Welcome from the Chair

What an exciting year it has been in the School of Technology! As you read this newsletter, I am sure you will be amazed at the number of activities in which our faculty and students have participated. Additionally, the SOT Advisory Board continues to advocate for our programs and students. This year, the Board recognized outgoing member Kathy Rhodes for her service as both a member and secretary from 2005 through 2014. Rhodes said of her experience, “Serving on this Board has given me much more than I gave, I can assure you. Being an off-campus student, I felt a sort of disconnect to the school’s campus, but this experience has given me an insight into MY school that I will hold near and dear to my heart forever. Prior to this, I only felt connection to the program and its instructors. I AM EIU now! Priceless!”

We also have exciting news to share with regard to faculty, as we welcome two tenure/tenure-track faculty members this fall: Dr. James McKirahan, Jr., who completed his Ph.D. in Technology Management at Indiana State University, and Dr. John Cabage, a Ph.D. graduate in Civil Engineering from the University of Tennessee. We also welcomed Dr. Toqeer Israr as a full-time faculty member. Dr. Israr completed a Ph.D. in Electrical and Computer Engineering from the University of Ottawa.

Our students continue to participate in professional and research activities. Ten students attended the Association of Technology, Management, and Applied Engineering (ATMAE) conference in New Orleans. Stephany Fonseca, an AET major, presented at one of the SOT Advisory Board meetings, and she also presented “Performance Testing of a New Knot for Life Safety and Rope Access Applications” at the National Conference on Undergraduate Research (NCUR). The student chapter of ATMAE organized another successful meeting.

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“Golf and Goat” event in April. Students networked with professionals and advisory board members and enjoyed a friendly round of golf and a nice lunch. Once again, Dr. Slaven’s team won the golf tournament!

The School of Technology is in the midst of its strategic planning initiative. A day-long retreat was held on April 24, at an off-campus location, where faculty and staff spent time developing the vision, mission, and values statements, as well as the action items that will guide us through the upcoming years. Enjoy the newsletter, as we share accomplishments of your School of Technology from the past year.

Faculty Excellence
The School of Technology is proud of its active faculty members who receive accolades for their teaching, research, and service. Dr. Isaac Slaven received a “Research and Creative Activity” award for his project entitled, “The influence of building geometry in impacting thermal energy loss through open doors.” Dr. Slaven also received a “Faculty Award for Interdisciplinary Research (FAIR),” along with MSG Michael J. Gately, Jr. and CPT Daniel J. Alix, from Military Science for their research on “Performance testing of knots for military and rope access applications.”

A number of faculty members were honored with awards at the university, college, and departmental levels. Mr. Gabe Grant was the winner of this year’s “2013 Michael R. Hoadley Excellence in the Use of Instructional Technology Award.” Dr. Peter Ping Liu was honored with the “Edwin L. ‘Bud’ May Award for Outstanding Achievement in Research & Grants” award, as he has been very successful in writing grants that allow him to further his research and garner recognition for himself, his students, and EIU’s School of Technology. OPD faculty Dr. Luke Steinke received the “Epsilon Pi Tau Laureate Citation & EIU Achievement & Contribution Award,” and Dr. Diana Wyatt earned the “Felstehausen/Boldrey Excellence in Career and Organizational Studies Award.” Additionally, Dr. Isaac Slaven was a recipient of this year’s “Provost’s Undergraduate Research Mentor Award for LCBAS.”

Dr. Wafeek Wahby was named as ATMAE’s University Division Vice President for the upcoming year. Dr. Wahby was very busy in the fall semester, as he was the co-organizer for the EIU Science & Technology Symposium. Additionally, he organized the annual Thanksgiving dinner for international students that was once again held at the Lincoln Garden restaurant, generously sponsored by the owners Faik and Gici Zendeli, which gave international students a taste of what American Thanksgiving is all about.

Several School of Technology faculty members were recognized at the Celebration of Publications, Creative Works and Grants that was held in October of 2013. Dr. Rendong Bai, Dr. Wutthigrai Boonsuk, Dr. Julie Chadd, Dr. Rigoberto Chinchilla, and Dr. Karen Drage all submitted publications and were acknowledged for their research efforts.

