



## Work Experience:

The University of Toledo – Toledo, Ohio  
Department of Engineering Technology (ET)

August 2019 – current

### Associate Professor

- Develop and teach courses and laboratories at undergraduate (UG) and graduate (GR) levels: Technical Thermodynamics (UG); Applied Fluid Mechanics (UG, 4ch with lab component), Applied Thermodynamics (UG, 4ch with lab component); Strength of Materials for Technology (UG, 4ch with lab component); Mechanical Design II (UG); Applications of Engineering Analysis (GR); Advanced Mechanical Design (GR); Applied Thermodynamics (GR).
- Develop and teach distance learning (DL) courses, all received Quality Matters (QM) certification: Applied Engineering Analysis, Mechanical Design II, Technical Thermodynamics, and Strength of Materials.
- Undergraduate research mentoring / advisor for senior capstone design engineering projects (at least two / year).

Examples of projects:

- *Tabletop Wind Tunnel* to be used as lab equipment for ET Department.
- *Temperature-Controlled Automated Startup* team was invited to present to the local chapter of The International Society of Automation (ISA) (<https://www.isa.org/toledo/>).
- *Cover All – Cover for a Prosthetic Leg* team was invited to present to Imagination Station Toledo.
- *Developing Power Cycles Simulations for an Applied Thermodynamics Course*. The work was the subject of a student-faculty conference paper published and presented at the 2022 ASEE NC Section Conference, March 18-19. Pittsburg, PA. Paper ID #36003. <https://peer.asee.org/39237>
- PI for “*Using entrepreneurial mindset learning approach to overhaul a senior level fluid mechanics course*”
  - project period: 10/1/2021 to 09/30/2022 - **Awarded**; Budget: \$10,000; Sponsor: Kern Family Foundation.
- Submitted NSF Proposals – non-awarded; for full list and details, please check Faculty180.
- Graduate Faculty Member (full) and faculty advisor for MS and PhD students (list of students is on page 11).

@ Department Level

- Organize and moderate the Brown Bag Webinar Series dedicated to engineering education and pedagogy.
- Faculty mentor for TT faculty in the MET program.
- Engineering Technology’s Department Personnel Committee (various years); search committee member for various positions within ET Department.
- Initiate the creation of a new online MET program; develop new flowchart and update various syllabi. Numerous outreach activities.

@ College Level

- Faculty advisor for the UT’s Society of Women Engineers (SWE) student organization.
- Member / Chair of various College level Committees: Constitution & Bylaws Committee, Retention, etc.
- Board member for Dr. Keith’s Distinguished Lecture Series.

@ University Level

- Member in the Faculty Senate; chair and member for Academic Regulations Committee working on various policies.
- Member of the University Teaching Advisory Council.



- Board member in the Catherine S. Eberly Center for Women Advisory Board.

@ National and International Level

- Member of the ASEE Engineering Technology – EDT – Mechanical Engineering Technology Heads Committee.
- Board director ASEE North Central (NC) Section Board member.
- Organized, ran, and chaired the 2021 ASEE North Central (NC) Section Conference, Toledo, OH.
- American Society for Engineering Education (ASEE) campus representative.
- Engineering Unleashed Ambassador <https://engineeringunleashed.com/ambassadors>
- Engineering Unleashed Fellow <https://www.engineeringunleashed.com/content/2021-engineering-unleashed-fellows>
- External evaluator for several tenure and promotions dossiers at similar institutions.
- Reviewer for: International Journal of Mechanical Engineering Education; ASEE Annual Conferences; ASEE NC Section Conferences; Hawaii University International Conferences (HUIC).
- Session Chair and Moderator for many conferences, including ASEE and HUIC.

The University of Toledo – Toledo, Ohio  
College of Engineering

March 2021 – current

**Program Director of the Online Master of Science in Engineering,  
General and Energy Engineering Programs**

<https://www.utoledo.edu/engineering/graduate-studies/energyengineering.html>

<https://www.utoledo.edu/engineering/graduate-studies/ptmse-general.html>

- Manage two graduate engineering programs.
  - Participate in the recruiting process; publicize on the web to promote interest in the program; lead and assist with student admission decisions; develop and provide online new student orientation.
  - Contact all students in the program to identify problems and answer questions proactively; resolve course issues, registration problems, and any other online challenges encounter by the enrolled students; maintain records of active students;
  - Develop programs' curriculum; work collaboratively with instructors of GR courses to develop program and course level assessment; perform annual program assessment and reporting.
- Encourage and collaboratively work with GR faculty to develop QM certified courses.
- Work collaboratively with the Associate Dean to collect data and assist in completing the annual submission for the *US News & World Report* annual survey of online graduate programs.
- Keep up to date info in the university catalog; update CIM system for program changes and approvals.

