

OSEH MSA Safety, Inc. Partnership



Millersville University OSEH Program recently entered into a partnership with MSA Safety Incorporated. Through the partnership MSA donated equipment estimated at about \$50,000 to be used for training students in our OSEH labs. As part of the partnership, MSA will also be providing training support to the students in our labs. Representatives from MSA will be working with OSEH faculty to train students on equipment use and applications.

MSA Safety Incorporated is a global industry player in the manufacture and distribution of safety products. Their main clients include; fire service, oil & gas, construction, general industry, mining, utilities, HVAC, and water/wastewater. industries The company is headquartered in Pittsburgh (source: <https://us.msasafety.com/>)

The OSEH Program regularly work with local companies to provide EH&S support. Including students in these local projects enables them to apply whatever they are learning in the classroom into the "real-world." We try to bridge the gap between available information and active student participation in connecting with industry in the R&D cycle.



(L-R) Mr. Joe Gormley '97, Mr. Jason Fox, and Dr. Jack Ogutu

outdated. The MSA donation makes sure that we now have the current technology being used in industry and the students are being trained on the best available technology. The donation from MSA will make sure that our graduates, who are tomorrow's safety professionals, are being trained on equipment that integrates the newest technology.

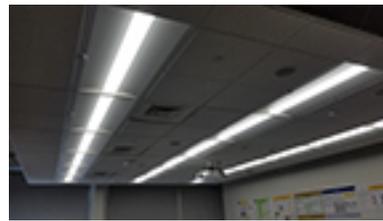
These high-impact practices require the use of the newest technology available. Students need to learn using the new equipment before going out for their internships or before we send them out to help local companies with EH&S support. Some of the equipment we had in our labs was old and

The donation by MSA is a good start, we hope that more companies will come forward with similar offers in the future. This will not only be good for our program, but it will also be an investment by the companies/organizations in the future of the safety & health profession. The support from industry will help support the next generation of safety & health leaders locally, regionally, and nationally. The equipment donated includes; gas monitoring and detection instruments, filter-type respirators, gas masks, breathing apparatus, head protection, confined space entry and rescue equipment, and a broad range of fall protection products.

The lead contact persons from MSA for this donation were Mr. Jason Fox, Customer Marketing Manager, Portable Gas Detection, and Mr. Joe Gormley, Executive Territory manager, Atlantic region. Mr. Gormley is also an alum of the OSEH program (1997).

Dr. Jack Ogutu, OSEH Program Coordinator ■

Energy Efficient Lighting Test Site



The department of Applied Engineering, Safety & Technology is serving as a beta test site for a new line of energy efficient LED lighting produced by Lutron. The Lutron Corporation

generously agreed to outfit one classroom with the new lighting that replaces standard fluorescent lighting commonly used throughout classrooms on campus. In addition to using one third less electricity than comparable fluorescent lighting the upgrade offers several other advantages. Unlike fluorescent lighting, the new lighting is dimmable so the room can be adjusted more precisely for desired lighting conditions. The room along with the third floor hallway have also been wired with occupancy sensors that control the lighting and turn it off of people are not present. The project was initiated by Tim Swartz, an alum of the department and an employee at Lutron in conjunction with Dr. Litowitz.

Dr. Len S. Litowitz, Department Chair ■

Advisory Committee Members Needed

The department is in need of volunteers to serve on newly formed Advisory Committees for our Automation & Intelligent Robotics Engineering Technology (ARET) and Manufacturing Engineering Technology (MFET) programs and our existing Applied Engineering & Technology Management (AETM) Program. Advisory committee members provide input related to curriculum and current trends in industry. Advisory committees typically meet at MU twice per year (Fall and Spring) for approximately two and a half hours and food is often provided. This is a nice way to provide some community service and to help improve the quality of our programs. Contact Len Litowitz, Department Chair, if interested at len.litowitz@millersville.edu

Wireless Communications Students Earn Amateur Radio Licenses

Seven members of the Wireless Communications Systems course earned their Federal Communications Commission (FCC) amateur radio licenses this spring. Amateur or “ham” radio is a hobby that mixes together the fun of making radio contacts with people from around the world and technical aspects that are widely used today. Needless to say, just about all our “technologies” today are wireless.