The School of Technology also received fourteen Redden Fund grants for the improvement of undergraduate education. The recipients were: Dr. Rendong Bai, Dr. Bruce Barnard, Dr. Wutthigrai Boonsuk, Dr. Rigoberto Chinchilla, Dr. Jerry Cloward, Dr. Karen Drage, Dr. R. Lance Hogan, Mr. Aaron Melton, Dr. David Melton, Dr. Isaac Slaven, Dr. Robert Wiseman, and Dr. Diana Wyatt.

Science & Technology Symposium
Dr. Wafeek Wahby once again acted as co-organizer of the annual Science & Technology Symposium that brought together over 50 speakers over the course of a month during the Fall 2013 semester. Speakers focused on the changes in science and technology which had great impact on the world as we know it. In addition to speakers from all over Eastern’s campus, the following School of Technology faculty and staff participated in the symposium: Dr. Wutthigrai Boonsuk, Dr. Austin Cheney, Dr. Rigoberto Chinchilla, Ms. Donna Dawson, Dr. Peter Ping Liu, Dr. James McKirahan, and Dr. Isaac Slaven.
School of Technology Students Travel to Caterpillar

On Monday, November 18, 2013, twenty-five EIU School of Technology students in Dr. Mori Toosi’s Construction Equipment and Materials class travelled to the Caterpillar Visitors Center (CVC) in Peoria, Illinois. Their tour started in the bed of a huge 797F Mining Truck, where students viewed a brief movie about the history of Caterpillar and a look at the company’s customers worldwide. After viewing the movie, students and faculty were free to browse the many exhibits on display throughout the CVC.

Students climbed into the cabs and surveyed the complex control systems of the 318E Hydraulic Excavator, D6T Track-Type Tractor, and 420F IT Backhoe Loader, among others. Historical displays of equipment from the early 1900’s, like the Holt steam-type tractor, and the Caterpillar-designed Model-T wenty, gave students a feel for just how much the construction equipment industry has advanced throughout the past 100 years. Numerous videos described various Caterpillar equipment operations, complexities of huge diesel engines, and on-site assembly of the 797F at quarries: the mining truck is too large to transport in one piece! The highlight of the trip was when students were able to virtually operate hydraulic excavators and track-type tractors. They discovered, first-hand, the difficulty of moving mountains! EIU’s School of Technology strives to engage students through numerous field trips, like attending the Caterpillar Visitors Center, giving them hands-on experience in the fields they will enter upon graduation.

School of Technology Students Attend New Orleans ATMAE Convention

On November 20, 2013, School of Technology students (undergraduate and graduate) and faculty from Eastern Illinois University left early to travel in two 15-passenger vans to New Orleans, headed for the Association of Technology, Management, and Applied Engineering (ATMAE) Annual Convention.

A variety of technical and educational presentations dominated the scheduled events, but the opportunities to network with academics, industry practitioners, and fellow students were the underlying convention highlights. Along with Dr. Rendong Bai, Dr. Jerry Cloward, Mr. Gabe Grant, Dr. Peter Ping Liu, Dr. Isaac Slaven, Dr. Mori Toosi, and Dr. Wafeek Wahby, several graduate students presented the results of their research: Mr. George Buzard, “A Study of Laboratory Scale Wind Power Generation for Sustainable Energy”; Mr. Chengdong Hu, “Investigation of the Local Biomass Resources for Sustainable Energy”; and EIU Police Detective Kent Martin, “Collaboration with Campus Police Investigators to Teach Concepts for Research” as well as “Application of Customer Service Techniques to Investigative Police Reporting.” In addition, Dr. Wahby was elected to serve as Vice-President of the University Division of ATMAE. Of course, students and faculty were also able to experience the incredible food and culture that is unique to New Orleans! EIU’s School of Technology is proud to support student attendance at national conferences like ATMAE. Our students and faculty are widely recognized for their outstanding research and contributions to their academic disciplines.

