considering the Value of the IAC Program***



I completed my Masters Degree in Mechanical Engineering at the University of Massachusetts in 1986, almost 17 years ago. During my graduate studies, I had the wonderful opportunity to work at the University's

Energy Analysis and Diagnostic Center (EADC) with Professor Larry Amb's. For those of you who don't recognize the EADC acronym, this was the IAC's prior name, before productivity, waste minimization, and other items were added to the portfolio of services. In most ways, an EADC center was identical to the current IAC, but it had an exclusive focus on energy efficiency.

IAC work experience is truly unlike that found in most other academic programs. Students get the opportunity to mix their education and research work into engineering fundamentals with real-world energy engineering and consulting experience. Rarely does an academic experience facilitate work at customer facilities, interaction with those customers, solicitation of information from vendors and other engineers, and development of technical business reports that describe your analytical and economic findings. That kind of exposure is invaluable, serving as focused experience for those who want to pursue a career in the energy field, or as basic professional work experience for those whose career paths move away from the energy discipline.

Shortly after graduating with my Masters Degree, I took a position at a Massachusetts-based energy consulting firm, and was able to rapidly make progress, enhancing my engineering skills while also learning much about marketing, management, and business development.

About 10 years ago, I decided to make some changes, and started my own consulting business: Energy & Resource Solutions (ERS). ERS has an interesting assortment of projects and has grown to a company of about 15 energy professionals.

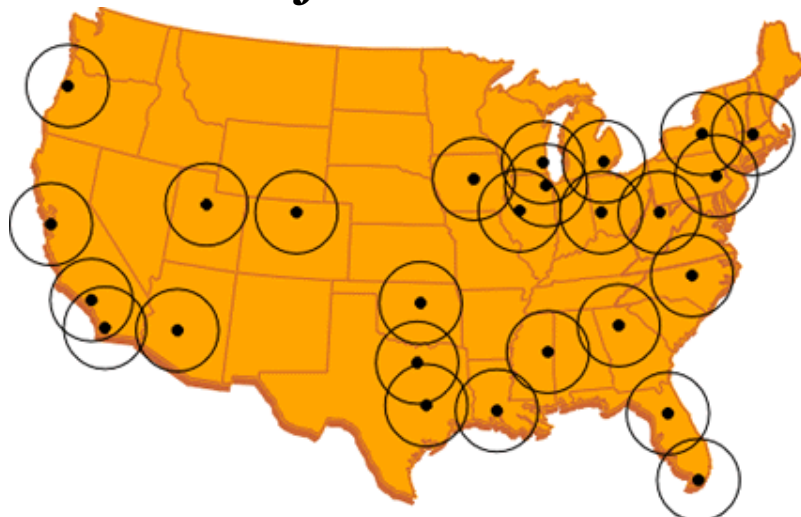
While many elements of my own current work are more business-focused and less technically oriented, I still find value from my IAC experience. But now, however, the experience has taken on some very different meanings and there are new values to me. I continue to work closely with Larry Amb's (still the director at the University of Massachusetts IAC), with who ERS jointly pursues projects and has some active engagements. I also work with several of my fellow students from my own IAC days, who are still working in the energy field.

Recently, I've been developing relationships with a number of current IAC directors, tracking their students' progress, and seeking those graduates whose IAC experiences enable them to readily move ahead of other prospective employees. ERS currently has five engineers that have come through the IAC program. The facility assessment experiences they have made them uniquely qualified to handle the challenging jobs in the energy field, and to quickly become highly productive professionals. As students approach graduation and start seeking employment, it is critical to recognize the value of focusing on their professional IAC experience, including their experiences in their resumes and addressing them during interviews. One or two years of actual experience at an IAC will go a long way in increasing your competitiveness with other candidates, particularly if the work you are seeking is in the energy field. Be confident of what the IAC experience has given you, for whether you seek work as a consulting or design engineer, in the facility management field, or any other engineering work in an energy or unrelated discipline, the professional skills you start to develop at the IAC can help you open the doors to a more successful career. And don't hesitate to contact ERS. We are regularly looking for new talent as we expand our horizons.