The basics of many forms of radio communication were presented in the course, along with the challenge of earning the FCC license for the Technician level (the first level of licensing). A written test was provided and proctored by approved volunteer examiners: Jason Benedick W3PC, Ralph Brandt K3HQL, Stephen M. Gavalchik N8LXD, David Gent N3DLG, Ralph Hess K3KMT, Brian Klines W3BEK, Stephen E. Steffan WB3EFA, and Mark Vreeland KB3NCJ. Needless to say, the entire class and I were grateful for the assistance of these volunteer examiners making the trip to Millersville University and giving up several hours for the testing to take place.

Students that earned the Technician license are: Heather Murray KC3NJT, Yingxi (Olivia) Chen KC3NJU, Katherine Pelcin KC3NJV, Jack Todd KC3NJW, David Gaines, Jr. KC3NJV, Jarrod Claar KC3NJY, and Gavin Lippold KC3NJZ.

With my up-coming retirement, at the end of the May 2019 semester, I am very pleased that I was able to assist these seven students with the attainment of their amateur radio license. I hope to “see” them on the air in future months.



The volunteer examiners grading the test forms for the Wireless Communications Systems class.



Ken De Lucca congratulates Kate Pelcin for passing the Technician level amateur radio exam, to become KC3NJV.

Dr. Ken De Lucca WA3KD

TQM Faculty and Students Earn Professional Certifications

12 of 16 Total Quality Management (TQM) students passed the ATMAE Certified Technology Manager (CTM) Professional Certification Exam on May 7th. The open-book, 160-question, two-hour examination content focusses on Leadership/Self-Management, Systems, Processes, Operations, People, Project, Quality, and Risk.

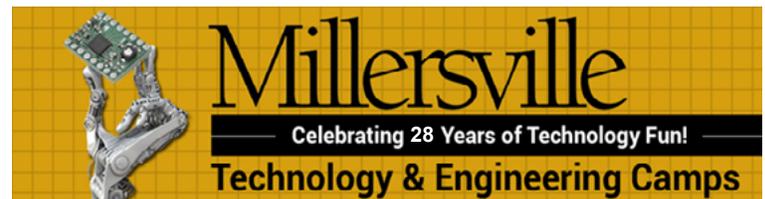
Additionally, Dr. John Wright, TQM professor/Certified Senior Technology Manager (CSTM), and Joseph Wright took the ATMAE Certified Lean Six Sigma exam on May 9th. Both were certified at the Green Belt level (CLSSGB). The 125-question, two-hour exam's belt level is determined by one's score (40-59% - Yellow Belt, 60-79% - Green Belt, 80-100% - Black Belt). Joseph Wright prepared for the exam via an honors independent study.

The CTM and CLSS are just two of several professional certifications offered by The Association of Technology, Management, and Applied Engineering (ATMAE). ATMAE is also the professional accreditor for the Department's AETM Bachelor of Science degree program.

Congrats to the following AEST members for passing their professional certifications!

CTM: Philip Brust, Willis Do, Conrad Dobler, Andrew Hungerford, Kashaan Kennard, Cole Lefever, Gavin Lippold, Calvin Savary, Eathen Theimer, Madison Trilling, Bryn Winebrunner, Joseph Wright
CLSSGB: Dr. John Wright, Joseph Wright

Dr. John R. Wright, Jr., ARET Coordinator



[Click here for more information](#)

People Notes



Dr. Kenneth P. De Lucca, esteemed faculty member and colleague since 1986 announced his plans to retire at the end of the spring semester. Faculty members, students, and friends gathered for an evening of fond memories and sociability at the National Watch and Clock Museum in Columbia, PA on May 4, 2019. His colleagues and friends wish him well as he embarks on this new chapter in his life.

Joseph Wright, class of May 2019, has been awarded a graduate research fellowship to Drexel University's PhD program in Materials Science and Engineering. This Department of Education fellowship focuses on materials for environmental sustainability. He will be studying under Dr. Antonios Zavaliangos in the Particulate Materials research group.

Joe received his B.A. in Physics and his B.S. in Applied Engineering & Technology Management with dual concentrations in Nanotechnology and Nanofabrication Manufacturing Technologies. He has presented five times at the Association of Technology, Management, and Applied Engineering (ATMAE) in professional tracks, and received the ATMAE Best Micro/Nanotechnology Presentation award in November 2018. He has worked for three years in the Nanoscale Materials Lab and completed his thesis titled, "Solid-State Foaming," focusing on the mechanics of manufacturing micro- and nanoporous metal foams. Joe has also been a member of the MU ATMAE chapter, where he has served as Project Manager for the past three years. He is member of the Epsilon Pi Tau and Sigma Pi Sigma honors societies.

