



U.S. Department of Energy
**Energy Efficiency
and Renewable Energy**

Bringing you a prosperous future where energy
is clean, abundant, reliable, and affordable

Industrial Technologies Program

Student Activities Update

IAC Student Meeting
February 2008

Michaela Martin
martinma@ornl.gov, 865-574-8688



Overview

- Student Registry and Exit Interviews
- IAC Forum website
- Newsletter
- Certificates





Student Registry and Exit Interviews

- Located at: <http://www.iacforum.org/>
- Lead Student Responsibilities
 - Ensure that all students complete the registry when entering the IAC
 - Ensure that all students complete the exit interview when departing the IAC
 - Ensure that lead/active/inactive status information on students is current



Student Registry and Exit Interviews

- Lead Student Query should be used to maintain student status information regularly
 - Active/Inactive student status
 - Deactivating students: Lead students should change status of students who departed without an exit interview. Deactivation requires reason for departure and updated contact information.
 - Lead Student(s) appropriately identified
 - Update contact information for alumni
 - Please review list of active students for accuracy ASAP!



Why This Is SO Important

- The IAC is a government program
- IAC funding is determined annually and is based on:
 - Savings from assessments
 - Number of students trained and energy experts created
- *Registry data* defines the number of students in the IAC at any time
- *Exit interviews* identify the number of students that are departing for careers in energy



Registry/Exit Interviews and Program

Metrics

- Metrics are used in performance reports to DOE-headquarters, congress and the news media. Budget decisions are often made using frequent analyses of registry and exit interview data.
- Data quality, consistency and completeness are critically important
- Maintaining your registry/exit interview data is a deliverable in your center's workplan with DOE and should be a high priority for Lead Students and Directors.



Alumni Fact Sheet

U.S. Department of Energy
Energy Efficiency and Renewable Energy
 Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

Industrial Technologies Program

Industrial Assessment Centers Alumni

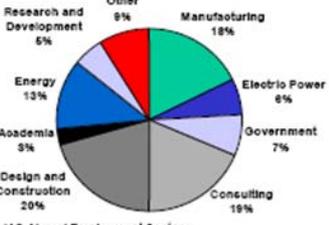
The Nation's Premier Talent in Energy Efficiency

The U.S. Department of Energy's Industrial Assessment Center program is the nation's premier, successful launching pad for a new generation of engineers that are capable of tackling the energy challenges faced by this country in the 21st century. Each year over 200 engineering students receive hands-on training in energy efficiency under the leadership of seasoned professional engineers in the conduct of energy assessments at U.S. manufacturing plants. This effective training approach creates highly proficient energy professionals, with over 60% of graduates making careers in the energy field.

Since its inception in 1977, over 2500 engineering students have participated in the Industrial Assessment Center program. Funded by the Department of Energy's Industrial Technologies Program, teams of engineering students and faculty at 26 universities across the United States conduct energy assessments at industrial manufacturing plants within their region. The recommendations identified by the IACs help plant managers reduce energy consumption and operating costs, saving U.S. manufacturers over \$100 million in energy costs in the last five years alone.



IAC graduates bring their unique skills to work across all major engineering employment sectors, with the majority working in Design/Construction, Manufacturing and Consulting. IAC graduates are well known for their expertise in energy efficiency and are in high demand in the current job market. Recruiters actively post job opportunities and identify candidates through the IAC Forum website (www.iacforum.org) and many recruiters regularly attend the annual meeting of Lead Students. IAC graduates and their employers are also actively involved in the Save Energy Now assessment effort. The IAC program maintains communications with its network of active alumni through an alumni list serve, the annual IAC Student and Alumni newsletter and the IAC Forum website.



Sector	Percentage
Design and Construction	20%
Consulting	19%
Manufacturing	18%
Energy	13%
Research and Development	8%
Other	8%
Electric Power	8%
Government	7%
Academia	3%

Success in Developing Energy Professionals

The vitality and success of the program can be seen in the statistics on the IAC student participants.

Numbers of IAC students entering the program, active in the program, and departing the program (entering the job market) are shown in the following table. *The lower numbers in 2006 and 2007 reflect reduced funding levels for those years and the same downward trend is expected for 2008.*



IAC Student Forum Website

- Offers a window to IAC students and alumni for potential employers, policymakers, media, non-IAC schools
- Primary communications tool for students and alumni
- Important announcements are listed on the home page, students should check the site every month
- Many students and alumni use the website for information about their work
- We are always interested in new article highlights





IAC Student Forum Website

- The Career section is VERY effective at matching IAC students and alumni with energy-focused employers
 - Please have your students post resumes regularly
 - Please remind your students to check the site frequently for new job opportunities!!
- Privacy concerns?
 - The site is hosted by ORNL and adheres to all ORNL privacy requirements



