#### DOMINIC M. HALSMER

Professor of Engineering, College of Science and Engineering
Director of the Center for Faith and Learning
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#### Education

M.A., Biblical Literature, 2013 Oral Roberts University, Tulsa, OK

Ph.D., Mechanical Engineering, 1992 University of California at Los Angeles

M.S., Aeronautical and Astronautical Engineering, 1986 Purdue University, West Lafayette, IN

B.S., Aeronautical and Astronautical Engineering, 1985 Purdue University, West Lafayette, IN

# **Experience**

Director, Center for Faith and Learning, 2013-Present Dean, College of Science and Engineering, 2007-2012 Professor of Engineering, 2002-Present Chair, Engineering and Physics Department, 1999-2007 Associate Professor of Engineering, 1997-1999 Assistant Professor of Engineering, 1992-1997 Oral Roberts University, Tulsa, OK

Summer Faculty Fellow, 1996-1997 NASA Goddard Space Flight Center, Greenbelt, MD

Mechanical Engineer, 1994-1995 Dunbar Engineering Corporation, Tulsa, OK

Dynamics and Controls Engineer, 1985-1992 Hughes Aircraft Company, Los Angeles, CA

Teaching Assistant, 1987-1988 University of California at Los Angeles, Los Angeles, CA

#### **Areas of Specialization**

The Integration of Faith and Learning in Higher Education, The Role of Engineering in Science and Theology, Christian Apologetics, Reverse Engineering of Natural Systems, Reverse Systems Engineering, Forensic Engineering, Engineering and Science Education, Dynamic Systems, Control Systems, Spacecraft Attitude Dynamics and Control

### **Recent Publications**

- Dominic Halsmer and Lanny Endicott, "Sailing the Seas to Scientific Literacy without Shipwrecking Faith in America's Bible Belt," submitted to *International Journal on Science in Society*, December, 2014.
- Dominic Halsmer, and P. Wesley Odom, "Fostering Enthusiasm for Engineering in America's Bible Belt by Demonstrating Consonance with a Theistic Worldview," Proceedings of the ASEE Midwest Section Conference, Fort Smith, AR, September 24-26, 2014.
- Dominic Halsmer, and Andrew Lang, "Science and the Wisdom of God: Appreciating Divine Ingenuity (Update)," presented at the Second Summer Workshop for Evolution and Christian Faith Grantees, BioLogos Foundation, University of Oxford, July 13-16, 2014.
- Dominic Halsmer, Calvin Roso, P. Wesley Odom, "Relating Christian Faith to Physics for Scientists and Engineers," submitted to *Journal of the Scholarship of Teaching and Learning for Christians in Higher Education*, February, 2014.
- Dominic Halsmer and Caleb Lutz, "Science and the Wisdom of God: Encouraging an Appreciation for the Ingenuity that Underlies Our Evolving Universe," Proceedings of the 2<sup>nd</sup> Faith and Science Conference, Evangel University, June 23-25, 2014.
- Dominic Halsmer, Jordan Mendenhall, and Gabriel Kanelopoulos, "Diversity of Thought on the Integration of Faith and Science as an Opportunity for Christian Unity and Growth," presented at the Christians on Diversity in the Academy Conference, Azusa Pacific University, March 26-27, 2014.
- Dominic Halsmer, Michael Gewecke, Rachelle Gewecke, Nate Roman, Tyler Todd, and Jessica Fitzgerald, "Reversible Universe: Implications of Affordance-based Reverse Engineering of Complex Natural Systems," in *Engineering and the Ultimate: An Interdisciplinary Investigation of Order and Design in Nature and Craft*, ed. by Jonathan Bartlett, Dominic Halsmer and Mark R. Hall, Blyth Institute Press, Broken Arrow, Oklahoma, pp. 23-50, 2014.
- Dominic Halsmer, Andrew Lang, Hal Reed, John Korstad, Lanny Endicott, and Enrique Valderrama, "Science and the Wisdom of God: Encouraging an Appreciation for the Ingenuity that Underlies Our Dynamic Universe," Pastor's Workshop and Focus Group Session, Oral Roberts University, January 3, 2014.
- Dominic Halsmer, "Science and the Wisdom of God: Study of Nature Unveils Underlying Ingenuity," presented at Franciscan University, Steubenville, Ohio, November 8, 2013.
- Dominic Halsmer, "Evidence of Exquisite Engineering Expertise in the Universe," *Community Spirit* (online copy at communityspiritmagazine.com), August, 2013.
- Dominic Halsmer, "What Hath Stuttgart to do with Jerusalem? Exploring a Model of God as Process Engineer," Annual Meeting of the American Scientific Affiliation (ASA), Belmont University, July 19-22, 2013.
- Dominic Halsmer, Calvin Roso, P. Wesley Odom, "Relating Christian Faith to Physics for Scientists and Engineers," Christian Engineering Conference (CEC), Georgia Tech University, June 26-28, 2013.