**Graduate Assessment Coordinator**

- Provide mentorship to GR programs directors (PDs) about annual program assessments.
- Assist PDs in revising and updating curriculum maps; assist PDs in developing robust assessment plans, and reports, including annual UT's Assessment Reports.
- Facilitate the sharing of best practices at both program and course levels.



ET Department

February 2021 – current

**Director of Assessment and Accreditation**

- Provide expertise and mentoring advice for assessing student learning at program and course levels.
- Provide mentoring and training of FT and PT faculty on all issues regarding course assessment.
- Develop and oversee a system of collecting, sharing, and archiving accreditation reports and materials; Analyze various assessment data and provide reports to PDs.
- Develop and oversee a process for periodic review of the PEOs (Program Educational Objectives) and SLOs by each program key constituents, including the Industrial Advisory Committees.
- Develop a template for the ABET's Self-Study Report (SSR) & assist in writing SSRs for each of the five ET programs.

ET Department

August 2015 – August 2019

**Assistant Professor**

- Taught various undergraduate and graduate levels courses and laboratories, including Introduction to Engineering Technology; Applied Engineering Mathematics; Statics; Applied Fluid Mechanics; Applied Thermodynamics; Dynamics; Applications of Engineering Analysis.
- Developed several new laboratory experiments for thermodynamics and fluid mechanics courses.
- Advised undergraduate senior technology capstone design engineering projects.
- Graduate Faculty Member; advisor / co-advisor of graduate students.
- Co-PI for "Making Connections: Preparing Teachers to Integrate STEM / Grade levels 7<sup>th</sup> – 8<sup>th</sup>"
  - Project Period: January 2016 to March 2017 - **Awarded**; Budget: \$95,216; Sponsored Agency: OBR, Program name: Improving Teachers Quality State Grants Program.
- Co-PI for "Making Connections: Preparing Teachers to Integrate STEM / Grade levels 5<sup>th</sup> – 6<sup>th</sup>"
  - Project Period: January 2017 to March 2018 - **Awarded**; Budget: \$99,524; Sponsored Agency: OBR, Program name: Improving Teachers Quality State Grants Program.
- ASEE Campus Representative.
- Member of various committees at department, college, and university levels.
- Faculty advisor for the UT's Society of Women Engineers student organization (SWE).
- Developed hands-on activities for various outreach STEM activities, like: "Engineer for a Day;" "Transfer Visit Day;" "Women in STEMM Day of Meetings - WISDOM;" "Girl's Day;" "Toledo EXCEL"- College of Engineering summer camp for rising 9<sup>th</sup> graders, etc.  
<https://www.toledoblade.com/Education/2018/05/11/GALLERY-Women-in-STEMM-day-of-meetings.html>
- Reviewer and session chair / moderator for ASEE, STEAM Conference – HUIC Hawaii, etc.
- Reviewer for the NSF – GRFP (Graduate Research Fellowship Program) program.
- Board member for the STEMCON – STEM Conference.



ET Department

August 2014 – December 2019

**MET Program Director**

- Managed and coordinated all educational activities related to the MET program, including, but not limited to:
  - Scheduling all MET classes (multiple sections / course) and laboratories.
  - Determined a list of available, qualified adjunct faculty and part time instructors for all MET courses; Assigned full time and part time faculty per MET courses.
  - Developed a five-year MET program faculty plan; worked with CIM system for program changes and approvals.
  - Supported the MET full-time and part-time faculty in the development and the assessment of the ABET students' learning outcomes; Worked collaboratively with instructors of courses in the program to develop the program and course level curriculum maps and assessment plans.
  - Maintained and reviewed all required accreditation documents for the MET program; wrote the ABET Self-Assessment Report in preparation for the ABET visit in fall 2017.
  - Provided academic counsel to MET students (at one time, more than 400) enrolled in the program.
  - Perform credit transfer evaluations.
- Assisted in the College of Engineering (COE)'s recruitment efforts; assisted with the development of promotional materials and ensured that the program's webpage is up-to-date and accurate;
- Reviewed the University catalog to ensure the MET program and courses' info are up-to-date and accurate.
- Lead the program's annual Industrial Advisory Board meetings.

