

# IAC Alumni

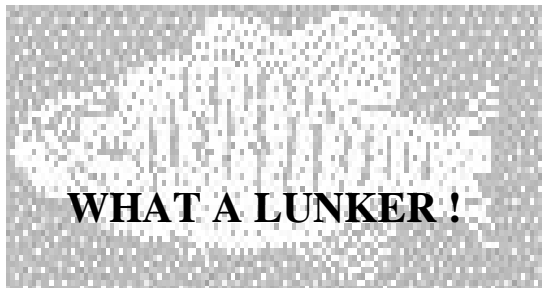
## NEWSLETTER

July 1998



Once again, WELCOME! This is the second issue of the IAC Alumni Newsletter, sponsored by the Office of Industrial Technology (OIT). OIT is a part of the Department of Energy's Office of Energy Efficiency and Renewable Resources.

We hope that you, as a former student in the EADC/IAC Program, enjoy the updates about the ongoing activities of the IAC program, the Department of Energy, and the Office of Industrial Technologies.



A fishing trip in the IAC database yielded some really big catches in implemented money saving recommendations. The biggest luncker of them all was from North Carolina State Report # 106, with a cost saving of \$870,000 from just one recommendation! In December 1996, an assessment was performed at a facility that makes paper packaging products for liquids such as milk and orange juice. Four sealing machines, which operate 24 hours per day, were a bottleneck in producing gable top boxes. The gable top boxes represented 30% of sales. A recommendation was made to add a fifth sealing machine. By implementing this recommendation in early 1997, a substantial increase in revenue was realized from the profit on increased sales.



### FINALLY! AN IAC LOGO"

After some time and debate, OIT has decided on a "logo" for the IAC program. Actually, *real* logos require approval from on high, so maybe we should just call it an

emblem. The emblem was adapted from a photograph taken at an actual assessment. Does anyone recognize themselves? You'll find out who it is in the next issue.

### REMEMBER WHEN . . .

"I remember the time we did an assessment of a plant that manufactured the fuses for the Patriot Missiles used in the Gulf War. The employees wrote notes to our troops and slipped them into the packaging." Please send us your most interesting recollections to [stories@camp.rutgers.edu](mailto:stories@camp.rutgers.edu). A collection of memories will be included in the next issue. Look for them.



## **THE ENERGY POLICY ACT OF 1992**

Motors and lighting systems have been good targets for energy conservation recommendations. However, the basic intent of EPACT is to reduce the rate of energy consumption in the US by **requiring the manufacture of energy efficient products**. For both motors and lighting, the less energy efficient options are no longer on the market. Should motor and lighting recommendations still be made? Yes - but with the knowledge of how EPACT has changed what manufacturers have to offer.

**MOTORS:** As of 10/24/97, most AC industrial general purpose motors imported or manufactured for sale in the US must meet energy efficient requirements as defined in Table 12-10 of NEMA standard MG1. **NEMA-defined energy efficient motors are the new standard motors.** The efficiency of EPACT motors falls between the pre-EPACT standard motors and the premium motors. Pre-EPACT motors are no longer “in the pipeline”.



**LIGHTING:** Many of the lighting industry’s most commonly used lamp types are subject to EPACT requirements. Fluorescent lamps were significantly effected by provisions becoming effective 5/1/94 and 11/1/95. **By setting standards for both lumens per watt and color rendering, the law allows the cheaper halophosphor colors (such as warm white and cool white) only in reduced wattage or energy saver types.** Old stocks of non-EPACT T-12 lamps are by now depleted. T8 lamps are in full compliance with EPACT. T8 systems with electronic ballasts provides the best combination of energy savings and color quality.

### **VISIT OIT’S WEB SITE**

Learn more about the Office of Industrial Technologies and its programs by visiting the OIT web page at <http://www.oit.doe.gov>. There are links providing information about Industries of the Future as well as links to each of the six Technology Access Programs: Motor Challenge, NICE<sup>3</sup>, Compressed Air Challenge, Industrial Assessments Centers, Steam Challenge, and Inventions and Innovations. These links and the “Headline News” links provide information about technological and financial resources available from the OIT. Also through the OIT site, you can access the IAC database and take advantage of the downloadable IAC training manuals.

### **NEW ADDITIONS TO THE OIT’S TECHNOLOGY ACCESS PROGRAM**



The goal of **Steam Challenge** is to help industrial customers retrofit, maintain and operate their steam systems more efficiently and more profitably. The Steam Team, comprised of suppliers of steam related technologies, works together to promote total steam system efficiency. DOE, the Alliance to save Energy and a technical advisory committee review all material before recommending its use in industry. For industrial steam owners and operators, Steam Challenge is a voluntary program that provides access to many tools and services.

The **Compressed Air Challenge** is dedicated to helping industrial customers improve the efficiency and reliability of their compressed air systems, with the goal of reducing energy needs and costs. *Improving Compressed Air System Performance: A Sourcebook for Industry* is a publication that provides an overview of industrial compressed air systems, describes improvement opportunities in detail, and includes a directory of programs, resources, and tools. The publication is available for \$19.95 through the Motor Challenge Information Clearinghouse at (800)862-2086.



