Keith L. Coogler Instructor Department of Engineering Technology College of Sciences and Engineering Technology

Degrees Earned

BS, Industrial Technology – Design & Development, Sam Houston State University, 1978
MA, Industrial Education, Sam Houston State University, 2002
EdD, Higher Education, Curriculum & Instruction – Texas A&M University-Commerce, 2013

Professional Licensure and Certifications

Peer-Review Publications and Artistic Performances/Exhibitions

Yildiz, F., Holekamp, J., Pecen, R., Karabiyik, U., **Coogler, K.**, and England, J., *"Design and Development of a Supervisory Control and Data Acquisition (SCADA) Laboratory"*, Proceedings of 2018 American Society for Engineering Education (ASEE) 125th Annual Conference & Exposition, Salt Lake City, Utah.

Yildiz, F. and **Coogler, K**., "An Interdepartmental Experimental Engineering Projects Course Development", Proceedings of 2017 American Society for Engineering Education (ASEE) 124th Annual Conference & Exposition, Columbus, Ohio.

Yildiz, F. and **Coogler, K.**, "Design and Development of Mobile Geothermal Laboratory Equipment". Technology Interface International Journal (TIIJ); Spring/Summer 2017, Vol. 17, No. 2, p5-12.

Yildiz, Faruk and **Coogler, Keith L.**, "Low Power Energy Harvesting with a Thermoelectric Generator Through an Air Conditioning Condenser". Journal of Energy Technology; Spring 2017, Vol.34, Issue 1, p8-16.

Yildiz, F., Suh, M., **Coogler, K.**, Dakeev, U., and Baltaci, K., "Design and Development of a Grid-Tied Solar Photovoltaic Training Infrastructure", Proceedings of 2016 American Society for Engineering Education (ASEE) 123nd Annual Conference & Exposition, New Orleans, Louisiana.

Yildiz, Faruk, **Coogler, Keith L.**, and Amador, Ruben, "Conversion of a Gasoline Powered Boat to a Hybrid Electric Boat". Journal of Energy Technology; Spring 2015, Vol.32, Issue 1, p52-63.

Yildiz, F., Dakeev,U., Baltaci,K., and **Coogler, K.**, "Energy Harvesting from Air Conditioning Condensers with the Use of Piezoelectric Devices", Proceedings of 2015 American Society for Engineering Education (ASEE) 122nd Annual Conference & Exposition, Seattle, Washington.

Yildiz, F., **Coogler, K.**, "Design and Implementation of a 1kw Photovoltaic System as a Training Infrastructure", Proceedings of 2014 American Society for Engineering Education (ASEE) 121st Annual Conference & Exposition, Indianapolis, Indiana.

Yildiz, F., **Coogler, K.**, "Low-power Energy Harvesting with a Thermoelectric Generator Through an Air Conditioning Condenser", Proceedings of 2014 American Society for Engineering Education (ASEE) 121st Annual Conference & Exposition, Indianapolis, Indiana. Dr. Faruk Yildiz, Dr. Reg Recayi Pecen, and **Keith L. Coogler**, "An Industry Related Project-Based Microcontroller Course", Proceedings of 2013 American Society for Engineering Education (ASEE) 120th Annual Conference & Exposition in Atlanta, Georgia

Dr. Faruk Yildiz, **Keith L. Coogler**, and Dr. Bill Crockford, "An Applied Comparison Study: Solar Energy vs. Thermoelectric Energy", Proceedings of 2013 American Society for Engineering Education (ASEE) 120th Annual Conference & Exposition in Atlanta, Georgia

Yildiz, F., **Coogler, K.,** Crockford, W., "Energy Harvesting from an Air Conditioning Condenser Exhaust", Proceedings of 2012 The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Strengthening Our Connections, November 14-17, 2012. Nashville, Tennessee

Yildiz, F., **Coogler, K.**, "Energy Efficient LED Lighting Powered By Hybrid Wind and Solar Power", Proceedings of 2012 The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Strengthening Our Connections, November 14-17, 2012. Nashville, Tennessee

Dr. Faruk Yildiz, **Keith L. Coogler** and Dr. Reg Recayi Pecen , "An Overview: Applied Interdisciplinary Renewable Energy Projects", Proceedings of 2012 American Society for Engineering Education (ASEE) 119th Annual Conference & Exposition in San Antonio, Texas

Dr. Faruk Yildiz, **Keith L. Coogler**, "Indoor Security Lighting with Solar Powered LED Technology", Proceedings of 2012 American Society for Engineering Education (ASEE) 119th Annual Conference & Exposition in San Antonio, Texas

Yildiz, F., **Coogler, K.L.**, Muns, N.C., "Two Successful Projects: Solar Air and Solar Water Heating Training Units", Proceedings of 2011 The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: ReThinking the Future, November 9-12 2011, Cleveland, OH.

Yildiz, F., **Coogler, K.**, Zora, A., "An Undergraduate Research Project: The Design and Development of an Environment Friendly Hybrid Boat", Proceedings of 2011 American Society for Engineering Education (ASEE) Annual Conference, Energy Conversion Conservation Division (EECT), June 2011, Vancouver, BC, Canada.

Yildiz, F., Muns, N.C., **Coogler, K.L.**, *"A General Alternative Energy Course Development for a Technology Program"*, Proceedings of 2011 IAJC-ASEE International Joint Annual Conference on Engineering and Related Technology, April 2011, Hartford, CT.