ET Department

August 2013 – July 2015

**Visiting Assistant Professor**

- Taught undergraduate courses: Applied Engineering Mathematics; Statics; Dynamics; Applied Fluid Mechanics; Applied Thermodynamics.
- Faculty advisor for capstone senior design engineering projects (at least three per semester).
- Member in departments' search committees: Assistant Professor positions in EET, CSET, CET, and lab technician.
- Co-PI for "Ohio New Learning Standards in Math and Science through a Technology Lens in NW Ohio."
  - Project Period: 06/01/2015 to 05/31/2016 - **Awarded** - Budget: \$99,912; Sponsored Agency: OBOR, Program name: Improving Teachers Quality State Grants Program.

U.S. Department of Energy - Washington, D.C.

January 2012 – June 2013

EERE - Solar Energy Technologies Office / SunShot Initiative

**SunShot Fellow**

- Monitored Solar - SBIR / STTR portfolio of approximately 25 awardees for research progress and compliance with regulations and advised the Topic Managers;
  - Counseled and assisted awardees in accomplishment of their research.
  - Reviewed and accepted quarterly progress reports; oversaw and followed up on progress reports; Scheduled kickoff meetings, quarterly meetings, and go / no-go meetings with awardees; conducted site visits.



- Negotiated Statements of Project Objectives and requests for project extension.
- Made recommendations to the Team Lead for approval.

<https://content.govdelivery.com/accounts/USEERE/bulletins/33499b>

- Supported Funding Opportunity Announcement (FOA) Managers and Team Leads in developing FOA focus areas (topics) and drafting FOAs; presented upcoming FOA topics to potential applicants in Webinars;
- Technical reviewer in photovoltaics, system integration - balance of system non-hardware, and soft costs - solar diffusion and installation.
- Technical content writer for the SunShot Initiative / Photovoltaics / Photovoltaics Research and Development webpage: developed content for the Crystalline Silicon and Thin Film (a-Si, CdTe, and CIGS) technologies.
- Lecturer for the SunShot Discussion Club and SunShot Fundamentals Lectures. Topics: Heliostat field optimization; Solar Innovations by America's Small Businesses.
- Co-organized the SunShot Solar Pavilion for the 2013 Solar Decathlon. Co-organized the Technology Forum at the 2012 SunShot Initiative Grand Challenge Summit.
- Coordinated the U.S. regional effort of the PV Quality Assurance Task Group #7: Wind & Snow Loads.

Wright Center for PVIC at The University of Toledo - Toledo, OH  
Department of Physics and Astronomy

August 2010 - December 2011

#### Graduate Research Assistant

- Performed research on Photoluminescence (PL) studies of II - VI thin film semiconductors: Time Resolved Photoluminescence (TRPL) for thin-films absorbers characterization and lifetime measurements for thin films (CdSe, CdTe).
- Performed absorption spectroscopy, temperature dependent measurements, and PL / TRPL studies for emerging PV: PbS QD, Ag NC, FeS<sub>2</sub>.
- Consulting Engineer for TA Industrial Solutions Inc., Perrysburg, OH (May 2011 - August 2011)
  - Performed wind load calculation on PV structures: Investigated the design loads for PV mounting systems on metal roofs (uplifts & down force); developed an Excel program to easily determine the loads as a function of PV panel dimensions and building characteristics.
  - Designed a testing setup and experimental methodology for measurements of wind loads on a novel PV mounting system to be conformal with the ASCE 7 code; Investigated failure modes and recommended improvements.

QED Services, Inc. - Gibraltar, MI

July 2006 - December 2008

#### R&D Engineer

- Performed research on the development of a physics-based mathematical model for mechanical, hydraulic, and pneumatic assemblies.
- Developed numerical models and simulations of fluid flows and components' motion for hydraulic and pneumatic assemblies applied to a novel suspension system for HMMWV (Humvee).
- Provided technical guidance, recommendations, and solutions to comply with the technological



requirements; authored technical / research reports and co-prepared research proposals.