SOT’s Applied Engineering and Technology Program Adds and Promotes Robots

The Applied Engineering and Technology (AET) program is pleased to announce the addition of three industrial robots to their program. Two of the robots are new GE FANUC LR Mate 200iC, 6-axis industrial application robots. One of the robots is a 4-axis, high speed YK1000X SCARA industrial robot from Yamaha Motor Company. Story continued on next page.
global economy” which indicate how robotics, 3-D printing, and surveillance drone technologies are three of a dozen major technological advances impacting not only the nation’s economy, but society as well, guiding the addition of these robots to their curriculum. These robot additions augment the 3-D printing and surveillance drone technologies which already exist in EIU’s AET program.

School of Technology Supports Youth Robotics Club

To promote robotics to future generations of EIU students, the AET program sponsors FIRST Lego League (FLL) robotics teams in Charleston. FLL teams consist of students aged 9-14 and are very popular in the northern areas of Illinois, but have only recently been pursued in the central and southern regions of the state. The two Charleston teams are among the first in the area formed south of the Champaign. Using Lego Mindstorm EV3 robots, students work together to design and program robots to compete in a variety of challenges designed by FIRST Lego League. In December of 2013, Charleston’s two rookie teams competed in Decatur. One of the teams received a Judge’s Choice Award.

On May 3, two Lego robotics teams from Charleston competed with 4-H at the University of Illinois in the 6th Annual 4-H robotics competition. The two teams of boys and girls ages 9-12 worked together from February through May preparing for the competition. Each team built and programmed a robot from Lego Mindstorm EV3 kits to perform warehousing tasks on a challenge mat they designed themselves. Competition teams are ages 9-14 and can have a maximum of ten participants per team. There were 42 teams competing.

Dr. James McKirahan, Jr., automation and robotics instructor at EIU says that these robots have made an immediate impact on the AET program. During the spring 2014 semester, enrollment in his robotics course immediately tripled with the addition of these robots. He says he thinks students have recognized the need for essential technology-related skills during college in order to get high paying jobs. McKirahan says the national average salary for robotics technicians is about $50,000 a year, while automation engineers average close to $90,000 a year. Students receive industry-recognized certificates of competency sponsored by FANUC Corporation of America upon course completion. He notes several industry-respected reports including from the McKinsey Institute entitled, “Disruptive technologies: Advances that will transform life, business, and the economy.”

EIU’s School of Technology Partners with Charleston’s Gifted and Talented Education Program

In February of 2014, Dr. Peter Ping Liu and Dr. Jerry Cloward attended the “Gifted and Talented Education” (GATE) Parent/Teacher night at the Charleston Community Unit School District. They gave a presentation entitled, “Gifted Energy.” Todd Vilardo, Assistant Superintendent of Charleston CUSD #1, thanked Cloward and Liu for their “work in providing learning opportunities for our youth through the EIU Renewable Energy Center and the Center for Clean Energy Research and Education. The current and future successes of all of our students are the result of this...
collaborative spirit among educational stakeholders in our school community. We look forward to continued, mutually beneficial partnerships aimed at student learning and growth.”

EIU’s School of Technology is excited to partner with the local school district, to encourage students’ enthusiasm about the field of technology and to provide opportunities for students to learn about all that EIU and the School of Technology have to offer.

Cloward is an Associate Professor, teaching courses in Career and Technical Education, Production/Manufacturing, Biomass Energy/Gasification, and a graduate course in Leadership. He is working on research concerning biomass gasification and green building. He received his Ph.D. from Utah State University. Liu is a Professor and Coordinator of graduate programs at EIU’s School of Technology as well as the Director of EIU’s Center for Clean Energy Research and Education (CENCERE). His teaching and research interests focus on renewable energy, advanced database technology (Oracle), system administration, biomedical devices, quality assurance, quality management systems, failure analysis and system reliability. He received his doctorate from Iowa State University in 1991.