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President, Energy & Resource Solutions

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## Current Locations of Industrial Assessment Centers



In its nearly 30 year history, 38 schools have hosted Industrial Assessment Centers. Here is the current list of centers awarded from the 2000 DOE solicitation, along with program management contacts.

### **IAC MANAGEMENT**

**US Dept. of Energy:** Sandy Glatt,  
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**Rutgers Field Manager:** Dr. Mike Muller,  
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**IAC Student Activities:** Michaela Martin,  
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### **CENTERS**

**Arizona State Univ.:** Dr. Patrick Phelan,  
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**Colorado State Univ.:** Dr. Harry Edwards,  
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**University of Dayton:** Dr. Kelly Kissock,  
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**University of Florida:** Dr. Diane Schaub,  
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**Georgia Tech:** Dr. Sam Shelton,  
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**Iowa State University:** Dr. Greg Maxwell,  
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**Univ. of Ill. at Chicago:** Dr. William Worek,  
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**Lehigh University:** Dr. Sudhakar Neti,  
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**Loyola Marymount Univ.:** Dr. Bo Oppenheim,  
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**Univ. of Louisiana-Lafayette:** Dr. Ted Kozman,  
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**Univ. of Massachusetts:** Dr. Larry Ambs,  
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**University of Miami:** Dr. Shihab Asfour,  
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**University of Michigan:** Dr. Arvind Atreya,  
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**Mississippi State University:** Dr. BK Hodge,  
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**North Carolina State Univ:** Dr. Jim Leach,  
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**Oklahoma State University:** Dr. Bill Kolarik,  
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**Oregon State University:** Dr. Greg Wheeler,  
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**San Diego State Univ:** Dr. Asfaw Beyene,  
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**San Francisco State Univ:** Dr. Ahmad Ganji,  
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**Syracuse University:** Frederick Carranti, PE,  
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**Texas A&M Univ:** Dr. Warren Heffington,  
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**Univ of Texas-Arlington:** Dr. Kendall Harris,  
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**University of Utah:** Dr. Melina Krahenbuhl,  
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**West Virginia University:** Dr. Ralph Plummer,  
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**University of Wisconsin:** Dr. Umesh Saxena,  
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## ***IAC News Briefs***

### **ARIZONA STATE UNIV.** (Jane He)

The ASU Industrial Assessment Center is pleased to welcome aboard our new Assistant Director, Dr. Rene Villalobos. We would also like to welcome aboard two new students, Reynaldo Valdemar Gonzalez and Eric Duncan.

### **BRADLEY UNIV.** (Benjamin Swim)

The Bradley IAC is exploring new ways to increase its implementation rate. Its business specialist, previously responsible only for client recruitment, has begun to interact with clients to identify budget cycles, energy investment plans, and preexisting savings ideas that relate to IAC goals. This information, along with efforts to streamline report format and to reduce time of report completion, appears to be creating positive effects on implementation rate.

### **COLORADO STATE UNIV.** (Doug Hopper)

We are expanding our geographic coverage. Assessments were conducted at facilities in Wyoming, South Dakota, New Mexico and Montana. We added a few fun educational events along the way, including sites such as the Devil's Tower and Mount Rushmore in the cold of winter, in contrast with viewing the beauty of Montana during 100 F heat and wildfires in the summer. Our clients have varied widely over the year: an acoustical guitar manufacturer, a soft drink bottler, cutting edge pharmaceutical producers, lumber mills, a printer, a job shop, and a coal mine.

### **GEORGIA INSTITUTE OF TECHNOLOGY** (Bill Meffert)

The Georgia Tech IAC faculty is preparing to teach Industrial Energy Management for Mechanical Engineering Seniors again this spring. This is the 3rd year in a row the course has been taught. A new Assistant Director has recently come on board, Matt Soderlund. He joins the faculty after spending a few years with Mirant, Inc., his first position after graduate school in Georgia Tech's ME program.