The University of Toledo - Toledo, OH  
MIME Department

July 1999 - December 2004

#### Graduate Research Assistant

- Developed physics-based lubrication models for high-speed rotorcraft transmission components.
- Developed numerical codes to simulate, investigate, and analyze the deterministic thermal elastohydrodynamic lubrication (TEHL) and mixed - TEHL problem applied to gears contacts. Newtonian / non-Newtonian fluids and measured surface roughness.
- Performed gear design optimization: advance gear concept, new lubricants, and interaction between moving parts.
- Assembled and ran the experimental high-speed rotor rig (up to 72,000 RPM) with magnetic bearings.
- Performed surface measurements and analyses using 3D optical surface analyzer.
- Authored technical / research reports.

#### Awards:

- **2022:** *North Central Section 2022 Outstanding Campus Representative Award* – ASEE North Central Section, March 19, 2022.
- **2021:** *Best Paper – Second Place* - Awarded to C.Cioc, N.Haughton, J.Napp, S.Cioc for paper entitled “*Incorporating Information Literacy in MET Design Project: Year 2 Implementation*”, 2021 ASEE North Central Section Conference, The University of Toledo, Ohio.
- **2019:** *Outstanding Campus Representative Award* – ASEE North Central Section, March 23, 2019, at Grand Valley State University.
- **2019:** *ASEE Campus Representative Award* - For Outstanding Achievement in Recruiting the Highest Percentage of Faculty in the North Central Section During the 2018-2019 ASEE Membership Promotional Campaign – ASEE 2019 Annual Conference & Exposition.
- **2019:** *ASEE Campus Representative Award* - For Outstanding Achievement in Recruiting the Most New Faculty in the North Central Section During the 2018-2019 ASEE Membership Promotional Campaign – ASEE 2019 Annual Conference & Exposition.
- **2018:** *Best Paper – First Place* - Awarded to C.Cioc, S.Cioc, R.Springman “*Using Peer Review in Engineering Technology Courses*”, 2018 ASEE North Central Section Conference, The University of Akron, Ohio.
- **2017:** *Best Paper - Third Place* - Awarded to C.Cioc, S.Cioc, R.Springman “*Using the Capstone Design Project to Retrofit or Design Laboratory Demonstration Units*” - 2017 ASEE North Central Section, ASEE Zone 2 Conference, San Juan, Puerto Rico.
- **2004:** *Best Paper - Wilbur Deutsch Memorial Award* - Society of Tribologists and Lubrication Engineers (STLE) - Awarded for the best paper published in 2004 on the practical aspects of lubrication.



## Education:

The University of Toledo - Toledo, OH

### **Doctor of Philosophy in Engineering – Mechanical Engineering**

**December 2004**

- Dissertation title: *An Elastohydrodynamic Lubrication Model for Helicopter High-Speed Transmission Components* [https://etd.ohiolink.edu/apexprod/rws\\_olink/r/1501/10?clear=10&p10\\_accession\\_num=toledo1100618919](https://etd.ohiolink.edu/apexprod/rws_olink/r/1501/10?clear=10&p10_accession_num=toledo1100618919)

- GPA: 4.0 / 4.0.

### **Master of Science in Physics, professional in photovoltaics**

**August 2012**

- GPA: 3.975 / 4.0

## Publications, Workshops, and Presentations:

### **Journals Publications:**

C.Cioc, N.Haughton, S.Cioc, J.Napp (2022) "A Model for Incorporating Information Literacy and Collaboration in a Project Based Learning Pedagogical Exercise with Application to a Fluid Mechanics Course". International Journal of Mechanical Engineering Education, Vol.50, Issue 4, pp. 955-977. First published March 3, 2022. <https://doi.org/10.1177/03064190221081450>

C.Cioc, N.Haughton, S.Cioc, and C.Wojciechowski (2020) "Improving learning Outcomes through Peer-Assisted Learning in a Statics Course". Journal of Engineering Technology. Spring 2020, pp. 32-42

J.Lambert, C.Cioc, S.Cioc, D. Sandt, (2018) "Making Connections: Evaluation of a Professional Development Program for Teachers Focused on STEM Integration", Journal of STEM Teacher Education, 2018, Vol.53, No.1, pp.3-25 - <https://ir.library.illinoisstate.edu/jste/vol53/iss1/2/>

