



MAY 1999

Volume 1
Issue 2

The INFORMER



Morehead State
University

Department of Industrial
Education

<http://www.morehead-st.edu/colleges/science/iet/>

New Accreditation

The National Association of Industrial Technology (NAIT) fully accredited the Industrial Technology Bachelor of Science program. The accreditation includes the options of construction/mining technology, electrical/electronics technology, graphic communications, and manufacturing/robotics technology.

The NAIT accreditation was a comprehensive self-study of the Industrial Technology program that included assessment of the program's quality, effectiveness, curriculum and instruction. After review, the NAIT team recom-

mended all four IT options for full accreditation.

Although Morehead State University is accredited by SACS, the Industrial Education and Technology Department applied for further accreditation to add additional credibility to its programs. The NAIT accreditation is a positive endorsement for graduates seeking jobs. Mr. Robert Hayes, chair of the IET Department, says that NAIT is an indication of quality instruction and was chosen because it is the leading accrediting Industrial Technology Association and accredits 206 programs in 59 institutions nationwide.

In This Issue...

PAGE 2

MSU Invades Indianapolis

Tech Fact

And Students Think They Have It Rough...

PAGE 3

From A Distance

Students Build Fiber Optics Display

PAGE 4

From A Distance

IET Celebrations

Dr. Zargari

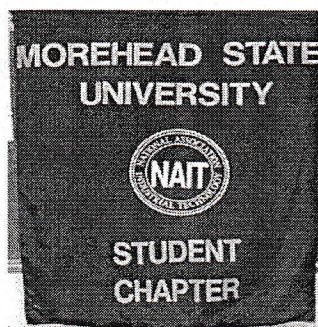
Bits of History

Thanks and Credits

NAIT Student Chapter

Although the University's NAIT student chapter is only two years old, it has sixty members. These members assisted in the recent NAIT accreditation of the IET department. The students also work very hard at fund raising. The most recent activity was a bluegrass jam session featuring the Lonesome River Band.

This fund raiser was organized by Phyllis Gilley, Mike Potter, Byron McCoy, and Robert Cooper. Next on the agenda is to help Habitat for Humanity build homes this summer.



IET Honors Students

The IET Department honored four graduating students and a graduate student at this spring's College of Science and Technology Honors Day on April 29, 1999. These students were chosen for their excellent academic records and involvement in activities within the IET Department.

Kevin Beck of Grayson, KY was chosen as the IET Department's overall best student, as well as the outstanding student in Electricity/Electronics. Kevin also had the distinction of being selected as the speaker for the entire University's graduation ceremony May 8th. Ronald W. Dillon of Morehead, KY was chosen as the outstanding student in Graphics Communications. Mark E. Parsons from Salyersville, KY, the outstanding student in Manufacturing and Robotics. Brent N. Setters of Mt. Sterling, KY the outstanding student in Construction/Mining. Steven Koutoulas was selected as the outstanding graduate student in the Master's in Vocational Education.

MSU Invades Indianapolis

From October 21st to the 24th, ten representatives of MSU's Industrial Education and Technology Department took part in the 31st Annual National Association of Industrial Technology (NAIT) Convention. Six students participated in several events including focus groups, student competitions,

and newly created student organizations.

Freshman Misty Owens captured first place in the Student Problem Solving contest, while Byron McCoy, a junior,

placed in the semi-finals of the Student Division IT/IQ contest. Several other students were appointed as official representatives of MSU's Student Division committees. Senior Phyllis Gilley was appointed to the Awards Committee while two fellow students were also being elected to offices. Rita Atiase, a sopho-



more, was appointed to the Presentation committee. Junior Sharon Austin was not only assigned to the Publications Committee but also to the Graphic Communications Focus Group. Austin served as a voting member on a proposal to create a new Graphic Communication Division within NAIT.

In addition to student participation, attending faculty were also active in the convention's events. As NAIT student chapter advisors, Dr. Ahmad Zargari, Dr. Charles Partick, Dr. Bill Grise

and department chair, Mr. Robert Hayes, provided several presentations covering topics from Industrial Technology's role in the 21st century to solar indoor lighting.

Thanks to senior Mike Potter, many of the events were captured with the IET Department's digital camera.