**CENCERE Building Grand Opening**

On Friday, April 25, the grand opening for the Center for Clean Energy Research and Education (CENCERE) building was held. The new building will include space for three types of research and teaching: (1) a biomass storage and processing area, (2) a room for the laboratory-scale gasifier, and (3) an analytical lab. The new building will also house an “idea incubator,” where students and faculty can connect with local businesses and community members to secure ideas for future projects. We hope the idea incubator will contribute to the local economy by initiating or attracting companies to develop technology in collaboration with Eastern Illinois University. A few days prior to the grand opening, congressman John Shimkus visited campus to get a sneak peek at the CENCERE building and a tour of the Renewable Energy Center.

**5th Annual Student Research Symposium**

The School of Technology held its 5th Annual Student Research Symposium in April, 2014. The symposium is an opportunity for graduate and undergraduate students to share the results of their research with their peers, faculty, and the campus community. The symposium also allows students more experience with making public presentations. As always, the symposium was well attended, as many came to be enlightened by the thought-provoking research presented by the students. The following students presented research:

- Craig Buscher, “Estimating Building Thermal Loss through Automatic Doors,” Faculty Mentor: Dr. Isaac Slaven
- Matt Maher, “Do Floor Safety Lines do Their Job?” Faculty Mentor: Dr. Jerry Cloward
- Sai Tejas Reddy, “Deep Web Technologies,” Faculty Mentor: Dr. Rigoberto Chinchilla
- Ausby Garrard, “Controlling Quality Problems Using Lean Principles: A Case Study,” Faculty Mentor: Dr. Wutthigrai Boonsuk
- Stephany Fonseca, “Evaluation of Static Strength of a New Knot for Rope Access Applications,” Faculty Mentor: Dr. Isaac Slaven
- Russell Melton, “Producteev: A Project Management Software,” Faculty Mentor: Dr. Isaac Slaven
- Mounicadevi Veerlapati, “Digital Looseleaf for Offline Lexis-Nexis Access,” Faculty Mentor: Dr. Rendong Bai
- Madhav Kasukurthi, “Subversion Controllers to Examine and Control Changes to Files on a Server,” Faculty Mentor: Dr. Rendong Bai

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In addition to the students who presented the results of their research, Dr. Austin Cheney and Dr. David Melton presented information on the upcoming study abroad trip, “Study Technology Abroad: Italy.” Drs. Cheney and Melton travelled to Italy in March of 2014 to scout sites for the study abroad trip that will be held in Summer 2015. Excitement is building for the trip, as it promises to have something for everyone!

Alumni Recognition

At the 2014 School of Technology (SOT) Advisory Board meeting, Mr. Ross McCullough received the School of Technology Distinguished Alumnus Award. The award was given in recognition of his numerous years of selflessly giving back to the School of Technology and EIU in the form of active participation as a SOT Advisory Board Member, using his network of alumni and professional contacts to support the School, and generously providing financial contributions to strengthen the opportunities for future students.

Two School of Technology alumni received recognition from Eastern Illinois University (EIU) during the 2013 Alumni Awards Dinner. Corey Duzan, a 2003 graduate of the Career and Technology Education (CTE) program received the EIU Distinguished Educator award. Mr. Duzan is a 2009 recipient of the Technology Education Associate of Illinois New Teacher of the Year and 2011 Illinois Drafting Educators Association Teacher of the Year. Dr. Jonathan Gosse, a 1974 CTE graduate, was recognized as an EIU Distinguished Alumnus. Dr. Gosse is the Editor in Chief for American Technical Publishers, and an active member of the School of Technology Advisory Board. Congratulations to each of them for his noteworthy achievement!

Study Abroad Trip to Italy in Summer 2015

The School of Technology will offer its students the opportunity to study abroad in Italy next summer. During spring break of 2014, Dr. David Melton and Dr. Austin Cheney traveled to Florence, Italy to make plans for establishing this three-week study abroad opportunity. In partnership with Florence University of the Arts (FUA), the experience will incorporate the history, culture, and technology of Italy. FUA will provide the general history and cultural aspects through a course entitled “Cultural Introduction to Italy,” which incorporates weekend trips to Venice and Rome. Dr. Melton and possibly Dr. Cheney, dependent on the level of enrollment in the opportunity, will expose students to historical science and technology figures in Italy (i.e. Galileo, Leonardo, etc.), artisan shops in Florence, wine and cheese production, and exotic manufacturing (i.e. Lamborghini, Ducati, Pagani, etc.).

