

Philip J. Parker, PhD, PE, ENV SP

EDUCATION

PhD Civil and Environmental Engineering, Clarkson University, 8/98

M.S. Civil and Environmental Engineering, Clarkson University, 5/95

B.S. Civil and Environmental Engineering, Clarkson University, 5/93, with Great Distinction

PROFESSIONAL EXPERIENCE

2021 — Present                      Acting Dean, UW-Platteville College of Engineering, Mathematics, and Science

2018 -2021                      Associate Dean, UW-Platteville College of Engineering, Mathematics, and Science

2014 2018                              Assistant Dean for New Initiatives, UW-Platteville College of Engineering, Mathematics, and Science

2015-2018                      Coordinator, UW-Platteville Master of Science in Engineering Program

2014 -Present                      Director, Center for Infrastructure Transformation and Education (CIT-E)

2008 — Present                      Professor, UW-Platteville

2006-2015                      Collaborating Scientist, UW-Platteville Pioneer Farm

2011                                      Interim Assistant Dean, UW-Platteville College of Engineering, Mathematics, and Science

2007-2019 Environmental Engineering Program Coordinator, UW-Platteville 2006

Engineering Consultant, Combs and Associates, Janesville, WI.

2004 - 2008                      Associate Professor, UW-Platteville

1998 - 2004                      Assistant Professor, UW-Platteville

2000                                      Engineering Consultant, Strand Associates, Madison, WI

1998 - 1999                      Lecturer, UW-Platteville

LEADERSHIP ACCOMPLISHMENTS

Acting Dean, UW-Platteville College of Engineering, Mathematics, and Science, June 2021 – present

Management

- Provided leadership to a college of 2,488 undergraduate students, 86 graduate students, and 150 employees (including 85 faculty members) while managing an \$11M annual budget
- Served as direct supervisor to 12 administrative positions
- Established several policies and procedures to ensure transparency and fairness — computer purchasing, advising loads, classroom utilization, overloads, discussion sections, etc.
- Co-developed, with chairs, compelling and successful requests for new hires of faculty and instructional academic staff
- Developed a position-tracking tool for the College
- Established annual safety inspection of laboratories and student organization spaces
- Led College of EMS Executive Council through a series of facilitated conversations resulting in a "Culture of Innovation" document that guides this team's response to fresh ideas and encourages the sharing of different perspectives
- Developed a teaching load-tracking process that was transparent, ensured equitable allocation of College resources, and could be completed in a time-efficient manner by chairs and Dean.

#### Access

- Provided place-bound students an opportunity to meet their educational goals through the distance programs offered by the College of EMS
- Reorganized and consolidated our distance engineering offerings by establishing the Platteville Distance Engineering Program to oversee the Masters of Engineering, UWPlatteville Engineering Partnerships ("PEP") program, individual online engineering, math, and science offerings, articulation agreements, transfer pathways, and engineering programs delivered collaboratively with the Universities of Wisconsin
- Launched a third undergraduate distance engineering program (industrial and systems engineering) as part of our PEP program, joining electrical engineering and mechanical engineering
- Established strong partnerships with several colleges in the Wisconsin Technical College System, private universities, branch campuses in the Universities of Wisconsin, and comprehensive universities in the Universities of Wisconsin
- Lowered barriers to achieving an engineering degree and ensured timely degree completion for transfer students by signing 17 Memoranda of Understanding and articulation agreements with partner institutions
- Increased efficiency of distance degree offerings through innovative and thoughtful scheduling and astute allocation of supplies and equipment funding
- Continuously improved quality of distance offerings, investing in faculty to create educational experiences for students aligned with best practices

#### Accreditation and Program Evaluation

- Instituted annual program evaluation processes for eight undergraduate engineering programs as part of our continuous improvement process in support of our accreditation efforts by ABET

- Led efforts, in close collaboration with department chairs and departmental assessment coordinators, to ensure programs are prepared for ABET site visit in Fall 2024

### Revenue Generation and Budget Management

- Successfully implemented supplemental engineering tuition to support high instructional, laboratory, and support costs associated with engineering, resulting in approximately \$3M additional revenue to the university
- Helped UW-Platteville attain three successive record-breaking years of fundraising and the College of EMS to record three of its four highest years of donation revenue -Established five new endowed scholarships
- Persistently advocated for additional funds to be spent on Sesquicentennial Hall made possible by construction bids that came in under budget. These funds are to be used in the project for mission-critical items such as solar panels on the rooftop, improved air handling equipment, and additional equipment
- Built and allocated a budget to support the operations of the Huff Family Innovation Center, including supplies, equipment, a director, two professional staff members, and 20-30 student workers
- Developed tracking and projection tools for Foundation accounts, senior design sponsorships, and room naming donations for Sesquicentennial Hall
- Led the College through one of the largest budget cuts in its history in a collaborative and transparent manner, protecting instructional capacity in the process
- Successfully advocated for new tenure-track faculty position in Mechanical Engineering, despite the university being in a very challenging financial situation