Exciting Professional Development for STEM Minors

There are currently nearly 100 early childhood education students enrolled in the Integrative STEM Education Methods (ISEM) minor, which is offered through AEST. Interest in this minor has been strong since it was initiated in 2015. This can be at least partially attributed to the growing interest in Science, Technology, Engineering, and Math (STEM) programs nationwide. Students in the ISEM minor take five additional STEM-related classes in the minor and they are eligible for Pennsylvania's Integrative STEM Education endorsement on their teaching certificate.

Since 2016, Dr. Sharon Brusic (AEST Professor) has been working with a few other faculty members on campus to conduct some research on the STEM minor. The National Science Foundation (NSF) funded project is called, Integrative STEM for Teachers of Young Students (iSTEM4ToYS) and it involves collaborators from Educational Foundations (Dr. Nanette Marcum-Dietrich), Early, Middle & Exceptional Education (Dr. Jennifer Shettel), and Math (Dr. Janet White). One component of this project is to promote ISEM students' engagement in professional development opportunities outside of the regular classroom.

This spring, many ISEM students have been engaged in exciting professional development opportunities made possible through the iSTEM4ToYS project. In fact, we offered 5 special workshops and events for STEM students, in addition to providing support to attend two conferences. Below is a list of the special opportunities during spring semester:

1. Baby STEM: How Developmentally Appropriate STEM Learning Can Take Place, Starting at Birth (Presented by Dr. Aimee Ketchum, a pediatric occupational therapist and owner of Aimee's Babies Child Development Company)
2. Land to Stream Early Education Teacher Workshop (Presented by Stroud Water Research Center and the Pennsylvania Department of Conservation and Natural Resources)
3. Makey Makey Invention Literacy Workshop (Presented by Heather Lister of Construct Learning)
4. Picture Perfect STEM (Presented by Dr. Jennifer Shettel and Ms. Brandy Speas)
5. A..B..C..Sustainability: A Workshop Specially Designed for Early Childhood Education (Presented by Dr. Len Litowitz, Mr. Chris Steuer, and Mr. Bert Myers)
6. Virginia Children's Engineering Convention (Roanoke, VA) – A conference dedicated to K-5 STEM Education which was attended by two MU professors and 17 STEM students.
7. International Technology & Engineering Educators Conference (Kansas City, MO) – The primary organization representing K-12 STEM Educators around the globe

It's been rewarding to see how many students are taking advantage of these extra opportunities to engage in professional development and to share their knowledge with others. Attendance at every professional development session this spring has been nearly maxed out with 20 or more participants, including some classroom teachers who are invited to a few of the events. It is especially valuable to have these opportunities for STEM minors to engage in professional development with experienced



Christina McDaniels, Kathleen Wert, and Eliana Marino (STEM Minors) participated in the Makey Makey Workshop. Here they are developing and testing their solution to the design problem.



Four STEM minors attended ITEEA's Kansas City Conference in March 2019 to engage in professional development and co-present. Pictured from left to right are Katelyn Williams, Brooke Martin, Angelina DeLima-Diaz, and Hannah Newman.



Seventeen STEM students attended the 2019 Virginia Children's Engineering Convention in Roanoke, VA with two of the STEM professors. Two students presented one of the workshops there, too.

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Dr. Sharon A. Brusic, Technology & Engineering Education Program Coordinator

Technology & Innovation News

The spring 2019 term was a busy time for the M.S. in Technology & Innovation program. Among the news stories to report were a wave of articles submitted for publication by students in the course EDTE 646: Writing the Professional Paper, a large contingent of students, alumni, and friends going to the annual Barnstormers baseball game, and nine students graduating with their degrees.