Tech Facts

The most mysterious technical force in the 19th century world was electricity. It was invisible, poorly understood, and potentially harmful. No one did more to advance the field of electricity than Michael Faraday (1791 - 1867). His two greatest accomplishments were inventing the electric motor in 1821 and the transformer in 1831. Faraday is the only person honored with two measurement units. The farad is a unit of capacitance and the faraday is a unit of charge.

And Students Think They Have It Rough...

We have all probably been guilty of complaining about teachers being too difficult or too slow returning homework and exams. However, we should consider everything teachers do outside of class. Faculty do far more than just teach in a classroom. They do extensive research, write books and articles, and deliver many presentations in an effort to enhance their professional development.

In 1998, the faculty in the IET Department participated in many outside activities. Dr. Ronald Spangler conducted three presentations including "On-line Learning" at the Kentucky Applied Technology Education Association Annual Meeting,

and "Multimedia in the Classroom" at the Kentucky Vocational Teacher Education Conference. Dr. Charles Patrick also gave presentations in 1998: "Passive Solar Lighting Using Fiber Optics" at the 31st Annual National Association of Industrial Technology Conference, "WEB Page Development, Advanced Power Point, and Learning Through the WEB" at the 42nd Annual Conference of the Kentucky Applied Technology Education Association, and "Enhancing PowerPoint Presentations: Custom Builds and Transitions" at the 23rd Annual Kentucky Vocational Teacher Education Conference.

From A Distance

In a world where convenience is a must and time is limited, educational advancements are being made to help schools become more accessible. MSU is certainly no exception. It is the regional leader in distance learning and internet courses.

Compressed video classes are broadcast via monitors and cameras to one or more designated sites. One such course is Dr. Smallwood's Evaluation Techniques. The class is broadcast to three other sites where eleven students meet. The on-campus site is equipped with four T.V. screens,

an audio-activated camera, and a document camera. The off-campus sites in Montgomery, Magoffin, and Lawrence Counties contain a T.V. screen and audio-activated cameras enabling students to see one another. Students must have internet access using a 4.0 browser and an E-mail address. Students can either fax or E-mail their homework. Students also participate in chatroom discussions. This class will be offered again during the summer.

Internet courses, like that of Dr. Ron Spangler's Methods of Instructional Technology, are another example of distance

learning. This particular class has 14 students who receive Powerpoint presentations and assignments through the Internet. According to Dr. Spangler, "the Internet courses have an advantage others do not... allowing students to access information according to their schedule." Tests, homework, and grades are posted on the Global Gateway section of MSU's webpage for students to access at any time. The flexibility of internet courses is slowly gaining popularity with students and creating a demand for more distance learning opportunities.

Students Build Display

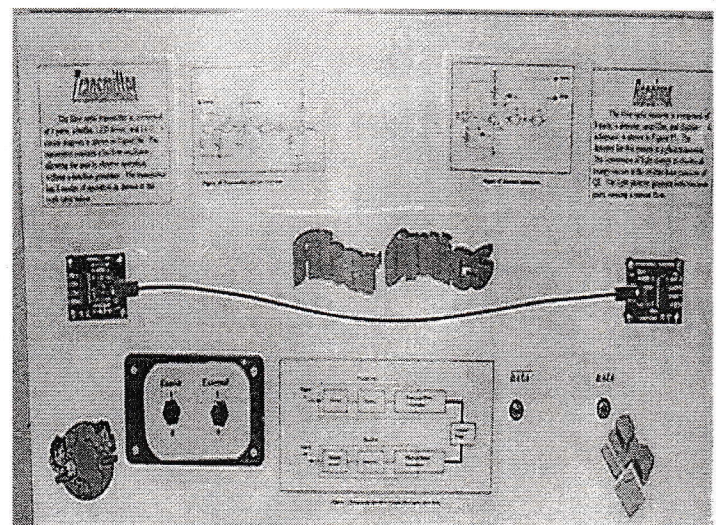
If you were to visit the second floor of Lloyd Cassity, you would find a display of one of the most advanced technologies available on campus: fiber optics. Built by three EET 345 students, Kevin Beck, Willie Boggs, and Kevin Bowling, the display shows how data can be transmitted from one source to another through the use of light and digital pulses. To the layman, fiber optics cable looks like a t.v. cable, however, this is hardly the case. The "cable" is actually a tiny plastic tube wrapped in a thin, reflective metallic sheet called cladding. The tube and cladding are then coated with a protective layer of flexible plastic. One end is connected to a transmitter while the other is connected to a receiver. The transmitter sends

laser pulses of light through the tube, while the receiver then decodes the pulses into data.