- Dominic Halsmer, Jessica Fitzgerald, P. Wesley Odom, and Taylor Tryon, "Implementation and Assessment of a Curricular Module on the History and Philosophy of Reverse Engineering in Biological Systems," Annual Conference of the American Society for Engineering Education (ASEE), Atlanta, GA, June 24-26, 2013.
- Dominic Halsmer, Andrew Lang, and Hal Reed, "Science and the Wisdom of God: Appreciating Divine Ingenuity," First Summer Workshop for Evolution and Christian Faith Grantees, BioLogos Foundation, Gordon College, June 24-26, 2013.
- Dominic Halsmer, "An Apologetic to Scientists and Engineers Derived from a Biblical and Theological Model of God as Engineer," Thesis for a Master of Arts in Biblical Literature, Oral Roberts University, May 4, 2013.
- Dominic Halsmer, "Science and the Wisdom of God: Encouraging an Appreciation for the Ingenuity that Underlies Our Evolving Universe," grant proposal to the BioLogos Foundation, submitted on October 1, 2012.
- Dominic Halsmer, Ken Weed and Taylor Tryon, "Introducing the Possibility of Corruption to Facilitate Reverse Engineering of Natural Systems," Annual Meeting of the American Scientific Affiliation (ASA), Point Loma Nazarene University, July 20-23, 2012.
- P. Wesley Odom, Dominic Halsmer, Sean McDonough, "Constructal Theory in Relation to Metaphysics and a Christian Worldview," Engineering and Metaphysics Conference, Oral Roberts University (ORU), June 15-16, 2012.
- Jessica Fitzgerald and Dominic Halsmer, "The Problem of Evil and Suffering from an Engineering Perspective," Engineering and Metaphysics Conference, ORU, June 15-16, 2012.
- Dominic Halsmer and Joshua Beck, "Encouraging Critical Thinking and Spiritual Vitality via Multidisciplinary Discussions on the Role of Engineering in Reconciling Science & Faith Issues," Spirituality & Honors Education Symposium, Indiana Wesleyan University, May 29-31, 2012.
- Kyle Hansen and Dominic Halsmer, "A Corollary to Arthur C. Clarke's Third Law and his Use of Partial Revelation as Key to Successful Transformation to Maturity in *Childhood's End*," Science and Science Fiction Conference, ORU, April 12-13, 2012.
- Dominic Halsmer, Jeff Lamp and Joshua Beck, "Bringing Science into Theology to Facilitate Healing and Reconciliation," Annual Meeting of the American Association for the Advancement of Science, SWARM Region, University of Tulsa, March 31-April 4, 2012.
- Dominic Halsmer, "Review of Science and the Spirit: A Pentecostal Engagement with the Sciences, James K.A. Smith and Amos Yong, eds., in Perspectives on Science and Christian Faith, 63:4, December, 2011.
- Dominic Halsmer, Jon Marc Asper and Benjamin Zigrang, "Enhancing Science and Engineering Programs to Equip and Inspire Missionaries to Technical Communities," *Journal of the Scholarship of Teaching and Learning for Christians in Higher Education*, Vol. 5, No. 1, pp. 15-33, Nov., 2011.