### **IOWA STATE UNIV.** (Michael J McCarty)

We currently have four audits scheduled for the new fiscal year and have attended one audit to a food plant that produces oatmeal and instant oatmeal. We recently hired four new undergraduate students to our program. We trained all of our students about the electrical bill analysis so they have a better understanding of rate structures and marginal utility rates.

### **LEHIGH UNIV.** (Huseyin Cagatay Yalcin)

As one of the newest centers, Lehigh University Industrial Assessment Center located in Bethlehem, PA serves plants in New Jersey, Eastern Pennsylvania, Delaware and parts of Maryland. Since Lehigh University is located in an industrially rich area we have the opportunity to serve a variety of manufacturers and save energy and costs for a wide range of industries. Student participation and education is a primary objective of the center and the educational goals achieved with the participation of students in all aspects of the center.

### **LOYOLA MARYMOUNT UNIV.** (Steve Vasquez)

In the summer of 2003, the IAC at LMU|LA (that is our new name!) graduated six seniors and added two excellent juniors into the program, for a total of 14 students, including two graduate ones, all ready to pursue savings in the State that is recoiling from Enron excesses and manufacturing job losses. Our team bravely looks forward not only to finding savings in energy, productivity and waste, but also to overcoming the cabaret with the Governor's recall and election.

### **MISSISSIPPI STATE UNIV.** (Kristoffer Findley)

The Mississippi State University center has started off fiscal year 2004 well. We recently visited The Clarion Ledger, the largest circulated newspaper in the state based in the state capital of Jackson. We are also excited about this year because we have lined up assessment trips all the way into March and April. We are really looking forward to having a good year.

### **NORTH CAROLINA STATE UNIV.** (Nathan Block)

Dr. J.W. Leach attended the Pumping System Assessment Tool Specialist Training in Atlanta, GA from August 10-11. Nathan Block was awarded the \$5,000 College of Engineering Dean's Fellowship for graduate study in Mechanical Engineering at NCSU.

### **OKLAHOMA STATE UNIV.** (Joyce Taylor)

During FY2004, Oklahoma State University's IAC is developing a "snap shot" vibration analysis procedure for use during one-day walk through assessments. In conjunction with the infrared thermography program we started two years ago, we want to develop a process to analyze motor working condition, to identify factors such as misalignment, imbalance or contamination, and to link energy and productivity savings to the improved motor operations.

### **OREGON STATE UNIV.** (Tyler Downey)

At Oregon State University we have been busy all summer knocking out reports all over the Pacific Northwest. This year we are focusing on improving delivery time, while maintaining our outstanding report quality. We will also be hiring and training several new

students this year, since the majority of our staff will be graduating in the spring. Center management is very involved in improving operating efficiency, time management and leadership development through the use of mentors, tracking databases, training seminars and weekly meetings. Go Team!

**SYRACUSE UNIV.** (Adam Knapp)

At Syracuse University we are currently in the process of improving the center's efficiency. Specifically, we have implemented a new client tracking system that has proved very effective for booking new clients and have also implemented a system to better track our report progress in the hopes of eliminating late reports. Outside of the efficiency improvements the center has also recently won a grant to be part of a team that will promote co-generation in the North East. We are sharing this grant with the UMass IAC, Rutgers University, and PACE law school.

**SAN DIEGO STATE UNIV.** (Jason Knight)

Jason Knight, the lead student at San Diego State University, recently returned from a 3 week stay in Turkey. While their economy is in poor shape and an electricity crisis is causing problems, the Turkish people are able to maintain a relatively high standard of living. The biggest difference he noticed was the price of gasoline, which was around \$6-7 per gallon. Other than a severe bout with food poisoning, everything went well and he recommends other students' travel to Turkey if the opportunity presents itself to them.