O.Ahmed, S.Cioc, C.Cioc, A.Jayatissa (2017) "Tribological properties of Multilayer TiN and MoS<sub>2</sub> Thin Films", published in Colloid and Surface Science Journal: Science Publishing Group, October 13, 2017, pp.137-142; DOI: 10.11648/j.css.20170204.13  
<http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=607&doi=10.11648/j.css.20170204.13>

C. Cioc, S. Cioc, L. Moraru, A. Kahraman, T.G. Keith (2002) "A Deterministic Elastohydrodynamic Lubrication Model of High-Speed Rotorcraft Transmission Components", Tribology Transactions, Vol.45, No.4, pp. 556-562.

### **Double-Blind Peer Reviewed Conference Proceedings Publications:**

C.Cioc, N.Haughton, S.Cioc (2023) "Combining Project Based Learning with the KEEN Framework in an Advanced Fluid Mechanics Course: One Year Implementation", paper accepted for publication and presentation at the 2023 ASEE Annual Conference and Exposition. June 25-28 Baltimore, MD

C.Cioc, N.Haughton, S.Cioc (2023) "Providing a New Space for Student Learning: A Pilot Implementation of Self-Generated Student Stories and Informal Peer Assessments in Mechanical Engineering Technology



Education”, paper accepted for publication and presentation at the 2023 ASEE Annual Conference and Exposition. June 25-28 Baltimore, MD

C.Cioc, N.Haughton, S.Cioc (2023) “Using Project Based Learning in a Mechanical Design Course to Enhance Engineering Skills: Lesson Learned”, paper published and presented at the 2023 ASEE North Central Section Conference. March 24-25, Morgantown, WV.

C.Cioc, N.Haughton, S.Cioc (2022) “Blending the Entrepreneurial Mindset into a Learning Module with a HVAC Design Project: Pilot Implementation”, paper published and presented at the 2022 ASEE Annual Conference and Exposition. June 26-29. Minneapolis, MN

C.Cioc, N.Haughton, S.Cioc (2022) “Combining Problem-Based Learning with the KEEN ‘s Framework for Entrepreneurially Minded Learning in a Fluid Mechanics Course: Pilot Implementation”, paper published and presented at the 2022 ASEE Annual Conference and Exposition. June 26-29. Minneapolis, MN

C.Cioc, S.Cioc, J.Landel, E. Dunham (2022) “Developing Power Cycles Simulations for an Applied Thermodynamics Course”, paper published and presented at the 2022 ASEE NC Section Conference, March 18-19. Pittsburg, PA. Paper ID #36003. <https://peer.asee.org/39237>

C.Cioc, N.Haughton, S.Cioc, J.Napp, (2021) “Incorporating Information Literacy in MET Design Project: Year 2 Implementation”, paper published and presented at the 2021 ASEE NC Virtual Conference, March 20, Toledo, OH. Paper ID #35039  
[https://www.academia.edu/45615531/Incorporating\\_Information\\_Literacy\\_in\\_MET\\_Design\\_Project\\_Year\\_2\\_Implementation](https://www.academia.edu/45615531/Incorporating_Information_Literacy_in_MET_Design_Project_Year_2_Implementation)

C.Cioc, J.Napp, N.Haughton, S.Cioc (2020) “Incorporating Information Literacy in MET Design Project: Pilot Implementation”, paper published and presented at the ASEE’s Virtual Conference. Paper ID #29596  
<https://peer.asee.org/incorporating-information-literacy-in-met-design-project-pilot-implementation.pdf>

C.Cioc, S.Cioc, and R. Springman (2020) “Introducing Engineering Technology Students to Ethical Engineering Decision Process”, paper published and presented at the ASEE’s Virtual Conference. Paper ID #28659  
<https://strategy.asee.org/introducing-engineering-technology-students-to-ethical-engineering-decision-processes.pdf>

C.Cioc, Q.Zhao, S.Cioc (2019) “Combining Simulation and Experiment to Determine Fluid Forces in the Fluid Mechanics Laboratory”, paper published and presented at the 126<sup>th</sup> Annual Conference & Exposition, June 15-19, Tampa, FL  
<https://www.asee.org/public/conferences/140/papers/25146/view>