In EDTE 646: Writing the Professional Paper students were tasked with writing and submitting at least two manuscripts to professional journals and other publications. None of the students had their work appear in print prior to taking the course. However, once the first student received notice from the journal that his manuscript was accepted for publication, the entire class got the excitement of getting their own writing published. Graduate assistant Sam Brennan had the distinction of being the first to have his manuscript accepted. The work was entitled Being an Effective Leader and will be published in the journal SAE Momentum. At the end of the semester there were 28 manuscripts submitted to local, regional, national, and international publications for review and consideration for publication. A total of 21 different publications received these manuscripts for review. At the time the course was completed five of those manuscripts had already been reviewed and accepted for future publication. Many of the submissions were on a 30 to 45-day review cycle with a few having review cycles that could be as long as 4 months. Throughout this summer there will undoubtedly be a wave of acceptance emails received by the students. Another type of assignment involved those students who were writing a thesis or a research and development capstone report. They were to write, at a minimum, the first three chapters. During the



Some students enjoyed an afternoon at the ballpark. From left; Kim Auger, Julia Cin, Amber Doran, Erin Petty, and David Morning.



Student Evan Geesey was having a great time as he got ready to launch his rubber chicken from one of the sky boxes at Clipper Magazine Stadium.



The participants from the Technology & Innovation program for the 2019 Graduate Commencement were: Back row left Michael Papieredin, Evan Geesey, Eric Group, David Morning – front row left Brook Ziegler, Dr. Warner, and Courtney Sweigart.

spring semester, two R&D reports and one thesis were written to that stage. By the end of the semester one writer completed his R&D report, and the other two writers were well on their way toward completing the report or performing the research.

The opening of the baseball season has come to represent a time for the graduate students to make a trip to Clipper Magazine Stadium. Graduate students, program alumni, and friends went to the ballpark for the fifth year in a row to enjoy the game, enjoy the food, and spend some downtime together enjoying each other's company. This year's group was quite large with 38 people attending. Special events included Dr. Warner throwing in one of the ceremonial first pitches, the program being announced on the public address system, and having ten people from the group participate in the rubber chicken toss from the skyboxes during the 5th inning break. Even though the Barnstormers lost the game, everyone in the group had a great time and are looking forward to continuing the tradition next year.

Finally, the Annual Graduate Commencement was held in Pucillo Gymnasium on Friday, May 10th. The Master's in Technology & Innovation program graduated nine students. The largest number of M.S. degrees awarded by the program so far were given to five students during this ceremony. Students who are grandfathered from the old program are still receiving M.Ed. degrees and this spring four such degrees were awarded. The number of graduates at the

commencement over the last several years is indicative of the revived health and vibrancy of the program. It is anticipated that there will be a similar number of graduates from the program at next year's ceremony. In short, 2018/2019 has been a good year for the Technology & Innovation graduate program.

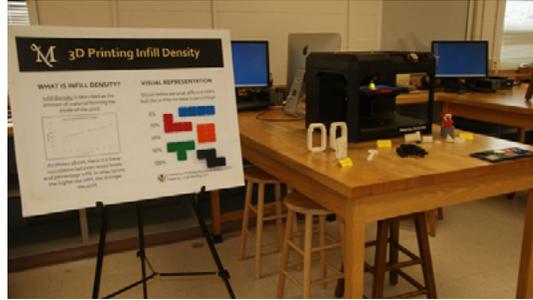
Dr Scott A. Warner, Graduate Program Coordinator

Women in Math, Science, and Technology Conference

On Tuesday, April 2, 2019, the 32nd annual Glenna Hazeltine Women in Math, Science and Technology Conference (WMSTC) was held at Millersville University. Female high school and middle school students from the surrounding communities interested in learning about STEM careers attended the conference.



Ms. Stacey Darrohn, a Millersville OSEH graduate and Business Unit EH&S Director at Turner Construction Company in Philadelphia was one of the role models. As part of the conference events, Stacey presented “Safely Building the Future” at the Student Memorial Center. She talked about her company and career as an environmental, health and safety professional



Cindy L.W. English, instructor of Applied Engineering Technology Management and Carla DiStasio (Technology and Engineering Education major) performed a demonstration titled “3D Printing – One facet of building product solutions”. A 3D printer was running while students had the opportunity to view a wide variety of Carla’s course projects.



Samantha Hackney, OSEH major, presented “Overexertion of Female Firefighters Through Their Leadership Behaviors Compared to Male Firefighters” at Made in Millersville on April 16th. She has been accepted for a poster presentation at the American Society of Safety Professionals (ASSP)--Safety 2019 Conference in New Orleans.



Dr. Betty-Jo Legutko

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Betty-Jo Legutko, Ph.D., Emily Seiler and Noah Zollner (OSEH majors) performed demonstrations for three groups of students titled “Occupational Safety & Environmental Health – Fire Extinguisher Training Demonstration.” They used a BullEx fire extinguisher simulator.