Department of Industrial Education and Technology

IET Informer

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Of Special Interest

- Mathematics, Physics, and Advanced Technology Exposition is Nov. 6 at MSU.
- National Association of Industrial Technology Association Conference is Nov.
 6-9 in Panama City, Florida.
- Kentucky Applied Technology Education Association Conference is Nov. 8-9 in Louisville.

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Dr. Ahmad Zargari Takes IET Helm Department Faculty Member for Eight Years

Dr. Ahmad Zargari, Associate Professor of Industrial Education, was recently appointed Department Chair. He has been an MSU faculty member since 1994. Dr. Zargari succeeds Prof. Robert Hayes who retired last summer. Prof. Hayes currently teaches part time in the department.

Dr. Zargari holds a PhD degree in Higher Education from Bowling Green (Ohio) State University. He has also earned other degrees related to technology education and electronics. He is a Certified Senior Industrial Technologist (CSIT) and has about 30 years of experience in administration and teaching curriculum development. He said that he has several departmental goals:

- Focus on students,
- Improve retention,
- Enhance quality,
- Curriculum content,
- Teach contemporary technology, and
- Economic development by preparing technology teachers and technical management personnel.

He developed several new courses and was the driving force in establishing the MS in Industrial Technology degree in 2001. The program has about 30 students, which is considered to be a very strong number. Dr. Zargari's research interests include alumni surveys, market analysis, networking and computer technology, and total quality management. He has made about 50 presentations at technical meetings over the past eight years. He has also authored or co-authored about 40 articles.

His long list of professional organization memberships include being president of the Kentucky Applied Technology Education Association and senior member of the Society of Manufacturing Engineers. As this issue was going to press, he was one of two persons running for the presidency of the university division of NAIT.

NAIT Reaccredits IET Department

The IET Department received its initial National Association of Industrial Technology accreditation in 1998. Representatives of NAIT returned in the Spring of 2002 for a routine evaluation of the department's progress.

They looked at course requirements, textbooks, examples of student work, and other aspects of industrial technology.

One of the reasons for such visitations is to make recommendations for improvement. The NAIT team noted those areas in the report they gave to President Eaglin in May. Balancing them with the department's strengths, NAIT extended the department's accreditation for two more years.

Department Welcomes Four New Individuals

The department was fortunate to find four faculty and staff members who have added their expertise to improving instruction. They include two new and one returning faculty, and one staff member.

Dr. Ehsan Sheybani - most recently came from Hillsborough Community College in Tampa, Florida. He has a PhD degree in Electrical Engineering from the University of South Florida in Tampa His employment background includes work as a networking engineer for Bell South. He has had several articles published by the prestigious Institute of Electrical and Electronic Engineers. Dr. Sheybani is primarily responsible for teaching electricity/ electronics courses and networking technology.

Instructor Giti Javidi-Sheybani also came from Tampa with her husband Dr. Ehsan Sheybani. Instructor Javidi expects to receive her PhD in Instructional Technology next year from the University of South Florida. She has held various positions associated with computer science and has special skills with course development tools such as WebCT and Blackboard. She has made presentations at several technical conferences. She is primarily responsible for teaching electricity/ electronics and internet courses. Instructor Sam Mason - was a department instructor during the 2001/02 academic year and stayed for the current year. He has also worked as an industrial engineer for Arvin NAA in Columbus, Indiana and as robotic engineer at Toyo Seat in Flemingsburg. Instructor Mason is a Certified Manufacturing Engineer and recently received a Masters degree in IET. He is responsible for teaching robotics and machine tool technology courses.

Mr. Rick Rose - is the new department technician. He maintains, repairs, and upgrades all the laboratory equipment, including the many departmental computers.

Kevin Hale is New Chair of IET Dept Advisory Board

Kevin Hale is the new chair of the department's Advisory Board. He received a degree in IET in 1986 and is CEO of Box Lake Networks, a networking company based in Winchester. The company provides computer services for engineering firms, manufacturing companies, and other businesses. Those services include network design, high speed internet and WAN connectivity, website development, and general technical support.

Mr. Hale also serves as Computer Systems Coordinator for Palmer Engineering in Winchester. The 112-member civil engineering consulting firm has six branch offices and Mr. Hale was responsible for the development of the company's CAD system, used in all the branch offices. His current responsibilities center around computer development. During his 15-year career with Palmer, Mr. Hale was project manager for various gas line, highway, and surveying projects.

His wife, Kim, is also an MSU alumnus. They live in Menifee County with their 10 year old daughter, Lindsey.

Mathematics, Physics, Applied Technology Exposition MPATE: A Joint Activity With Other MSU Departments

For the past several years, the department has joined forces with the Departments of Mathematics and Physical Sciences to provide challenging activities for visiting high school students. About 400 visit the campus for a day and travel from experiment to experiment in groups of about 20. Some of the light-hearted technical activities the department sponsored last year were:

"Get the Led Out" was with Drs. William Grise and Ahmad Zargari. Students assembled an electronic circuit and made measurements associated with a light emitting diode. "This Old House" by Dr. Ronald Spangler had the students designing houses with simulation software.

"Let it Fly" by Dr. James Smallwood centered around the folding of specialty paper airplanes.

MPATE 2002 is scheduled for November 6th.

Spring 2002 Reception For 27 IET Graduates Students Earned Associate, Bachelor, and Master Degrees

It is traditional for the department to sponsor a reception for its graduates. The May 10th event was held one day before the university's spring graduation ceremony, and at the MSU Alumni Center. Many of the graduates came with friends and relatives. Demonstrating the importance of non-traditional students in the IET Department, some graduates arrived with their spouses and children.