C.Cioc, N.Haughton, C.Wojciechowski, S.Cioc (2019) “Using Peer Assisted Learning in an Engineering Technology Course”, paper published and presented at the 9<sup>th</sup> Annual – 2019 Science, Technology, Engineering, Arts, Math & Education Conference, June 5-7, Honolulu, HI;  
<https://huichawaii.org/wp-content/uploads/2019/06/Cioc-Carmen-2019-STEM-HUIC.pdf>





C.Cioc, S.Cioc, R. Springman (2018) "Using Capstone Projects for Community Outreach", paper published and presented to the ASEE Annual Conference & Exposition, June 24 - 27, Salt Lake City, UT; Paper ID #23596

<https://www.asee.org/public/conferences/106/papers/23596/view>

C.Cioc, E.Buckholtz, S.Cioc, J.Lambert (2018) "Implementing Hands-On Activities and Online Simulations to Middle School Curricula: Electric Circuits", paper published and presented to the 8<sup>th</sup> Annual – HUIC STEM / STEAM & Education Conference, June 6-8, Honolulu, HI; Published in the Conference Proceedings

<https://huichawaii.org/ssec/proceedings-programs/proceedings-steam-2018-1/>

C.Cioc, S.Cioc, R. Springman (2018) " ", paper published and presented to the ASEE – North Central Section Spring Conference 2018, March 23-24, University of Akron, Akron, OH; Published in the Conference Proceedings

C.Cioc, S.Cioc, Z.Linkous (2017) "Implementing Hands-on Experiments to an Engineering Technology Introductory Course", paper published and presented to the ASEE Annual Conference & Exposition, June 25 - 28, 2017, Columbus; Paper ID #19053

C.Cioc, S.Cioc, R.Springman (2017) "Using the Capstone Senior Design Project to Retrofit or Design Laboratory Demonstration Units", paper published and presented to the ASEE Zone 2 Conference 2017, March 2 – 5, San Juan, Puerto Rico; Published in the 2017 Zone II Proceedings

S. Cioc, D.P. Fleming, T.G. Keith, C. Cioc (2005) "Numerical Investigation of Choked Flow in Padded Finger Seals", paper published and presented to the ASME World Tribology Congress III, September 12-16, 2005, Washington, D.C. (WTC 2005-64006). <https://asmedigitalcollection.asme.org/WTC/proceedings-abstract/WTC2005/42029/263/315323>;

C. Cioc, S. Cioc, T.G. Keith, A. Kahraman (2003) "A Deterministic Mixed Elastohydrodynamic Lubrication Model of High-Speed Rotorcraft Transmission Components. Part II: Non-Newtonian Fluids," paper published and presented to the International Joint Tribology Conference, Ponte Vedra, Florida, October 27-29

S. Cioc, T.G. Keith, C. Cioc, F. Dimofte, P. Fleming (2003) "Optimization of a Hybrid Gas Wave Bearing for Oil-free Turbomachinery", paper published and presented to the Society of Tribologists and Lubrication Engineers, 58th Annual Meeting, New-York, April 28 – May 1

C. Cioc, S. Cioc, T.G. Keith, A.Kahraman (2003) "A Deterministic Mixed Elastohydrodynamic Lubrication Model of High-Speed Rotorcraft Transmission Components. Part I: Newtonian Fluids," paper published and presented to the Society of Tribologists and Lubrication Engineers, 58th Annual Meeting, New-York, April 28 – May1

C. Cioc, L. Moraru, T.G. Keith, A. Kahraman (2001) "An Integrated Physics Based Lubrication Analysis Methodology for Helicopter Transmission Gear Surfaces with Asperities", paper published and presented to the American Helicopter Society, International Annual Forum, 57th, Washington D.C., May 9-11.



## Workshops:

*“Entrepreneurial Mindset for Engineering (Technology) Education: Starter Kit”* – workshop creator and moderator in collaboration with Dr. N.Haughton and Dr. S. Cioc

- Held as F-2-F during the 2023 ASEE North Central Section Conference. March 24-25, Morgantown, WV.
- To be held as Online during the 2023 Hybrid Conference on Improving University Teaching, July 12-14, Heriot-Watt University, Malaysia campus.

## Other Publications / Engineering Unleashed Cards:

“Stirling Engine Project – SEP.” (last updated: April 2022) <https://engineeringunleashed.com/card/2566>

“HVAC System Design.” (April 2022) <https://engineeringunleashed.com/card/2361>

“Pump Storage Hydropower” (June 2022). <https://engineeringunleashed.com/card/3113>

“Entrepreneurial Mindset for Engineering (Technology) Education: Starter Kit” – work in progress.