### Facilities

- Oversaw final design and construction completion for one of the nation's premier engineering buildings, Sesquicentennial Hall
- Co-located all engineering and computer science programs "under one roof" with Sesquicentennial Hall addition to Busby Hall, supporting the interdisciplinary connections that industry demands
- Provided students with hundreds of seats in a variety of study spaces in Sesquicentennial Hall, many strategically located near faculty offices
- Planned, co-designed, and led the creation of mission and values statements for the Huff Family Innovation Center, a 20,000 square foot makerspace, the largest in the region - Expanded IOT (Internet of Things) infrastructure significantly through design and construction of the IOT Test Bed, a hands-on learning environment where users can collect, monitor, and analyze data from industrial operations using an ecosystem of sensors, devices, applications, and network equipment
- Led the advocacy for funding a Biochemistry Lab in Boebel Hall, which will be provide the university with a cross-College collaborative space serving both Biology and Chemistry

### Diversity, \_\_\_\_\_ and Inclusion

-Signed ASEE Dean's Diversity Pledge

- Submitted Bronze Level Reaffirmation application to ASEE Diversity Recognition Program
  - Led a \_national Community of Practice (CIT-E, Center for Infrastructure Transformation and Education) including a national effort to create new learning materials and tools to help faculty teach DEI content in their civil and environmental engineering courses
  - Supervised Director of UW-Platteville's award-winning Women in STEM program, advocating and supporting a program that hosts 30+ programs annually including living/learning communities, peer mentoring, professional mentoring, and professional networking events

### Planning

- Led seven planning initiatives with industry, industrial advisory boards, and campus administrative units based on principles of Strategic Doing
- Led a national Community of Practice ("Project Unlock") supported by funding from Kern Family Foundation, wherein we provide academic leaders with the tools needed to transform their industrial advisory boards into industrial partnership boards.
- Created College of EMS Operational Plan, to align with Chancellor's annual goals and Academic Affairs Strategic Plan

### Curriculum

- Initiated new Computer Engineering degree (2023) and new Cybersecurity degree (2022)
- Increased on-campus interest in our online MS in Engineering program through establishment of Accelerated Bachelor's to Master's pathway
- Prioritized a revamping of sophomore-level Mechanics of Materials course to improve student engagement, ensure consistency across different instructors/sections, and modernize and broaden the laboratory experiences
- Sponsored faculty to participate in an "Active Tutoring" pilot for Statics and Mechanics of Materials over three semesters, while helping faculty participants see this project as a SOTL (Scholarship of Teaching and Learning) opportunity.

### Corporate Outreach

- Fostered partnerships between engineering and manufacturing companies in the greater Sauk County region and the University of Wisconsin-Platteville Baraboo Sauk County, with the aim of making the Baraboo Sauk County campus a key player in meeting regional workforce needs
- Visited an average of ten companies per year, and hosted approximately ten companies per year for on-campus visits, resulting in many employment opportunities for our students, increased scholarship funding, increased presence at the UW-Platteville Career Fair, increased funding for College programs, collaboration on instruction, and sponsored senior design projects
- Served on Wisconsin Internet of Things Steering Council

### Leader Development

- Grew new leaders in the College through establishment of a Leadership Learning Community, in which 12 faculty and staff members participated
- Encouraged and sponsored four women leaders in the College of EMS in three successive years for ELATES (Executive Leadership in Academic Technology, Engineering and Science) leadership program at Drexel University

### Faculty Development and Support

- Initiated a training opportunity for new instructors ("Springboard to Success"), including securing funding to support 15 new faculty and staff for two weeks prior to the start of contract, with the impact being more skilled, more confident, and more competent instruction from our least experienced instructors
- Invested in human resources for the College by sponsoring workshops on Inclusive Pedagogy, Crucial Conversations, Human-Centered Design, and Applying Lean Principles to Academic Processes
- Coached struggling faculty members and supported appropriate teaching training from national organizations (e.g. National Effective Teaching Institute)
- Sponsored a Huff Family Innovation Center (makerspace) Orientation Workshop for Faculty and Staff, resulting in 12 faculty and staff (with minimal experience in the space previously) from across the College participating and integrating a making experience into their course
- In collaboration with the College of EMS Executive Council, developed a "College of EMS Belonging Playbook" that assists College and departmental leaders in developing a strong sense of belonging in their areas

### Communication and Transparency

- Wrote hundreds of hand-written notes per year to donors, faculty, and staff
- Connected with students via Dean's Student Advisory Board, Donuts with the Dean, and Pizza with Parker
- Wrote 'Dean's Update' emails to keep College employees informed of what I, as the Dean, was thinking about and working on
- Instituted annual Employee Satisfaction Pulse Survey for the College (2023, 2024)
- Launched a Graduating Senior Open House to provide students and parents an opportunity to meet with faculty and staff, tour learning spaces, and for students to show parents their capstone engineering project poster
- Co-created, with faculty and staff across the College, a set of College of EMS Values.