Fiber optics has many uses. Currently, it is used in telecommunications. Fiber optics is more efficient than electricity; however, it has serious disadvantages. According to Kevin Beck, the connections are the biggest problem because light travels in waves that require uninterrupted paths, the transmitter and receiver must be connected perfectly. This dilemma makes splicing nearly impossible. Cost is another disadvantage. The tubing costs \$70.00 per three

feet while common network patch cable costs only \$7.00 per 100 feet.

Since student exposure to fiber optics is somewhat limited, Kevin Beck and Willie Boggs believe the display is important because people have an opportunity to see what it looks like and acquire a better understanding.



IET Celebrations

The spring 1998 graduate reception was held on May 15, 1998. Those graduates attending included David Peyton, Brett Daughenbaugh, John Cornett, Pat Mays, Jon Thomas, Westley Conway, Steven Conway, Keith Messer, Clyde Dotson, Neil Gyuris, Danny Collins, Jason

Adkins, David Appel, Lance Hocker, and Andy Ong. Those students in attendance were commended by the departmental faculty in a positive oral presentation. The fifth annual graduate reception for the Fall 1998 graduates was held on December 11, 1998. Of the 23 invited graduates, the photo shows the attendees: Robert Cooper, Leslie Crager, Latishawa Ezell, James Gullet, William LeQuire, Jasson Lindon, Wayne Mason, Jeffery Pergrem, Brent Setters, Brian Sims, Phyllis Steele, Westley Truesdell, Evan Hall, and Chad Fredrick. Two special events took place at the reception. The IET faculty presented Ms. Johnda Flora,



Academic Department Specialist, with a Special Christmas Wish that only partly expressed their appreciation for her efforts during 1998. The second special event was a dedication ceremony for the recently developed FACULTY/STAFF FRAMED MARQUEE. The

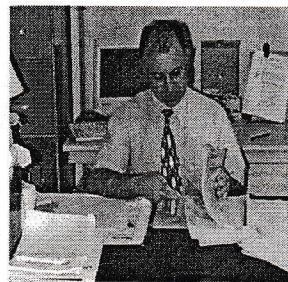
graphic representation of the IET faculty will be placed in the display case outside of the LC105 office complex and updated yearly.

Dedication of a similar marquee for the IET Advisory Council members is planned for a forthcoming ceremony. In addition, a special marquee of all faculty serving MSU since 1922 will be dedicated at a future graduate reception.

The sixth annual graduate reception for the Spring 1999 class was held May 7, 1999. A write-up will be included in the next issue.

Dr. Zargari

Dr. Ahmad Zargari is one of the most highly respected instructors in the IET Department. He is extremely active in assisting students, as well as the entire department. He played an integral part in the accreditation process, escorted students to the NAIT convention in Indianapolis, delivered numerous presentations and orchestrated the fiber optics display.



Thanks and Credits

The editor would like to thank all of the faculty and students who have aided in the production of the newsletter. Thanks to Dr. Morella for input on the graduation party and Mr. Dennis Karwatka for submitting the History and Tech Fact bits. Dr. Bill Grise for the Honors article. Special thanks go to Dr. Ron Spangler and Dr. Ahmad Zargari for their contributions.

STAFF

Editor: Andrea Martin
Photographs (Except NAIT Convention and Party): Andrea Martin
NAIT Convention Photograph: Dr. Ahmad Zargari
Faculty Advisor: Dr. Ron Spangler

Bits of History

Grace Hopper (1906-1992) was a member of the first team of modern computer programmers. She worked on the Mark I during the 1940s. Hopper's favorite teaching tool was a wire nanosecond (billionth of a second). It was a 12-inch long length of wire, about the distance electricity travels in a nanosecond. She compared it to a 984 foot long wire microsecond (millionth of a second). She said every circuit designer should have a wire microsecond on their desk so they would know exactly what they were wasting with each extra microsecond.