## Other Presentations (not listed under publications):

N.Haughton, C.Cioc, S.Cioc (2022) “Integrating research and practice: The pedagogy of self-generated student stories in mechanical engineering technology education”, presented at the IUT (Improving University Teaching) Conference – Global Conference, Tbilisi, Georgia.

C.Cioc (2022) “Blending Engineering Unleashed Framework for Entrepreneurially Minded Learning in Engineering Education: Case Studies”, presented as part of a Roundtable Discussions about Engineering Innovation and Entrepreneurship. 2022 ASEE NC Section Conference, March 19, Pittsburg, PA.

Cioc (2022) “Combining Problem-Based and Project-Based Learning with KEEN’s Framework for Entrepreneurially Minded Learning: A Pilot Implementation in a Fluid Mechanics Course”, presented for the Brown Bag Webinar Series dedicated to Engineering Education, The University of Toledo, College of Engineering, Toledo, OH.

S.Cioc, S.V.Kothareddy, C.Cioc (2018) “Study in the Frequency Domain of Cavitated Squeeze Film Dampers”, presented to the 73<sup>rd</sup> STLE (Society of Tribologists and Lubrication Engineers) Annual Meeting and Exhibition, May 20-24, Minneapolis, MN.

J.Lambert, C.Cioc, J.Campbell, A. Bennett (2018) “Making Connections: Motivating Teachers to Integrate STEM in the Classroom”, presented to the 5<sup>th</sup> Annual STEM Conference, STEMCON, April 20, Chicago, IL.

C.Cioc, J.Lambert, M.Tsapanis, K.Velikaz, C.Marlet (2017) “Making Connections: Preparing Teachers to Integrate STEM”, presented to the 4<sup>th</sup> Annual STEM Conference, STEMCON 2017, April 07, Cleveland, OH

C.Cioc, S.Cioc, C.Deszell (2016) “Dampening performance of a squeeze film damper in the presence of gaseous cavitation”, presented to the 2016 STLE Tribology Frontiers Conference, November 13-15, Chicago

C. Cioc (2012) “Solar Innovations by America’s Small Businesses – A year in review”, Solar Energy



Technologies Office, October 23, Washington, D.C.

C. Cioc (2012) "The good-natured Fibonacci numbers – Minimizing the heliostat area", 3rd SunShot Fundamentals Lecture, Solar Energy Technologies Office, October 23, Washington, D.C., March 21.

## List of Current and Past Graduate Students:

(TBD) Victor Samoei. Dissertation "*Investigation of Nanocomposites for Physical Sensor Applications.*" – work in progress. Dissertation committee member.

(TBD) Tyler Jacob Hoffman. Work Project "ROI for Electric Vehicle to Grid through Bi-Directional Charging and Stationary Storage." – work in progress. Project advisor

(2022) Nathan Instone. Work Project "*Part Redesign of Module Packout to Reduce: Part Cost, Downtime, and Preventive Maintenance.*" Project advisor.

(2022) Prakash Niroula. MS Thesis "*Optimization of Nanocrystalline Metal Oxides-based Gas Sensors for Hydrogen Detection.*" Thesis committee member.

(2022) William Edwards. Work Project "*Veriati Due to Tool Wear*" – work discontinued due to Covid. Project advisor.

(2022) Ryan Miely. Work Project "*Hazardous Energy Safety System for Battery Cell Manufacturing Environment.*" Project advisor.

(2022) Anthony Romanowski. Work Project "*Electric vehicle powertrains from the motor output shaft to the wheel: Summary of common architectures and designing for manufacturability.*" Project co-chair & advisor.

(2021) Craig Firsdon. Work Project "*Functional Safety Improvements and Standard Workflow Integration.*" Project co-chair & advisor.

(2020) Uchenna J. Asogwa. MS Thesis "*Developing problem solving skills using student generated problems that reverse engineer YouTube videos.*" Thesis committee member.

(2018) Ethel Ruskin. MS Thesis "*Magnetic Injectable Self-Setting Calcium Phosphate Cement (CPC) Compositions for Hyperthermia Treatment of Bone Tumors.*" Thesis committee member.