Associate Dean, UW-Platteville College of Engineering, Mathematics, and Science, 2018 — 2021

- Led academic planning for Sesquicentennial Hall project.
- Worked closely with stakeholders (architect, UW-Platteville Facilities, UW System, Department of Administration, etc.) to create a one-of-a-kind engineering facility (100,000 square feet, \$55M) o Ensured that faculty and staff outside of the

College of EMS were included in planning and design of Organized teams around affinity areas including student study space, faculty offices, makerspace, and 'building-as-a-teacher' of Facilitated working sessions with faculty and staff, prior to architect being engaged, that resulted in significant shared spaces and highly efficient usage of the building of Persistently advocated for LEED certification and was the motivating force behind 'green' features such as covered bicycle facilities, rooftop solar panels, and a green roof of Ensured that the building was student-focused, with copious amounts of student study areas in the building, many of which are near faculty offices of Established the vision of a large, impossible-to-miss, inclusive, and design-focused makerspace (Huff Family Innovation Center) of Initiated planning for the Huff Family Innovation Center, years before it opened, to formulate a vision, values, processes, policies, and standard operating procedures of Initiated and managed a sponsored paver project, eventually raising over \$ 100,000 for undergraduate research

- Established annual program evaluation reviews by all College of EMS programs and aided programs in creating efficient and effective evaluation plans - Championed undergraduate research
- Assisted Dean in corporate outreach
- Oversaw distance delivery of engineering programs and online engineering programs - Incentivized the modernization of the instructional design of online summer courses in Summer 2018 and 2019
- Selected by the Provost in the summer of 2020 to work with Registrar, Facilities, and academic programs across campus to find and distribute learning spaces for the Fall 2020 semester in response to the Covid pandemic
- Stewarded 10-20 donors annually, as assigned by Dean and Foundation staff
- Ran College of EMS Executive Council meetings
- Established 13 articulation agreements/transfer pathways/MOUs
- Co-led the College of EMS' design and construction of four new chemistry labs as part of the Boebel Hall reconstruction project

Assistant Dean for New Initiatives (25% load), UW-Platteville College of Engineering, Mathematics, and Science, 2014 — 2018

- Worked closely with Center for Distance Learning to create an innovative "profitsharing" model for online summer courses that generated new revenue to the College - Served as College of EMS liaison to Boebel Hall reconstruction project
- Partnered with consultant (Paulien and Associates) to formulate a space study for engineering programs at UW-Platteville as a precursor to Sesquicentennial Hall design - Oversaw improvements to College of EMS ASA (Academic Student Assistant) program
- Led development of first College of EMS online undergraduate summer courses in 2017 - Supervised manager of Highway Technician Certification Program for three years, which saw significant increases in efficiencies of administration, transition to online delivery, and continuous improvement of program offerings

- Launched the EMS Seminar Series, a monthly professional development series that provides continuing education credits to practicing engineers

#### Coordinator, UW-Platteville Master of Science in Engineering Program, 2015 — 2018

- Carried out all administrative duties, including managing the budget, evaluating admissions applications, completing annual program assessment, identifying course instructors and setting course rotation, and marketing
- Oversaw steady enrollment growth
- Ensured continuous improvement of the course instructional design
- Resurrected the program's steering committee

#### Environmental Engineering Program Coordinator, UW-Platteville, 2007-2019

- Wrote two ABET self-studies (2012 and 2018) and led preparations for successful visits
- Oversaw each semester's program evaluation process
- Assisted department chair with scheduling, budgeting, and teaching assignments
- Created a co-op-for-credit model that is still in place
- Launched Environmental Engineering Industrial Advisory Board

#### Faculty Member, 1998 — present

- Pioneered active learning teaching methods on campus
- Served as official and unofficial mentor to many new faculty and staff
- Created exemplary learning materials for many classes, many of which have been utilized by faculty and staff over the years
- Forged lifelong relationships with many students
- Served on Faculty Senate, University Undergraduate Curriculum Committee, and many other university-, college-, and department-level committees

#### LEADERSHIP AND DEVELOPMENT TRAINING

The Art and Science of Storytelling, Atlanta, GA (2023)

American Association of State Colleges and Universities (AASCU) Emerging Leaders Program (2020)

CASE Campaigns Workshop, New Orleans, LA (2019)

Strategic Doing 301: Leading Complex Collaborations. West Lafayette, IN (2018)

Development for Deans and Academic Leaders, CASE, Chicago, IL (2018)

Crucial Conversations, UW-Platteville, Platteville, WI (2017, 2022)

## GRANTS AWARDED (>\$50,000)

Building Better Bridges Between Academia and Industry: Leveraging Industrial Partnership Boards to Infuse Entrepreneurial Mindset (PI). Kern Family Foundation, \$662,000, 2022-2025.