Yildiz, F., Kingman, D., **Coogler, K.**, Karayaka, H.B., *"Recruitment of K-12 Students to Engineering Technology Programs through Applied Alternative Energy Education Workshops"*, Proceedings of 2011 ASEE Gulf Southwest Annual Conference: Innovating Engineering and Engineering Technology Education, ASEE Gulf-Southwest Section, March 2011, Houston, TX.

Yildiz, F., Fazarro, D., **Coogler, K.**, "The Green Approach: Self-Powered House Design Concept for Undergraduate Research", *Journal of Industrial Technology (JIT)*. Vol. 26 No.2. April 2010 through June 2010.

Yildiz, F., **Coogler, K.**, *"Development of a Renewable Energy Course for a Technology Program"*, Proceedings of 2010 American Society of Engineering Education (ASEE), Energy Conversion Conservation Division (EECT), June 2010, Louisville, Kentucky.

Yildiz, F., **Coogler, K.**, *"Students Built Educational Renewable Energy Training Units"*, Proceedings of 2010 American Society of Engineering Education (ASEE), Energy Conversion Conservation Division (EECT), June 2010, Louisville, Kentucky.

Yildiz, F., **Coogler, K.**, Fazarro, D., *"Self Sufficient Energy Efficient House Design"*, Proceedings of 2009 American Society of Engineering Education (ASEE), Energy Conversion Conservation Division (EECT), June 2009, Austin, TX. AC 2009-1073

Refereed Abstracts

Research Monographs and Technical Reports

- Fall 2004 A Comparison of Construction Management Programs at Sam Houston State University and Other Texas Universities (program evaluation, Agricultural Sciences)
- Spring 2005 Changes to the Construction Management Program at Sam Houston State University (program evaluation, Agricultural Sciences)
- Summer 2005 Lack of Organizational Participation in the SHSU Industrial Technology Program (survey report, Agricultural Sciences)

Funded External Grants

Peer-Review Presentations/Posters

An Undergraduate Research Project: The Design and Development of an Environment Friendly Hybrid Boat, 2011 American Society for Engineering Education (ASEE) Annual Conference, Energy Conversion Conservation Division (EECT), June 2011, Vancouver, BC, Canada.

Work or Professional Experiences

Facilitator – Fall 2017 Engineering Technology Career Fair Advisor & Trainer – American Builders and Contractors (ABC) National Construction Estimating Competition - 2016. Dallas, Texas 2016 BEST Robotics Competition – Field Constructor & Judge Facilitator – Fall 2016 Engineering Technology Career Fair Advisor & Trainer – American Builders and Contractors (ABC) National Construction Estimating Competition - 2015. San Diego California 2015 BEST Robotics Competition – Field Constructor Facilitator – Fall 2015 Engineering Technology Career Fair 2014 BEST Robotics Competition – Field Constructor Facilitator – Fall 2014 Industrial Technology Career Fair Advisor & Trainer – American Builders and Contractors (ABC) National Construction Estimating Competition - 2013. Birmingham, Alabama 2013 BEST Robotics Competition – Field Constructor & Judge Facilitator – Fall 2013 Industrial Technology Career Fair 2012 BEST Robotics Competition – Field Constructor & Judge Facilitator – Fall 2012 Industrial Technology Career Fair Advisor & Trainer – American Builders and Contractors (ABC) National Construction Estimating Competition - 2012. San Antonio, Texas

Advisor & Trainer – American Builders and Contractors (ABC), Houston Area Chapter, Construction Estimating Competition - 2012. Houston, Texas Facilitator – Spring 2012 Industrial Technology Career Fair Facilitator – Fall 2011 Industrial Technology Career Fair 2011 BEST Robotics Competition – Field Constructor & Judge Advisor & Trainer – American Builders and Contractors (ABC) National Construction Estimating Competition - 2011. San Antonio, Texas Advisor & Trainer – American Builders and Contractors (ABC), Houston Area Chapter, Construction Estimating Competition - 2011. Houston, Texas Facilitator – Spring 2011 Industrial Technology Career Fair Facilitator – Fall 2010 Industrial Technology Career Fair Facilitator – Spring 2010 Industrial Technology Career Fair Facilitator – Fall 2009 Industrial Technology Career Fair Facilitator – Spring 2009 Industrial Technology Career Fair Facilitator – Fall 2008 Industrial Technology Career Fair Facilitator – Spring 2008 Industrial Technology Career Fair Facilitator – Fall 2008 Industrial Technology Career Fair Facilitator – Spring 2008 Industrial Technology Career Fair Facilitator – Fall 2007 Industrial Technology Career Fair Facilitator – Spring 2007 Industrial Technology Career Fair Facilitator – Fall 2006 Industrial Technology Career Fair Facilitator – Spring 2006 Industrial Technology Career Fair Facilitator – Fall 2005 Industrial Technology Career Fair Facilitator – Spring 2005 Industrial Technology Career Fair

Honors and Awards

Other Competencies

American Builders and Contractors (ABC) – SHSU Chapter advisor National Association of Home Builders (NAHB) – SHSU Chapter advisor Associated General Contractors (AGC) – SHSU Chapter advisor Sam Houston Construction Association (SHCA) – SHSU Chapter advisor The Association of Technology, Management, and Applied Engineering (ATMAE) – SHSU Chapter Architectural Woodwork Institute (AWI) – Affiliate member