# David C. Winyard Sr.

### **Education:**

Ph.D., Science and Technology Studies (STS), Virginia Tech, 2016.

M.S., Mechanical Engineering, University of Rochester, 1987.

**B.S.**, Mechanical Engineering, Co-op Program, University of Maryland, 1980.

## **Academic Experience:**

**Grace College:** Associate Professor of Engineering, January 2020–present.

- Teaching: Dynamics, Thermodynamics, Fluid Mechanics, Heat Transfer, Kinematics & Linkage Design, Finite Element Analysis, Control Systems, Systems Engineering, & Faith, Science, & Reason
- Accreditation: *Self-Study Report* lead author for ABET visit, September 2021, leading to program accreditation in August 2022.
- Committee Participation: Program Assessment and Care Intervention Team.

## Mount Vernon Nazarene University (MVNU): Associate Professor of Engineering

- Founding Faculty, MVNU Engineering Department, 2014.
- .Department Chair: 2016–2017; Full-Time: 2016–2018; Half-Time: 2014–2016.
- Courses taught: Engineering Design, Logic & Engineering Computation, Dynamics, Thermodynamics, Fluid Mechanics, Heat Transfer, Senior Design Project, and Science and the Modern Mind (general education).
- Independent study adviser: Running Shoe Design Study; Engineering Patent Study; and SolidWorks Finite Element Analysis Validation.
- Co-author, draft *Self-Study Report*, September 2017, for ABET accreditation readiness review, leading to program accreditation in August 2019.
- Curriculum: Led program revision efforts, including scope and sequence changes, course revisions, elective development, and minors, 2016–2018.
- Facilities: Led efforts to specify and acquire space and equipment.
- Advising: Primary academic adviser for up to 50 students.
- Scheduling: Developed department schedule for 2017–2018 academic year.
- Search Committee service: yearly for engineering faculty, plus 2017 search for new Dean, School of Natural and Social Science.
- Recruiting: Frequent host for prospective students, individually and for groups during special events. Admissions Committee member, 2015–2018.
- Business Program: Worked to explore launch of a Logistics Minor.

**Virginia Tech:** Online course instructor, summer 2014, *Engineering Cultures*, a survey of engineering practices in other countries in comparison to U.S. practices.

### **Publications and Presentations:**

- Book review, *The Revolt Against Humanity: Imagining a Future Without Us*, Adam Kirsch, *Perspectives on Science and Christian Faith* (PSCF), the academic journal of the *American Scientific Affiliation (ASA)*, pending.
- Contributor, Institute for the Study of Christianity in an Age of Science and Technology (ISCAST, Australia)) Green Paper on transhumanism, pending.
- Book review, God, Technology, and the Christian Life, Tony Reinke, PSCF, March 2023, 74–75.
- Book review, *Religion and the Technological Future: An Introduction to Biohacking, Artificial Intelligence, and Transhumanism,* Calvin Mercer and Tracy J. Trothen, PSCF, June 2022, 123–124 "How to talk about Science and Faith with Boldness AND Humility" online presentation, ASA Ohio, October 24, 2021.
- Book review, 2084: Artificial Intelligence and the Future of Humanity, John Lennox, PSCF, December 2020, 254–255.
- "Transhumanism: Will It Help us to Love?" online presentation, ASA Ohio, October 25, 2020.
- "Call for Papers on Transhumanism: A Scholarship—and Faith—Opportunity," Intervarsity Emerging Scholars Network (ESN) Blog, June 15, 2019.
- Guest Editor, transhumanism-themed issue, PSCF, June 2020, including my invitational essay: "Transhumanism: Christian Destiny or Distraction?" 67–81.
- "Christianity, Transhumanism, and Techno-Syncretism," presentation, *ASA Annual Meeting*, Gordon College, Wenham, MA, July 28, 2018.
- "The Life and Legacy of Robert Boyle," presentation, ASA Ohio, March 17, 2018. Previously presented to several church groups.
- "The Promethean Escape: A Review of Charles Rubin's Eclipse of Man," *Social Epistemology Review and Reply Collective* 6, no. 10 (2017): 1–3.
- "Transhumanism-Christianity Diplomacy: To Transform Science-Religion Relations," presentation, *ASA Annual Meeting*, Colorado School of Mines, Golden, CO, July 30, 2017.
- "How Did You Do It? Faith and My Dissertation," Intervarsity ESN Blog, July 16, 2017.
- "Polanyi Appeal: A Review of Esther Meek's *Contact With Reality*," *Social Epistemology Review and Reply Collective* 6, no. 8 (2017): 17–19.
- "What Does a Christian Need to Know About Science?" presentation, with LeeAnn Couts, *ASA Annual Meeting*, Azusa Pacific University, Azusa, CA, July 23, 2016.
- "Technological Enhancement: What's a Christian to do?" presentation, with Christopher Benek and Micah Redding, *ASA Annual Meeting*, Oral Roberts University, Tulsa, OK, July 25, 2015.
- "A Technological God? The Emergence of Religious Transhumanism," presentation, *ASA Annual Meeting*, McMaster University, Hamilton, Ontario, Canada, July 27, 2014.
- "To Enhance or Diminish? That is the Technological Question," presentation, *Gender, Bodies & Technology Conference*, Blacksburg, VA, May 3, 2014.