WiSys Scholar Award Prototyping Center (PI). \$62,512. 2022.

Expanding The Capacity Of The Center for Infrastructure Transformation and Education Through Integrating Diversity, Equity, and Inclusion into Infrastructure Education (PI). NSF 2121326, \$92,074 (\$300,000 total award via collaborative grant with Colorado State University, Virginia Tech University, and Lafayette College with UW-Platteville the lead institution), 2021-2023

Pioneer Innovation and Prototyping Services (co-PI). WEDC Entrepreneurship Support Grant, \$80,000. 2021.

Building Capacity for the Engineers to Teachers Program (PI). NSF 1660814, Robert Noyce Scholarship Program, \$101,188. 2017-2020

Collaborative Research: Training Next Generation Faculty and Students to Address the Infrastructure Crisis (PI). NSF 1323279, TUES-Type 2 Project, \$359,198. 2013-2017

Production Ag Systems: Closing the Gap in Monitoring and On-Farm Learning Opportunities (co-PI). USDA NLGCA grant, \$293,534. 2013-2016

Infrastructure at the Forefront: Development and Assessment of Two Pilot Courses (co-PI). NSF 0837530, CCL1-Type 1 (Exploratory), \$149,980. 2019-2013

SGER: Zone Refining of Aqueous Solutions (PI). NSF 0553056, Interfacial Engineering Program, \$59,548. 2006 - 2008

Creating Citizen Engineers through Infrastructure Awareness (co-PI). NSF 0530506, EngEdEngineering Education, \$99,827. 2006 — 2009

Creating a Framework to Enhance the Engineering Literacy of Education Majors and the Instructional Effectiveness of Engineering Faculty (PI). NSF 0341962, EngEd — Engineering Education, \$115,061. 2003-2007

Creation of an Introductory Engineering Course Based on Sooner City (PI). NSF 0127117, CCL1-Adaption and Implementation, \$58,182. 2002-2005

## TEXTBOOKS



- Penn, M.R. and Parker, P.J. "Introduction to Infrastructure Engineering" J.W. Wiley (2011)
- Parker, P.J. and Stuart, B.J. "Environmental Engineering License Review for the P.E. Exam." Kaplan AEC Education, Chicago, IL. (2007).
- Banks, J., Das, B.M., Larock, B.E., Parker, P.J., Stuart, B.J., Williams, A, and Williamson, K.J. "Civil Engineering Sample Exam." Kaplan AEC Education, Chicago, IL. (2006).

#### PEER-REVIEWED PUBLICATIONS

- Esmaeili, B., P.J. Parker, S.D. Hart, B.K. Mayer, L Kiosky, and M.R. Penn. (2016) "Inclusion of an Introduction to Infrastructure Course in a Civil and Environmental Engineering Curriculum." Journal of Professional Issues in Engineering Education and Practice, currently published online.
- Parker, P.J. and D.L. Busch (2013). "Field-scale evaluation of a multislot passive sampler", Journal of Soil and Water Conservation, 68(2):83-88.
- Parker, P.J. and Collins, A.G. (2000) "Optimization of Freeze/Thaw Conditioning," J. AWWA, 92(5), 77-85.
- Parker, P.J., Collins, A.G., and DeWolfe, J.R. (2000) "Freeze-Thaw Residuals Conditioning," J. AWWA, 92(4), 168-181.
- Parker, P.J. and Collins A.G. (1999) "The effects of ultra-rapid freezing rates on freeze/thaw conditioning," Water Research, 33(10), 2239-2246.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. (1999) "Dehydration of flocs by freezing," Environmental Science and Technology, 33(3), 482-488.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. (1998) "Alum residual floc interactions with an advancing ice/water interface," ASCE J. Environ. Eng., 124(3), 249-253.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. (1998) "Significance of freezing rate, solids content, and curing time in freeze/thaw conditioning of water treatment residuals," Environ. Sci. and Technol., 32(3) 383-387.
- Parker, P.J. and Collins, A.G. (1997) Comment on "Unidirectional freezing of waste activated sludge: the presence of sodium chloride," by C.P. Chu, W.H. Feng, Y.H. Tsai, and D.J. Lee, Environ. Sci. and Technol., 31(12),3740.
- Parker, P.J., Collins, A.G. (1997) "Feasibility study on freeze/thaw conditioning of a pulp mill waste activated sludge," ASCE J. Cold Regions Eng., 11(3), 245-250.

#### CONFERENCE PAPERS AND PRESENTATIONS

- Donnelly, M, S. McDaniel, P.J. Parker, and L Streit. (2023) Building as Pedagogical Tool: Engineering Reality from Shared Vision. Society for College and University Planning (SCUP) North Central Regional Conference, 2023, St. Louis, MO.
- Sanford, K.L., F. Paige, P.J. Parker, and R. Valdes-Vasquez. (2023) Community of Practice as a Theory of Change for Infrastructure Education. ASEE Annual Conference and Exposition, Baltimore, MD.