Golf and Goat Outing

Over 70 alumni and industry members braved a windy day to enjoy a day of food, fun, and networking. The event was held at Meadowview Golf Course in Mattoon, Illinois. Students arranged for door prizes to be donated and even fabricated plaques for winners of certain events. All proceeds went to fund the ATMAE student chapter activities.

This was the final year the event will have held the name of “Golf-and-Goat.” Students have decided to change the name of the event to the “Dr. Tom Waskom Memorial Golf Outing.” Tom Waskom was a devoted member of the SOT Faculty and the original champion/
organizer of the event. Doc Waskom passed away on April 3rd, 2014.

The next event will be held on the 11th of April, 2015. Contact the group at atmae@eiu.edu for further details or if you would like to make a contribution to the event.

Dr. Hawkins Recognized

During the School of Technology day-long strategic planning retreat, Dr. Thomas Hawkins was recognized with a special award for Distinguished Service to the Organizational and Professional Development (OPD) program. In addition to many years of teaching, developing curricula, and leadership efforts, he served as Coordinator of the OPD program from 2005-2011.

Graduate Student Excellence

At the Scholarship and Recognition in International Studies ceremony sponsored by International Students and Scholars and Study Abroad, the following Technology students received Distinguished International Student Awards: Sreeja Nomula (Technology), Sunil Thapa (Sustainable Energy). Also, Rajani Pingili (Sustainable Energy) received the Eulalee L. Anderson Scholarship.

At the 2014 Graduate School Awards ceremony, the following Technology students were recognized with “Distinguished Graduate Student Awards”: Alex Cudone (Sustainable Energy), Matthew Maher (Technology, On-Campus), and Cyndia Hinton (Technology, Off-Campus). Additionally, Kent Martin received a Williams Travel Grant to support presentation of his research at a professional conference. Sunil Thapa (Sustainable Energy) received a Research/Creative Activity Grant.
School of Technology Scholarship and Award Winners

Charles and Lois Elliott Technology Education Scholarship
Clinton Rebman with Dr. Jerry Cloward

Walter A. Klehm Industrial Technology Award
Stephanie Fonseca with Dr. Isaac Slaven

Roy E. Ehrsam Scholarship
Holden Reel with Dr. Mori Toosi

Roy E. Ehrsam Scholarship
Craig Buscher with Dr. Isaac Slaven

Robert and Barbara Sullivan Scholarship
Kristen Block with Dr. Wafeek Wahby

Lou Ann and Tom Waskom Scholarship
Rachel Dory with Mr. Gabe Grant

Dallas and Nina Minnear Scholarship
Cameron Stone with Dr. David Melton

Felstenhausen-Boldrey Excellence in Career and Organizational Studies Award
Stephanie Hunt with Dr. Lance Hogan

W.C. Simmons Memorial Award
Alanna Dukeman with Dr. Austin Cheney

Kenneth and Keith Kohanzo Industrial Technology Scholarship
Jacob Armijo with Dr. David Melton

Walter A. Klehm Industrial Technology Award
Shawn Ball with Dr. David Melton

School of Technology Alumni Scholarship
Darnell Henderson with Mr. Sean Roberts

Harold Dean Fildes Scholarship
Brandon Byers with Dr. Melton and Jean Rinefort

Messer Family Scholarship in Technology
Jaime Leal with Dr. John & Dr. Margaret Messer

Organizational and Professional Development Student Excellence Award
RoShema Dixon with Mr. Bruce Barnard and Dr. Diana Wyatt

Awards also received: NBEA Award of Merit: Cameron Stone, David L. and Audrey Jorns Business Education Scholarship: Alanna Dukeman, Lucille M. Klehm Technology Education Award: Clinton Rebman.