Following a light meal of sandwiches and soft drinks, Prof. Robert Hayes received acknowledgement as the retiring department chair. He was given a monogrammed "Faculty Emeritus" shirt to commemorate his 28 years of service. Dr. James Smallwood was introduced for the last time and given a plaque for his years of service. He had accepted a position as a department chair at Indiana State University in Terre Haute. Dr. Ahmad Zargari made some comments as the incoming department chair.

The graduates included,

Construction/Mining: Jimmy Asher, Tracy Barrett, Thomas Ingram, Bradley Jones, Nathan Pickrell, Kevin Stacy, Joseph Watson, and Adam Woodring.

Electricity/Electronics: Paul Alex-

ander, David Cunningham, David Flora, and Andrew Grosser.

Graphic Communication: Jeremy Edgeworth.

Manufacturing/Robotics: Jacqueline Cavins, Jason Fights, Kevin Johnson, Bradley Kegley, Adam Mellenkamp, Phillip Thornton, and Bo Zwolski.

Education: Johnnie Belcher and Nicole Large.

Associate: Nancy Artrip, Jeffrey Ferry, and Cole Johnson.

Masters: Annette Harris-Ward and Patrick Samuel Mason.

Senior Students Involved With Challenging Projects

The Senior Project course is partly designed to provide IET students with the opportunity to use their technical knowledge to work on an approved project of their choosing.

The project must show competency in two option areas. Students generate a lengthy written report and also make an oral report to the faculty using Power Point slides. Some representative sample topics from the Spring 2002 semester were:

"Comparison of Two Highway Surfaces" (Concrete and asphalt),

"Three Storage Sheds: Comparing Different Construction Methods,"

"Electrical Sensing for Corrosion in Large Underground Pipes," "Highway Driving Sensor" (Sensing when a car's wheel wanders off a road's surface),

"Machine Tool Chip Breaker," and

"Designing a Small Factory to Produce Aluminum Step Plates for Early Pickup Trucks." This project resulted in the student receiving a \$300,000 bank loan to establish a small factory near Cincinnati.

Dept Members Participate in Career Exploration Program

Instructor Sam Mason, and Graduate Assistants Kimba Bush and Aaron Cochran recently participated in a Career Exploration program at Mt. Sterling Elementary School. Displays were sponsored by local business and professional leaders, and the program's theme was "A Rainbow of Careers."

Their display consisted of two small training robots, a robotics video, and several electronic devices. The three department representatives coached the elementary school students in the operation of the tabletop mini robots. Each youngster worked to move a small cube from one location to another.

The programmed robots followed a continuous routine until students asked questions. That was when they had the opportunity to handle the robot's teaching pendant.

Over 200 kindergarten through fifth grade students participated in the program.

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"Teaching tomorrow's technology today"

The Department is on the Web. www.moreheadstate/ colleges/science/iet/

Graduate Assistants

The establishment of a Master of Science in Industrial Technology has brought many interested students to the department. About 30 are presently in the program and six serve as graduate assistants.

Kathryn Campbell is from Winchester, Ohio and Shirley Glass comes from Maysville. Erick Jeffers is from Gallipolis, Ohio and Jason Noble comes from Jackson. Also, Martha (Mollie) Plymale is from Owingsville and Kaisheng Shi lives in Normal Hall.

These graduate assistants are all taking a variety of 600-level courses while assisting faculty members with teaching and research activities. Many are enrolled in networking and other contemporary courses taught by Dr. Ehsan Sheybani, Dr. Rodney Stanley, Dr. Ahmad Zargari, and Instructor Giti Javidi-Sheybani.

Short Bytes...

William Grise - was a Faculty Researcher on a Summer Faculty Fellowship Program at the High Energy Research and Development facility at Eglin AFB, Florida.

Robert Hayes - was selected to serve as MSU's representative on the Kentucky Wood Products Competitiveness Corporation Board.

Dennis Karwatka - edited this news letter and has a book in process.

Sam Mason - taught in the summer Upward Bound program and attended Space Camp in Huntsville, Alabama with 33 of the students.

Wayne Morella - received a \$35,000 Tech Prep grant to establish a consortium with Bath, Boyd, Floyd, Greenup, Johnson, Knott, Magoffin, and Montgomery counties. *Charles Patrick* - is in the final phases of writing a book to be published by Prentice-Hall. With a target size of over 300 pages, it will be titled "Project Scheduling."

Ehsan Sheybani - co-authored a paper presented to the IEEE in May. It was titled "Integrated Network Architecture and Signal Processing for Telemammography."

Giti Javidi-Sheybani - presented a paper at the Conference on Information Technology in Monterrey, Mexico in February. It was titled "The Use of Immersive Virtual Reality in Education."

James Smallwood - accepted a position as head of the Department of Manufacturing and Construction Technology at Indiana State University in Terre Haute. Landon Smith - is a 1998 graduate who recently earned a Master of Science degree in Quality Assurance. He works for Arvin Meritor in Frankfort and has Black Belt Certification in Six Sigma.

Ronald Spangler - held a summer workshop on AutoDesk Inventor that was supported through the Cabinet for Workforce Development and Technology Update Program.

Rodney Stanley - taught an experimental summer class titled the Design and Construction of the Kentucky Longrifle.

Ahmad Zargari - instructed high school Governor's Scholar students in technology at Eastern Kentucky University for six weeks during the summer.