- Backus, E., P.E. Dougall, S.W. Rogers, J.S. Atchison, J.W. Rogers, and P.J. Parker. (2023) Unlock the Potential of Industry Partners for Engineering Education. ASEE Annual Conference and Exposition, Baltimore, MD.
- Torlapati, J., J.F. Prosise, P.J. Parker, K. Jahan, and M.K. Smith. (2023). Building Action Oriented Collaborations with Industry Advisory Boards to Promote Entrepreneurial Mindset Learning (EML). ASEE Annual Conference and Exposition, Baltimore, MD.
- Valdes-Vasquez, R., K.L. Sanford, F. Paige, and P.J. Parker. (2023). Work in Progress: Assessing a Faculty Community of Practice and Identifying Its Opportunities to Enhance Equitable Infrastructure Education. ASEE Annual Conference and Exposition, Baltimore,
- Parker, P.J., Paige, F., Sanford, K.L., Valdes-Vasquez, R. (2022). Integrating Justice, Equity, Diversity, and Inclusion into Infrastructure Education. CI & CRC Joint Conference 2022, Arlington, VA.
- Puletapuai, C., Valdes-Vasquez, R., Birmingham, D., Sanford, K.L., Parker, P. J., Paige, F. (2022). The Formation of an Educational Community Practice: An Analysis in a Virtual Setting. 2022 ASEE Annual Conference and Exposition, Minneapolis, MN.
- Sanford, K.L., P.J. Parker, F. Paige, R. Valdes-Vasquez, E. Diacik, T. Larsen, P. Caneveri. (2022) Re-contextualizing Civil Engineering Education: A Systematic Review of the Literature. 2022 ASEE Annual Conference and Exposition, Minneapolis, MN. <https://peer.asee.org/41666>.
- Sanford, K. L., Parker, P. J., Paige, F., & Valdes-Vasquez, R. (2022). Re-contextualizing Civil Engineering Strengthening a Community of Practice to Transform Infrastructure Education. Transportation Research Board 101st Annual Meeting, January 9-13, 2022, Washington, DC.
- Sanford, K.L., P.J. Parker, M.W. Roberts, CM. Wilson, M.R. Penn, R. Valdes-Vasquez, F. Paige. (2021). Infrastructure Education in Unprecedented Times: Strengthening a Community of Practice. 2021 ASEE Annual Conference and Exposition (Virtual Conference).
- Prosise, J, P.J. Parker, and C. Keller. (2020). A Learner and Equity-Centered Approach to Makerspaces. 2020 ASEE Annual Conference and Exposition (Virtual Conference). <https://strategy.asee.org/34010>
- Parker, P.J., M.R. Penn, D.S. Apul, M.E. Garcia, and J. Torlapati (2018). "Collaboratively Developing an Introductory Infrastructure Systems Curriculum: The One Water Module" . 2018 ASEE Annual Conference and Exposition, Salt Lake City, UT. <https://peer.asee.org/30557>
- Parker, P. J., & Haden, C. (2017). "The CIT-E Model Introductory Infrastructure Course: Summary of the "Fundamentals" Module." 2017 ASEE Annual Conference & Exposition, Columbus, Ohio. <https://peer.asee.org/27821>
- Haden, C., P.J. Parker, M.K. Thompson, M.R. Penn, S.D. Hart, and M.W. Roberts (2016). "Implementation of Infrastructure Education Courses Across Multiple Institutions." 2016 ASEE Annual Conference and Exposition, New Orleans, LA. June 26-29, 2016.
- Parker, P.J., M.R. Penn, MOW. Roberts, S.D. Hart, C Haden, and M.K. Thompson (2016). "Crowdsourcing an Outline for a Model Introductory Infrastructure Course Using a

