

1. Name

Rodney F. Wilkins III

2. Education – degree, discipline, institution, year

-Ph.D., Civil Engineering, University of Virginia, Charlottesville, VA, 2018

-M.E., Civil Engineering, University of Virginia, Charlottesville, VA, 2017

-B.S., Mechanical Engineering, VPI&SU, Blacksburg, Virginia, 1981

3. Academic experience – institution, rank, title, when, full time or part time

-Virginia Military Institute (VMI), Instructor, 2020-Present, full time

-Eastern Mennonite University, Assistant Professor and Laboratory Manager, 2019-2020

-University of Virginia, Instructor, 2018 (Summer Semester)

-University of Virginia, Graduate Research/Teaching Assistant, 2013-2018

-James Madison University, Laboratory Assistant/Instructor, 2013

-Guest Lecturer, UVA and JMU, 2013-2018.

4. Non-academic experience – company or entity, title, brief description of position, when, full time or part time

-Energen Holding Corporation. Integrated technologies of three global companies as Research Manager 2010-2013.

-Engineering Manager et al, ASR Company, 1984-2010. Managed NPD, R&D, Intellectual Property, Environmental and other functions to expand company globally over the course of 5-6 ownership changes.

-Engineering Consultant/Contractor, Shenandoah Energy, 1984-Present. Select project focus on sustainable technologies.

-Power Maintenance Engineer, Westvaco Corp, 1981-1984. Managed improvements for a 100MW cogeneration power facility: Turbogenerators, boilers, pumps, heat transfer equipment, water treatment, environmental controls, and facility wide piping.

-Co-op Engineer, General Motors (SSG Division), 1977-1979. Research paper based on tribological work selected as runner-up at 1979 ASME Virginia Conference.

5. Certifications or professional registrations

-Professional Engineer, Commonwealth of Virginia, 1985

-Master Mechanical Certification, Commonwealth of Virginia, 1985

-EPA Master License, 2013

-FCC General License, WB4YIL, 1969 (est)

-Too many additional certifications to list!

6. Current membership in professional organizations

-American Society of Mechanical Engineers (past)

-American Society of Heating, Refrigeration, and Air Conditioning Engineers (past)

7. Service activities

- Va Tech Research Leadership Council Board member, SVAREC, 2020-present
- VMI ASCE student chapter presentations and support for 2022 Regional Conference
- Panelist for VMI seminar “Meeting learners where they are now: Reflecting on teaching in the age of COVID.”
- Reference for a number of VMI cadets seeking internships, full-time employment, and graduate school admission
- Performed STEM demonstrations for Rockbridge Middle School students, 2023
- Mentor for East Tennessee State University student, 2021-22.
- Shell Challenge Team, faculty advisor, EMU, 2019-2021.
- Mentor for JMU student presentation at Environment Virginia Conference
- Recruiting and Career Advising, VMI (UVA, EMU).
- Pro bono Engineering consulting services in the community.
- Global Missions Chair and Finance Committee members, Staunton Alliance Church-present
- Grass Roots Development, Director/Treasurer, a 501c3 corporation focused on the Himalaya region 1998-2003
- Augusta County Extension Service Overall Advisory Board, Chair/member, 1986-1990
- Headwaters Soil and Water Conservation District, elected Director, 1985-1989

8. Publications and presentations from the past five years – title, co-authors if any, where published and/or presented, date of publication or presentation

- “Entry-level mathematics and engineering course grades as indicators of success in a Civil Engineering program,” Martin, R., Afrin, T. and Wilkins, R. 2023 ASEE Conference
- “Highlighting Cultures, Civilizations, and Diversity in Historical Civil Engineering Achievements,” Afrin, T., Timmes, T., Martin, Wilkins R., and Swenty, M. 2022 ASEE Conference.
- “How Public Values Theory can influence energy infrastructure planning: Exploring values articulation, time horizons, and substitutability through the Atlantic Coast Pipeline,” Foley, R., Pollack, C., Barrell, E., Wilkins, R., Energy Research & Social Science, 2021.
- “The impact of interfacial properties on fluid fate and transport during production of hydraulically fractured unconventional gas wells,” Clarens, A., Wilkins, R., Liang, B., Plampin, M., American Geophysical Union Conference, 2018.
- “Future Energy Infrastructures: Engagements with the Atlantic Coast Pipeline-A research report,” Foley, R. et al, Wilkins, R., LibraOpen 2017.
- “Environmental Life Cycle Analysis of Water and CO₂-Based Fracturing Fluids Used in Unconventional Gas Production,” Wilkins, R., Menefee, A., Clarens, A., Environmental Science and Technology, 2016

9. Most recent professional development activities

- Hosted solar PV and pumping application technical demonstration for USDA, 2021
- Consultant for several solar energy design applications, and one technical service issue.
- Continue work on a collaborative book project illustrating industrial culture using a local company as surrogate over the past 50 years.