**SAN FRANCISCO STATE UNIV.** (Ricardo Sfeir)

The SFSU IAC is in its eleventh year. Our greatest strength is our attention to detail. Our constant challenge is balancing this strength with our weakness: long report times. Currently, we are conducting measurement and verification on a new high-efficiency hydraulic pump system. This new system drives an injection molding machine, and we shall verify whether it is more efficient than using a variable frequency drive on the current system's hydraulic pump motor.

**TEXAS A & M UNIV.** (Joseph Freeman)

The Texas A&M University IAC team kicked off the fall semester with a visit to a steel forging plant. We are looking forward to a great semester, with 11 student employees and 3 staff members.

**WEST VIRGINIA UNIV.** (NASR ALKADI)

In October, a couple of experts from the North America Insulation Manufacturing Association conducted a very interesting seminar for the center.

They brought samples of all types of insulation and provided training on 3E plus software.

Nasr Alkadi recently accepted a position as an Energy Engineer with General Motors in Missouri. Rajkumar Selvaraj took a job with Siemens in Buffalo, New York. Congratulations Raj and Nasr!

**UNIV. OF DAYTON** (Christopher Schmidt)

Our biggest and proudest news out of Dayton is that we were named the top IAC in the country. We are very proud of our work and achievements and very much appreciate the success and recognition of being the top among all the other 25 outstanding centers. It is truly an honor and at the same time, a challenge to keep the bar high.

**UNIV. OF FLORIDA** (Christian Cardenas)

The University of Florida Industrial Assessment Center just purchased 4 new DELL computers to replace the "OLDY" ones. The funds came from remaining money of an energy audit that the UF-IAC did for the Utility Annex at Kennedy Space Center on October 2002 through the Federal Energy Management Program.

**UNIV. OF ILLINOIS – CHICAGO** (Rohith Bharadwaj)

We have been concentrating on energy assessments in the food industry. We have also partnered with Industrial Council of Near-west Chicago (ICNC) to reach out to the smaller manufacturers in the area. Our marketing energies are focused on heavy energy-use industries within the Chicago area. In order to keep up with the fast paced work going on at the center, we have set up accelerated training sessions for the new undergraduate students. We are also spending considerable time and energy towards making our reports flawless and encouraging students to come up with new recommendation ideas. This is very apparent in the fact that the last dozen reports from our center have seen numerous new recommendations.

**UNIV. OF LOUISIANA AT LAFAYETTE** (Christy Hymel)

Here at UL Lafayette, we have eight full-time students, and one part-time student, which is the largest group we have ever employed. Three assessments have been completed this fiscal year. We also have eight implementations done from the last fiscal year.

**UNIV. OF MASSACHUSETTS** (Michael Socks)

The University of Massachusetts IAC will be celebrating its 20<sup>th</sup> anniversary in 2004. We welcome Mark Gerrish to the program, bringing our IAC graduate student team to seven members. The UMass IAC has recently participated in several energy efficiency outreach activities throughout Massachusetts. IAC student Michael Socks recently presented a chilled water system analysis tool at several chiller efficiency



workshops, and our assistant director, Beka Kosanovic, will be promoting the newly created Northeast Combined Heat & Power Application Center at the Northeast Energy & Technology Expo on November 5<sup>th</sup> and 6<sup>th</sup> in Worcester, MA.

**UNIV. OF MIAMI** (Pinaki Chakraborty)

Currently, MIIAC members are undertaking web training sessions presented by the Association of Energy Engineers (AEE), conducting follow up implementation calls for the fiscal year 2002-2003 companies, scheduling 28 companies for 2003-2004, and developing our IAC web page. Additionally, MIIAC team members are working towards solidifying our center's strategy for gathering and analyzing electrical power consumption data, using data loggers for lighting, cooling, manufacturing and logistics and then further subdividing these categories into on-peak, off-peak, summer and winter periods. This year MIIAC will be expanding from 90 to 120 data loggers. MIIAC believes this strategy will help companies plan ahead for the forthcoming de-regulated utility industry of the future.