- Modified Delphi Process." 2016 ASEE Annual Conference and Exposition, New Orleans, LA. June 26-29, 2016.
- Parker, P.J., Roberts, M.W., Hart, S.D., and Haden C.M. (2015). "Flipping the Infrastructure Classroom", 2015 ASEE Annual Conference and Exposition, Seattle, WA.
- Parker, P.J., D.L. Busch, J. Panuska, R. Stephens, and C. Elmer. (2015) "Passive Stormwater Agricultural Runoff Sampling". 2015 AWRA WI Section Annual Conference.
- Parker, P.J., C. Haden, S.D. Hart, M.K. Thompson, and M.W. Roberts (2014). "Creating an Infrastructure Education Community of Practice." Proceedings of the 2014 ASEE Annual Conference, Indianapolis, IN.
- Parker, P.J., B.T.W. Bocher, and A.S. Polebitski (2014). "Assessing Student Writing Competencies in Environmental Engineering Courses." Proceedings of the 2014 ASEE Annual Conference, Indianapolis, IN.
- Roberts, M.W., C. Haden, M.K. Thompson, and P.J. Parker (2014). "Assessment of Systems Learning in an Undergraduate Civil Engineering Course using Concept Maps," Proceedings of the 2014 ASEE Annual Conference, Indianapolis, IN.
- Parker, P.J. (2013) "Ability of Environmental Engineering programs to meet B.S. Requirements of the BOK". 2013 Environmental Engineering Chairs and Directors Workshop, Golden, CO, July 14, 2013.
- Parker, P.J. and D.L. Busch. (2013) "An Evaluation of Lower Cost Discharge Measurement and Sampling Methodologies " AWRA 2013 Spring Specialty Conference on Agricultural Hydrology, March 25-27, St. Louis, MO.
- Penn, M.R. and P.J. Parker. (2013) "Infrastructure Education for Environmental Engineers— Let's Not Forget Our Origins", 2013 AEESP National Conference
- Thompson, M.K., P.J. Parker, M.W. Roberts, and M.R. Penn. (2013) "A General Education Course on Infrastructure: Going Beyond the Required Technical Competencies." 2013 Conference of the ASCE Engineering Mechanics Institute
- Parker, P.J. (2012) "Out-of-Class Screencasts to Enhance In-Class Learning" 2012 Opening Workshop for New STEM Educators, September 27, 2012, Green Bay, WI.
- Parker, P.J., Busch, D.L., and R. Mondloch. (2012) "An Experimental Investigation of Flume Tilt." American Water Resources Association - Wisconsin Section 36th Annual Meeting, March 1-2, 2012, Wisconsin Dells, WI.
- Roberts, M.W., P.J. Parker, M.K. Thompson, and B. Barnett. (2012) "Interdisciplinary Teams through Two Companion Courses on Infrastructure." 2012 ASEE Annual Conference, June 10-13, 2012, San Antonio, TX.
- Parker, P.J. (2012) "Can the "M/+30" Requirements of the Environmental Engineering BOK be Met with a Bachelor's Degree?" AEESP Frontiers of Education in Environmental Engineering, October 18-19, St. Louis, MO.
- Penn, M.R., P.J. Parker, M.W. Roberts, and M.K. Thompson. (2012) "Introduction to Infrastructure: Bridging First-year and Junior-Level Civil and Environmental Engineering Courses." 2012 Critical Infrastructure Symposium, Arlington, VA, April 23, 2012.

- Busch, D., Parker, P.J., and Haggard, B.E. (2011) "Alternative Methods for Monitoring Surface Water Runoff From Agricultural Fields." Proceedings of the ASA/CSSA/SSSA International Annual Meetings, October 16-19, 2011; San Antonio, TX
- Parker, P.J. (2011) "Using Out-of-Class Screencasts to Enhance In-Class Active Learning." Proceedings of the 2011 UW System Summit on Excellence in Teaching and Learning.
- Parker, P.J. (2011) "Using Screencasts to Enhance Introductory Environmental Engineering Education," Proceedings of the 2011 ASEE (American Society of Engineering Education) Annual Conference.
- Roberts, M.W., M.K. Thompson, and P.J. Parker. "Development of an Introduction to Infrastructure Course," Proceedings of the 2011 ASEE Annual Conference.
- Parker, P.J. and Busch, D. "Comparison of Two Passive Standpipe Samplers," presentation at 18<sup>th</sup> National Nonpoint Source Monitoring Workshop, November 16-18, 2010, Milwaukee, WI.
- Parker, P.J., M.W. Roberts, and M.K Thompson. "Work in Progress: Assessment and Pilot Delivery of an Introduction to Infrastructure Course", Proceedings of the 2010 Frontiers in Education (FIE) conference.
- Roberts, M.W., M.K. Thompson, and P.J. Parker. "Work in Progress: Development, Implementation, and Preliminary Assessment of an Introduction to Infrastructure Engineering Course," Proceedings of the 2010 ASEE Annual Conference.
- Parker, P.J., Jadaan, O, and Almquist, J. "Development and Assessment of a Revised Introductory Engineering Course: Work in Progress," Proceedings of the 2010 ASEE Annual Conference.
- Parker, P.J. and M.S. Meyers. "Effect of Type of Writing Instruction on Quality of Student Writing," Proceedings of the 2009 ASEE Annual Conference.
- Parker, P.J. "The Effect of Pedagogy on Knowledge Retention," Proceedings of the 2009 ASEE Annual Conference.
- Parker, P.J. "A Writing-Intensive Fluid Mechanics Laboratory," Proceedings of the 2008 ASEE Annual Conference.
- Parker, P.J. "Using Laboratory Reports to Improve Student Writing," Proceedings of the 2008 ASEE Northern Midwest Section Annual Conference.
- Parker, P.J. "The Effect of Pedagogy on Knowledge Transfer," Proceedings of the 2008 ASEE Northern Midwest Section Annual Conference
- Curras, C.J., Penn, M.R., and Parker, P.J. "Oral Exams: Not Just for Dentists Anymore," Proceedings of the 2008 ASEE Northern Midwest Section Annual Conference
- Roberts, M., Curras, C.J., and Parker, P.J. "A Homework Problems Database: Design and Implementation," Roberts, M, Parker, P.J., Curras, C.J., Penn, M.R., and Anderson, M.L. "An Innovative Infrastructure Curriculum for 21<sup>st</sup> Century Civil Engineering," Proceedings of the 2007 ASEE Annual Conference. Chicago, IL June 18 — 21, 2006. (Published on CD-ROM).
- Parker, P.J. "Significant Learning Experiences in the Fluid Mechanics Classroom," 2006 ASEE Annual Conference, Chicago, IL June 18 — 21, 2006. (Published on CD-ROM).