Student and Alumni Newsletter

- January 2008 edition available on website
- Electronically delivered to current and former students
- IAC news briefs from all centers
- Feature articles from our alumni
- Ideas for articles from students and alumni are accepted all year

INDUSTRIAL ASSESSMENT CENTERS
Student and Alumni Newsletter

January 2008
 Visit us at www.IACforum.org and iac.rutgers.edu





**IAC Alumni ARE
 "The People We Have Been
 Waiting For"**

Those of you who keep up with the IAC Forum website (www.IACforum.org) have seen the article from Thomas Friedman of the NY Times titled "The People We Have Been Waiting For". After an initial dose of criticism of U.S. energy policy, he writes about student-driven activities at MIT that create awareness and expertise in energy efficiency and renewable energy. As I read the article, I found myself yelling at my monitor—this is work that our IAC schools have been doing for the U.S. Department of Energy for 30 years! In addition to creating campus advocacy groups, our students are working side by side with some of the best energy experts this country has to offer and gaining experience that is second to none. So despite the lack of recognition from the NY Times, we are making a difference!

This year's newsletter includes some exciting stories about the work of our students and alumni in deploying energy efficiency and renewable energy solutions. From our busy colleagues at ERS to our new City of Cleveland Energy Manager and our West Coast solar advocate—IAC'ers are transferring their skills and experiences into action to solve U.S. and global energy challenges. We also have two feature technical articles from our alumni that address transportation assessments and best practices in industrial refrigeration. Finally, because of the high demand for IAC graduates in 2007, we have added a section on corporate recruiters.

As we move into another year, I encourage you to keep in touch and send me updates of your successes and whereabouts. The benefits of networking through the IAC are tremendous. In the meantime, I think I'm going to send a copy of our newsletter to Mr. Friedman.

Michaela Martin, PE, CEM
 IAC Student Activities
 R&D Staff Member
 Oak Ridge National Laboratory
martinm@ornl.gov

Contents

IACs Playing a Major Role in U.S. DOE 2

Save Energy Now Assessments 2

IAC Graduates Find a Home at ERS 2

From IAC Student to City Energy Manager 3

Oregon State Student Goes Solar 4

Spotlight on University of Illinois at Chicago 5

Missouri IAC Students Attend First-Ever EE Global Forum in Washington, D.C. 7

Hosted by the Alliance to Save Energy 7

Feature Article: Incorporating Transportation into the Industrial Assessment 8

Feature Article: Introduction to Industrial Refrigeration Best Practices 11

University Briefs 22

Recruiter's Corner 29

This year's newsletter includes some exciting stories about the work of our students and alumni in deploying energy efficiency and renewable energy solutions. From our busy colleagues at ERS to our new City of Cleveland Energy Manager and our West Coast solar advocate—IAC'ers are transferring their skills and experiences into action to solve U.S. and global energy challenges. We also have two feature technical articles from our alumni that address transportation assessments and best practices in industrial refrigeration. Finally, because of the high demand for IAC graduates in 2007, we have added a section on corporate recruiters.

As we move into another year, I encourage you to keep in touch and send me updates of your successes and whereabouts. The benefits of networking through the IAC are tremendous. In the meantime, I think I'm going to send a copy of our newsletter to Mr. Friedman.

Michaela Martin, PE, CEM
 IAC Student Activities
 R&D Staff Member
 Oak Ridge National Laboratory
martinm@ornl.gov



Industrial Assessment Centers 2006-2011

Current schools in the Industrial Assessment Center Program.

IAC Student and Alumni Newsletter—January 2008 1/31



Student Certificates

- On-line requests are processed through certificates link on www.iacforum.org
- Deadlines for requests occur 3 times per year: October 1, March 1 and July 1
- Qualification criteria for students and alumni
 - Minimum of two semesters or summers completed
 - Minimum of 6 assessments conducted
 - Demonstrates 7 of 9 core IAC skills (AR identification, report writing, savings calcs, teamwork, client interaction, utility data analysis, conceptual AR designs, leadership, others)





Student Certificates

- Student initiates request online, Director/AD receives email notification with link and he/she completes the request online and submits request for final processing (*please verify that your Director has received the automated request*)
- Both alumni and students who meet the criteria may apply
- Students and alumni must be in the IAC registry to receive certificates
- Certificates are mailed to the Directors within 30 days of the request deadline for distribution



Questions, Suggestions or Comments on IAC Student Activities?

Contact:

Michaela Martin
IAC Student Activities Coordinator
Oak Ridge National Laboratory
865-574-8688, martinma@ornl.gov

Susie Allen
ORNL IAC Administrative Assistant
865-740-4684, allensc@ornl.gov