- "Creativity and Transhumanism: Where Are the Limits?" presentation, *ASA Annual Meeting*, Belmont University, Nashville, TN, July 22, 2013.
- "Transhumanism, and the First Amendment," presentation, *Science & Technology in Society Conference*, STGlobal Consortium, American Association for the Advancement of Science (AAAS), Washington, DC, April 5, 2013.
- "Review of Steve Fuller, Humanity 2.0: What it Means to be Human Past, Present and Future," *Social Epistemology Review and Reply Collective* 2 (2): 16-18.
- "Culture-Clash Aspects of Humanitarian Relief Logistics," presentation, *Outside Authority: Virginia Tech STS Graduate Conference*, Blacksburg, VA, October 15, 2011.
- Numerous government technical reports, 1980–2012.
- Other technical presentations: SAVE International; Society for Applied Learning Technology; SAE; and, Joint Actuation Conference.

#### **Certifications:**

- Held SECRET Security Clearance through retirement.
- Defense Acquisition University, Systems Engineering, Certified Level III.
- Passed Engineer-in-Training exam, 1980.

## **Memberships:**

- American Scientific Affiliation (ASA), 2012–present.
- Founding Vice President, ASA Ohio Chapter, 2017–present.
- Member, Reasons to Believe (RTB), Ohio Chapter, 2018—present, and member of the RTB Scholar Community, 2020—present.

# **Engineering Experience:**

**Turnaround Factor:** Engineering consultant, intermittent, part-time, 2014–present.

## **Defense Logistics Agency (DLA):**

- Strategic Distribution & Disposition R&D Program Manager, 2005–2012:
  - o Managed \$26M budget line.
  - o Launched, executed, and transitioned numerous logistics R&D projects.
- Technical Manager, fast-track technology demonstrations, 2005–2012:
  - Node Management and Deployable Depot (NoMaDD) Advanced Concept Technology Demonstration (ACTD), \$30M, 2005–2008.
  - o Humanitarian Expeditionary Logistics Project (HELP) Joint Capability Technical Demonstration (JCTD), \$10M, 2010–2012.
- Chief, Value Engineering Branch, DLA Aviation: 2003–2005:
  - o Supervised/managed team of ten engineers and technicians.
  - o Produced \$50M/year cost savings.
- Value Engineer, DLA Aviation, 1997–2003, with focus on cast- and forged-metal parts, aircraft flight instruments, batteries, actuators, and filters.
- Organized, *Life-Cycle Manufacturing Technology Conference*, Defense Supply Center Richmond, 2002.

## Naval Surface Warfare Center, Carderock Division, Annapolis Laboratory:

- Group Leader: Ship/Submarine Hydraulics, 1991–1997:
  - o Conducted R&D projects for Virginia-class submarine development.
  - o Supported development of Arleigh Burke-class destroyer steering systems.
- Project Engineer: Pumps, 1980–1991.
- Co-op Student: Mechanical Systems, 1975–1980.

### **Honors and Awards:**

- DLA Distinguished Career Service Award, 2012.
- DOD Value Engineering Professional of the Year Award, 2001.
- DOD Value Engineering Team Awards, 1999, 2002, & 2005.
- Five patents, plus one CONFIDENTIAL "Notice of Allowability."
- Numerous quality, sustained-performance, and special-act awards, 1980–2012.
- Severn Technical Society, Co-op of the Year, 1979.

## **Professional Development:**

- SolidWorks, online training, 2021.
- ASA Annual Meeting attendance and participation, 2013–2017.
- MVNU Faculty Institute, annually 2014–2017.
- Presenter/Participant, MVNU Faculty Development Seminars, 2015 & 2017.
- Numerous continuing education classes, 1980–present.

### **Service Activities:**

- Guest editor, *PSCF*, transhumanism-themed issue, June 2020.
- Church & Group Presentations: "The Life and Legacy of Robert Boyle," "Transhumanism: Destiny or Distraction?" and "Christ and Culture."
- Substitute teacher, Granville Christian Academy, fall 2019.
- Board Member, Knox Labs "Makerspace," 2017.
- Judge, Knox County STEM Day, 2015.
- Author: numerous church newsletter articles.

### Other:

- Strategic and systematic thinker, capable leader, willing follower.
- Especially capable in technical and cultural analysis and integration.
- Retired from U.S. Civil Service, June 2012, to pursue teaching career.
- In excellent health. Road cyclist, with 200+ consecutive months cycling 100+ miles/month, 2001–present. Completed three cross-country cycling trips (1983, 1987, 2002), as described in a self-published book: *Shore to Shore: A father-and-son journey across America*, Lulu, 2007. Completed one-day, 200-mile ride, Mount Vernon, OH, to Winona Lake, IN, May 2023.
- Member: Knox Orthodox Presbyterian Church. Previously a member of Reformed churches of one sort or another since childhood.
- Married (38 years); three home-schooled children, including two college graduates, with youngest son studying engineering at Grace College, and five grandchildren.