- Parker, P.J. and Thrun, J. T. "Successfully Building Bridges Between Education and Engineering Programs at a 4-year Comprehensive University," 2005 ASEE Annual Conference, Portland, OR, June 12-15, 2005.
- Parker, P.J. and Thrun, J.T. "Building Bridges Between Education and Engineering Programs: An Example of a Successful Planning Process," 2005 ASEE Annual Conference, Portland, OR, June 12-15, 2005.
- Parker, P.J. and Anderson, M.L. "Assessment of a First-year Introduction to Civil and Environmental Engineering Course," 2004 ASEE Annual Conference, Salt Lake City, UT, June 20 - 23, 2004. (Published on CD-ROM).
- Parker, P.J. and Anderson, M.L. "Assessment of an Introduction to Civil and Environmental Engineering Course," 2004 ASEE Annual Conference, Salt Lake City, UT, June 20 - 23, 2004. (Published on CD-ROM).
- Parker, P.J. "Streamlining the ABET Assessment Process: Less Might be More," Best Assessment Processes VI, Rose-Hulman Institute of Technology, February 9 - March 2, 2004.
- Parker, P.J. and Ralph, E.E. "Retention of Recent Women Engineering, Mathematics, and Science Graduates in the Workplace," ASEE Annual Conference, Nashville, TN, June 22-25, 2003. (Published on CD-ROM).
- Parker, P.J. and Anderson, M.L. "Creation of a Project-Based Introduction to Engineering Course." ASEE Annual Conference, Nashville, TN, June 22-25, 2003. (Published on CD-ROM).
- Parker, P.J. and Anderson, M.L. "Creation of an Introduction to Engineering Course based on the 'Civil City' Concept." ASEE Annual Conference, Nashville, TN, June 22-25, 2003. (Published on CD-ROM).
- Parker, P.J. "Student-Friendly Learning Via Inquiry-Based Instruction," Curriculum Reform Success Stories in Science and Mathematics, A Distance Education Discussion. , December 12, 2002.
- Parker, P.J., C.A. Curras, and M.R. Penn. "Enhancing Teaching (and Learning?) with On-Line Courseware," ASEE Upper Midwest Regional Conference, Madison, WI, October 11-12, 2002.
- Parker, P.J., "'Hyper-Active Learning' in an Upper Level Engineering Classroom," ASEE Annual Conference, Montreal, Que, June 16-19, 2002. (Published on CD-ROM).
- Jablokow, K.W. and Parker, P.J. "Cognitive Style and Learning Preferences in Engineering Undergraduates," ASEE Annual Conference, Montreal, Que, June 16-19, 2002. (Published on CD-ROM).
- Parker, P.J. "Student-Generated Checklists to Improve Writing," ASEE Annual Conference, Albuquerque, NM, June 24-27, 2001. (Published on CD-ROM).
- Anderson, M.L., Parker, P.J., and Penn, M.R. "Preparation for a Successful ABET 2000 Accreditation Visit," ASEE Annual Conference, Albuquerque, NM, June 24-27, 2001.
- Parker, P.J. "Improving the Writing Skills of Engineering Students," Fifth National Writing Across the Curriculum Conference, Indiana University, Bloomington, IN, May 31-June 2, 2001.