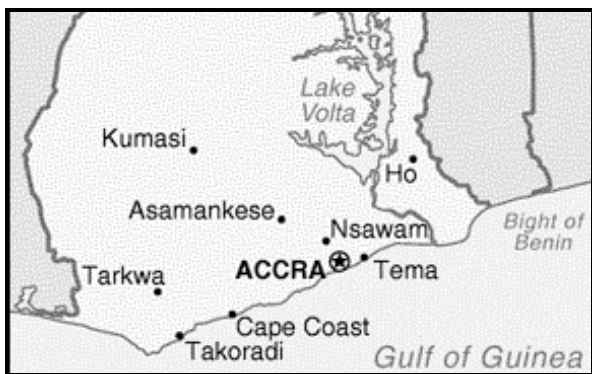
## NEW IAC FRONTIERS IN AFRICA

*Dr. Warren Heffington from Texas A&M and Dr. Paul Biney from Prairie View A&M provide technical assistance to the new IAC at the University of Science & Technology in Kumasi, Ghana.*



Energy efficiency is a vital concern for Ghanaians. About 98% of their electricity is hydro-generated, but supply is unstable due to rainfall fluctuations. As a part of a US-Ghana cooperative program initiated in 1995, the OIT and Ghana's Ministry of Mines and Energy (MOME) signed an agreement in early 1997 to facilitate the establishment of an IAC in Ghana. With the support of the DOE, Dr. Heffington and Dr. Biney went to Ghana in the summer of 1997.

A trip to Ghana sounds pretty exotic. Imagine the climate, the travel conditions, the animals! How did Drs. Heffington and Biney react to conditions in Ghana? Native Ghanaians repeatedly asked Dr. Heffington how he liked their hot, humid climate. Since he had left from Houston in the middle of July, he was happy to tell them that he liked the cooler, less humid climate of Ghana. They traveled by road between Accra and Kumasi. While road conditions are less than ideal (there is a preponderance of 4 wheel drive vehicles), the trip was nevertheless very speedy. Dr. Heffington was hoping to see the local wildlife, but the roadside scenery was mostly timber and crop land and Dr. Heffington saw only two animals (one was dead). How about Dr. Biney? Well, he's a native Ghanaian. So there was not much to distract Drs. Heffington and Biney from keeping their minds on business. They conducted a seminar in Accra and observed an audit of a plywood and veneer plant in Kumasi. The audit team consisted of 21 Ghanaian students, 3 UST faculty and 2



representatives from MOME. The audit led to several recommendations.

This July, Dr. Heffington and Dr. Biney will return to Ghana for two weeks. They will conduct seminars in Accra, Kumasi, and Takoradi, and will observe another audit.

## INDUSTRIAL ASSESSMENT CENTERS

### Arizona State University

Dr. Patrick E. Phelan (602) 965-1625

### Bradley University

Dr. Paul Mehta (309) 677-2754

### Colorado State University

Dr. Harry W. Edwards (970) 491-5317

### Georgia Institute of Technology

Mr. William A. Meffert (404) 894-3844

### Hofstra University

Dr. Richard Jensen (516) 463-6020

### Iowa State University

Mr. Richard Rusk (515) 294-1397

### Mississippi State University

Dr. B.K. Hodge (601) 325-7315

### North Carolina State University

Dr. James W. Leach (919) 515-5228

### Oklahoma State University

Dr. Wayne C. Turner (405) 744-6055

### Old Dominion University

Dr. Sidney Roberts (757) 683-3726

### Oregon State University

Dr. George M. Wheeler (541) 737-2515

### San Diego State University

Dr. Asfaw Beyene (619) 594-6207

### San Francisco State University

Dr. Ahmad Ganji (415) 338-7736

### South Dakota State University

Dr. Kurt Bassett (605) 688-4817

### Texas A&M University

Dr. Warren M. Heffington (409) 845-5019

### Texas A&M University - Kingsville

Dr. Youssi Elkassabgi (512) 593-2293

### University of Arkansas at Little Rock

Dr. Mamdouh Bakr (501) 569-8228

### University of Dayton

Dr. Kelly Kissock (937) 229-2852

### University of Florida

Dr. Barney L. Capehart (352) 392-1464/3180

### University of Kansas

Dr. Jerry D. Swearingen (785) 864-2980

### University of Louisville

Dr. Geoffrey Coburn (502) 852-5058

### University of Maine

Mr. Scott C. Dunning (207) 581-2349

### University of Massachusetts

Dr. Lawrence L. Ambros (413) 545-2539

### University of Michigan

Dr. Arvind Ateya (313) 647-4790

### University of Missouri-Rolla

Dr. Bums E. Hegler (573) 341-4718

### University of Nevada-Reno

Dr. Yunus A. Cengel (702) 784-1690

### University of Notre Dame

Dr. John W. Lucey (219) 631-7381

### University of Tennessee

Dr. Richard J. Jendrucko (423) 974-7682

### University of Wisconsin

Dr. Umesh Saxena (414) 229-4052

### West Virginia University

Dr. Ralph W. Plummer (304) 293-4607

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## Coming Events...

**Aug.23-28, 1998** ACEEE 1998 Summer Study on Energy Efficiency in Buildings, Pacific Grove, CA  
For info, <http://aceee.org>

**Sept.13-17, 1998** World Energy Conference  
Houston, Texas

**Feb.8-10, 1999** 3rd Biennial Industrial Energy Efficiency Symposium and Exposition  
Washington, DC

**April, 1999** Industrial Energy Technology Conference,  
Houston, TX  
For info, call Jim Eggebrecht at (409) 845-1508

**June, 1999** ACEEE Summer Study on Energy Efficiency in Industry  
For info, <http://aceee.org>

**Would you like more information about the IAC Alumni Newsletter?**

**Contact:** The Office of Industrial Productivity and Energy Assessment  
Lisa Holmlund, Editor  
(732) 445-5540  
[holmlund@camp.rutgers.edu](mailto:holmlund@camp.rutgers.edu)



**IAC Alumni**  
NEWSLETTER

The Office of Industrial Productivity  
and Energy Assessment  
Rutgers University, College of Engineering  
640 Bartholomew Road  
Piscataway, NJ 08854-8003

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