- Dominic Halsmer, and Jessica Fitzgerald, "Metaphysical Considerations Enhance Reverse Engineering Studies," ASA Annual Meeting, North Central College, July 29-August 1, 2011.
- Dominic Halsmer, Ken Weed and Sean McDonough, "Affordance-based Reverse Engineering of Natural Systems with Possible Corruption," Christian Engineering Education Conference (CEEC), Trinity Western University, June 29-July 1, 2011.
- Dominic Halsmer and Taylor Tryon, "Affordance-based Reverse Engineering of Biological Systems as a Framework for the Cumulative Case for a Christian Worldview," Faith and Science Conference, Evangel University, June 27-28, 2011.
- Kyle Hansen and Dominic Halsmer, "The Problem of Pain and a Relational Theory of Design: Can Suffering Result in Positive Affordances?" C.S. Lewis Conference, ORU, April 1-2, 2011.
- Dominic Halsmer, "Review of *Questions of Truth: Fifty-one Responses to Questions about God, Science and Belief*, by John Polkinghorne and Nicholas Beale, in *Perspectives on Science and Christian Faith*, 63:1, March, 2011.
- Dominic Halsmer, Elliot Butay, Ben Hase, Sean McDonough, Taylor Tryon, and Joshua Weed, "Exploring Connections between Engineering and Human Spirituality," Annual Conference of the American Society for Engineering Education (ASEE), Louisville, KY, June 20-23, 2010.
- Dominic Halsmer, Jon Marc Asper, Nate Roman and Tyler Todd, "The Coherence of an Engineered World," *International Journal of Design & Nature and Ecodynamics*. Vol. 4, No. 1, pp. 47–65, 2009.
- Dominic Halsmer, "Application of the 'Engineering Mindset' for Worldview Evaluation," in *Engaging Our World: Christian Worldview from the Ivory Tower to Global Impact*, ed. by William Adrian et al, Word and Spirit Press, Tulsa, Oklahoma, pp. 137-152, 2009.
- Dominic Halsmer, Michael Gewecke, Rachelle Gewecke, Nate Roman and Tyler Todd, "A Reversible Universe: Worldview by Affordance-based Reverse Engineering of Natural Systems," ASA Annual Meeting, Baylor University, August 1-3, 2009.
- Dominic Halsmer, Nate Roman and Tyler Todd, "Integrating the Concept of Affordance into Function-based Reverse-engineering with Application to Complex Natural Systems," ASEE Annual Conference, Austin, TX, June 14-17, 2009.
- Dominic Halsmer, Nic Halsmer, Robert Johnson and James Wanjiku, "The Applicability of Engineering Design Principles in Formulating a Coherent Cosmology and Worldview," ASEE Annual Conference, Pittsburgh, PA, June 22-25, 2008.
- Dominic Halsmer, "Why Engineers Make Good Apologists," in *Religion, Culture, Curriculum, and Diversity in 21<sup>st</sup> Century America*, ed. by Mary Alice Trent et al, University Press of America, Lanham, Maryland, pp. 85-94, 2007.
- Dominic M. Halsmer, "Teaching Spiritual Engineering," *Journal of the Scholarship of Teaching and Learning for Christians in Higher Education*, Vol. 2, No. 1, pp. 3-4, Dec., 2007.

Dominic M. Halsmer, "Multidisciplinary Cross-Cultural University Outreach to Secular Scientists and Engineers," International Conference on Engineering Education, San Juan, Puerto Rico, July 23-28, 2006.

## **Professional Affiliations**

Registered Professional Engineer in the State of Oklahoma American Scientific Affiliation, 2008-present American Society of Mechanical Engineers, 1993-present American Society for Engineering Education, 1993-present

#### **Grants and Awards**

Research Grant on Evolution and Christian Faith, 2013-present BioLogos Foundation \$159,200

Honors Research Fellowship (Science and Faith), 2007-present Oral Roberts University

Director of Summer Math Science Camp, 2005-2008 Oklahoma State Regents \$76,000

Scholar of the Year Nominee, 2014
Faculty Member of the Year in the Honors Program, 2014
Faculty Member of the Year in Engineering and Physics Department, 2005
Honorable Mention Award for Professionalism in the Classroom, 2003
Vice Presidents Award for Professionalism in the Classroom, 2001
Scholar of the Year, 2000
Faculty Member of the Year in the School of Arts and Sciences, 1997
Oral Roberts University

Outstanding ASME Faculty Advisor for The Great International Southwest Region X, 2002 American Society of Mechanical Engineers

J.T. Blackburn Award for Dedication and Service, 2001 American Society of Mechanical Engineers

Research Grants, 1997 NASA Goddard Space Flight Center \$75,000

Best Paper Award in the Mechanics Division at the ASEE Annual Conference, 1996 American Society for Engineering Education

Summer Faculty Fellowship Award, 1996, 1997 NASA Goddard Space Flight Center