**UNIV. OF MICHIGAN** (David Everest)

Congratulations to our former Lead Student Robert Hail, P.E., C.E.M. on earning his Professional Engineer's certificate! We have just performed our 246th assessment and have another great team working at the Center, including three master's level

students. You can view our latest website at [http://interpro.engin.umich.edu/mfgeng\\_prog/IAC/index.htm](http://interpro.engin.umich.edu/mfgeng_prog/IAC/index.htm)

**UNIV. OF TEXAS – ARLINGTON** (Sharath Chandra)

The Lead Student conference held in Washington D.C during February has helped our IAC center at UTA in re-organizing and improving our program. We incorporated several changes in our report, laid strong emphasis on recruiting students for IAC and have had several training sessions on getting familiarized with the software tools and on report writing skills. The newly introduced ranking system should bring competitive spirit among the schools to make it to the top.

**University of Utah** (Mike Chambers)

Hello from all of us here at the University of Utah Industrial Assessment Center! Things are going great for us this year. We have been receiving great feedback from industries we recently audited. The last company we obtained follow-up from reported that they had implemented all of our recommendations some even further than we had suggested! Go IAC program!

**UNIV. OF WISCONSIN – MILWAUKEE** (Dr. Umesh Saxena)

We recently conducted our first assessment of a sand mining company in Central Wisconsin. Noteworthy savings opportunities are: motors (belts and VFDs), dryer efficiency, cogeneration, and waste water filtration.

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## Calendar

- The IAC Lead Student's Meeting will be held at L'Enfant Plaza Hotel in Washington, DC, February 19-20, 2004. Travel arrangements will be handled through ORNL in early to mid-December. Alumni who are interested in attending should contact Michaela Martin at [martinma@ornl.gov](mailto:martinma@ornl.gov). Due to recent congressional budget cuts, we regret that travel costs for alumni cannot be covered this year.
- Industrial Energy Technology Conference (IETC) is April 20–22, 2004 in Houston, TX. See <http://www-esl.tamu.edu/ietc/newpage2.htm>.
- AEE's World Energy Engineering Congress (WEEC) is Nov. 12–14 2004 in Atlanta, GA. A breakfast will be held for students and alumni of the IAC/EADC on Thursday, November 13 from 8-9 a.m. An IAC technical session will follow the breakfast. See [www.energycongress.com](http://www.energycongress.com).
- ASHRAE's Winter Meeting will be held January 2004 in Anaheim, CA. To sign up for the conference, go to [http://ashrae.confex.com/ashrae/meetreg/forms/regform50\\_3.epf](http://ashrae.confex.com/ashrae/meetreg/forms/regform50_3.epf)
- Globalcon is scheduled for March 24–25, 2004 in Boston, MA. Visit <http://www.aeecenter.org/globalcon/>.



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## ***Texas A&M Conducts Training***

In August Texas A&M University conducted the first training workshop targeted for colleges and universities who want to have an IAC someday. Workshops are planned around the nation to familiarize potential IAC personnel in ABET-accredited college and university engineering departments with the national IAC program and the assessment process. Other organizations planning similar outreaches with funding from other sources may also benefit from this training.

There were fourteen participants from universities and government agencies at the first training workshop held August 18-20 at the University of Louisville and hosted by the Kentucky Pollution Prevention Center. This particular workshop was organized under the auspices of DOE's Atlanta Regional Office for the southeastern US. Future workshops will be



held in the other DOE regions depending on interest.

The workshop involved discussions of the IAC program, contractual expectations, policy issues, the role of the field manager, Best Practices (known as Industrial Technology Delivery), software tools, client relations, student participants, assessment visits, report preparation, implementation data, national database, instrumentation, safety, and program confidentiality.

Workshops are 2½ days long, and the second day is a visit to an industrial plant so that participants can see how students and faculty actually conduct an industrial assessment. At this workshop we visited a plant that manufactures both chemicals and mechanical equipment. The interesting plant gave a broad perspective on the assessment process.

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