- Parker, P.J. "Inquiry-based learning to enhance student writing skills," Northern Midwest Regional ASEE Conference, University of Minnesota, September 28 and 29, 2000. (Published on CD-ROM)
- Parker, P.J. "Enhancing the effectiveness of the undergraduate laboratory experience," 2000 ASEE Annual Conference & Exposition, St. Louis, MO, June 18-21, 2000.
- Parker, P.J. "Student-Active Learning in Fluid Mechanics," UW System Women and Science Program Spring Retreat, May 18-19, 2000.
- Parker, P.J. and Brady, B.S. "Teaching Structure and Conventions of Effective Engineering Communication to Improve Writing in Other Disciplines," Fourth National Writing Across the Curriculum Conference, June 3-5, 1999, Cornell University, Ithaca, NY.
- Parker, P.J., and Collins, A.G. "Cost-Optimization of Freeze/Thaw Conditioning," WEF/AWWA Joint Residuals and Biosolids Management Conference, January 27-30, 1999, Charlotte, NC.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. "Comparison of freeze/thaw conditioning for water treatment residuals," Universities Forum, 1998 American Water Works Association (AWWA) Annual Conference, June 21-25, 1998, Dallas, TX.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. "Optimizing freeze/thaw conditioning," Spring Meeting of New York State Section AWWA, April 28-30, 1998, Niagara Falls, NY.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. "Comparative studies (laboratory- and fieldscale) of freeze/thaw alum residual dewatering," Proceedings, WEF/AWWA Joint Residuals/Biosolids Management Specialty Conference, August 3-6, 1997, Philadelphia, PA, p. 41-47.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. "The effects of solids content and curing time on freeze/thaw conditioning of water treatment residuals," AWWA Annual Conference, June 15-19, 1997, Atlanta, GA.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. "Incorporation and rejection of alum sludge flocs by an advancing freezing front," Proceedings, 8th International Cold Regions Engineering Conference, August 12-17, 1996, Fairbanks, AK, p. 757-768.
- Parker, P.J. and Collins, A.G. "Qualitative observations of sludge flocs at the ice/water interface," 10th Annual Environmental Science and Engineering Research Conference, February 18-20, 1996, Gananoque, Ont.
- Parker, P.J. and Collins, A.G. "An optimization model for wastewater treatment plants: development and application," 9th Annual Environmental Science and Engineering Research Conference, February 19-21, 1995, Gananoque, Ont.
- Parker, P.J., Collins A.G., and Dempsey, J.P. "Dewatering of alum sludge by freezing," Spring Meeting of New York State Section AWWA, April 19-22, 1994, Buffalo, NY.
- Parker, P.J. and Collins, A.G. "Sludge dewatering by freezing," 8th Annual Environmental Science and Engineering Conference, February 20-22, 1994, Gananoque, Ont.
- Parker, P.J., Collins, A.G., and Dempsey, J.P. "Freezing rate of sludge layers," Proceedings, Joint CSCE-ASCE National Conference on Environmental Engineering, Montreal, Canada, Eds. R.N. Yong, J. Hadijinicolaou, and A.M.O. Mohamed, vol. P. 1, 405.

NON PEER-REVIEWED PUBLICATIONS

Parker, P.J. (2005). "Transferring Development Rights," Land Development Today, 1(7), 16 \_24.  
Parker, P.J., and Alderman, B.J. (1996). "Use optimization to minimize WWTP costs,"  
Clearwaters (NY Water Environment Association), 26(1), 34-35.

#### INVITED SEMINARS AND PRESENTATIONS

"Feasibility of Mechanical Freeze/Thaw Conditioning of Water Treatment Residuals," American  
Water Works Association Indiana Section Annual Meeting, February, 2001.

"Freeze/Thaw Conditioning of Water Treatment Residuals," University of Massachusetts,  
Amherst, MA, May 2, 1997.

"Mechanisms Responsible for the Success of Freeze/Thaw Conditioning of Sludge," Clarkson  
University, Potsdam, NY, October 31, 1996.

#### PROFESSIONAL LICENSURE AND CERTIFICATION

a Strategic Doing Certified Workshop Leader, October 2021, University of Southern Alabama  
a Professional Engineer, June 2024, Wisconsin a Envision Sustainability Professional,  
December 2024

#### TEACHING EXPERIENCE

Optimization with Engineering Applications; Computer Applications; Hydrology; Fluid  
Mechanics; Solid and Hazardous Waste Engineering; Engineering for Non-Engineers;  
Introduction to Environmental Engineering; Introduction to Engineering; Introduction to  
Engineering Projects; Site Design and Stormwater Management; Municipal Hydraulics; Senior  
Design.

#### PROFESSIONAL SOCIETY MEMBERSHIP

American Society of Civil Engineers  
American Society for Engineering Education

#### AWARDS

WiSys Innovation Champion, 2023  
Wisconsin Section ASCE Engineer in Education Merit Award, 2021  
2008, 2013 ASCE Region 3 Faculty Advisor of the Year Award  
UW System/Alliant Energy Underkofler Award for Teaching Excellence 2008  
ASCE Zone 111 Faculty Advisor of the Year 2006  
ASCE Faculty Advisor Certificate of Commendation 2005, 2007  
Excellence in Professional Development Award, UW-Platteville College of EMS 2003  
Southwest Branch ASCE-Wisconsin Section Young Member of the Year 2002

Apprentice Faculty Grant, American Society of Engineering Education 1999  
Russell L. Sutphen Scholarship (New York Section of AWWA) 1998  
John C. Robbins Scholarship (NY section AWWA) 1993