

DAVID ANTHONY ROGERS
Professor
Department of Electrical and Computer Engineering
North Dakota State University
Fargo, North Dakota

EDUCATIONAL BACKGROUND

B.S.E.E. cum Laude	University of Washington, 1961
M.S.E.E.	Illinois Institute of Technology, 1964
Master of Divinity (Ministry) cum Laude	Trinity Evangelical Divinity School, 1966
Ph.D. (E.E.)	University of Washington, 1971

PROFESSIONAL EXPERIENCE

September 1980 - Present

Professor of Electrical and Computer Engineering (Associate Professor, 1980-86)
North Dakota State University, Fargo, North Dakota 58108-6050

October 1972 - September 1980

Associate Professor of Electrical Engineering (Assistant Professor, 1972-1977)

[In Portuguese: Professor Colaborador MS-3 and MS-4]

University of Campinas (Unicamp), Campinas, S.P., Brazil

Visiting Appointments while with Unicamp:

Visiting Associate Professor of Electrical Engineering,
Washington State University, Pullman, WA, February - June 1980.

Visiting Associate Professor of Electrical Engineering, Rose-Hulman
Institute of Technology, Terre Haute, IN, December 1978 - March
1979.

December 1971 - September 1972

Acting Assistant Professor of Electrical Engineering
University of Washington, Seattle, Washington

September 1964 - August 1965 and September 1966 - December 1971

Predoctoral Lecturer and Predoctoral Research Associate (NSF supported) in the General
(Freshman) Engineering and Electrical Engineering Departments.

Summer Graduate Fellowship, National Science Foundation, 1965
University of Washington, Seattle, Washington

September 1963 - June 1964

IIT Research Institute Graduate Fellow
Department of Electrical Engineering
Illinois Institute of Technology, Chicago, Illinois

September 1963 - June 1964

Supervisor, Men's Dormitory

Trinity College

Chicago, Illinois (now Trinity International University, Deerfield, Illinois)

February - August 1963

Technical Assistant (part time), Electromagnetic Compatibility Section, Electronics

Research Division

IIT Research Institute, Chicago, Illinois

August 1961 - September 1962

Second Lieutenant, U.S. Army Signal Corps

Field Training Officer, Signal Integrated Training Facility (SITFAC), Fort Gordon,
Georgia and 335th Signal Battalion, to Jan 1962.

Chief and Electronics Engineer, Digital Data Evaluation Section, U.S. Army Electronics
Research and Development Activity (ERDA), Fort Huachuca, Arizona

Summer 1961

Associate Engineer, Computer Products Operations, Aeronutronic Division of Ford Motor
Company, Newport Beach, California

PROFESSIONAL REGISTRATION

Professional Engineer (Electrical Engineering), State of Washington, since 1972.

PUBLICATIONS AND PRESENTATIONS

A. Refereed Journal Articles

1. B. D. Braaten, D. A. Rogers, and R. M. Nelson, "Multi-Conductor Spectral Domain Analysis of the Mutual Coupling Between Printed Dipoles Embedded in Stratified Uniaxial Anisotropic Dielectrics," *IEEE Trans. Antennas Propag.*, Vol. 60, No. 4 (April 2012), pp. 1886-1898.
2. B. D. Braaten, R. M. Nelson and D. A. Rogers, "Input impedance and resonant frequency of a printed dipole with arbitrary length embedded in stratified uniaxial anisotropic dielectric." *IEEE Antennas Wireless Propag. Lett.*, Vol. 8, 2009, pp. 806-810.
3. P. F. Ribeiro and D. A. Rogers, "Integrated Use of Computer Software in Electrical Engineering Education." *Computers in Education Journal*, Vol. II, No. 3, July-September 1992, pp. 2-5.
4. R. M. Nelson, D. A. Rogers, and A. G. D'Assunção, "Resonant Frequency of a Rectangular Microstrip Patch on Several Uniaxial Substrates." *IEEE Trans. on Antennas and Propagation*, Vol. AP-38:7, July 1990, pp. 973-981.

5. D. A. Rogers, J. T. Aslakson, J. L. Helt, and D. J. Lee, "Using MathCAD in Introductory Antenna Analysis." *CoED Journal* [Journal of the Computers in Education Division of ASEE] Vol. X: 3, July-September 1990, pp. 73-76.
6. P. S. M. Pires and D. A. Rogers, "Single-Mode Fiber Design for Minimum Dispersion," *IEEE Trans. Microwave Theory Tech.*, Vol. MTT-31:11, November 1983, pp. 959-962.
7. H.C.C. Fernandes, A.J. Giarola, and D. A. Rogers, "PACMO: A Comprehensive CAD Package for Microwave Devices." *IEEE Trans. Education*, Vol.E-26: 4, November 1983, pp. 162-164.
8. G.P.S. Cavalcante, D. A. Rogers, and A.J. Giarola, "Radio Loss in Forests Using a Model with Four Layered Media." *Radio Science*, Vol. 18:5, September-October, 1983, pp. 691-695.
9. G.P.S. Cavalcante, D. A. Rogers, and A.J. Giarola, "Analysis of Electromagnetic Wave Propagation in Multi-Layered Media Using Dyadic Green's Functions." *Radio Science*, Vol. 17: 3, June 1982, pp.503-508.
10. P.S.M. Pires, D. A. Rogers, E.J. Bochove, and R.F. Souza, "Prediction of Laser Wavelength for Minimum Total Dispersion in Single-Mode Step-Index Fibers." *IEEE Transactions on Microwave Theory and Techniques*, Vol. MTT-30:2, February 1982, pp. 131-140.
11. D. A. Rogers, A. J. Giarola, and D. H. Rogers, "Doctoral Education in Brazil." *Engineering Education*, Vol. 72:4, January 1982, pp. 301-305.
12. A.G. d'Assuncao, A.J. Giarola, and D. A. Rogers, "Characteristics of Broadside-Coupled Lines with Iso/Anisotropic Substrates." *Electronics Letters*, Vol. 17: 7, April 2,1981, pp. 264-265.
13. P. Brosnon, D. A. Rogers, J. E. Ripper, N. B. Patel, A. J. Giarola, and M. H. M. Costa, "Optical Repeater Using PFM at 1 GHz." *Journal of Quantum Electronics*, Vol. QE-15:8, August 1979, pp. 798-800.
14. D. A. Rogers, "Suggestions for the Improvement of Independent Study Habits in Engineering Courses." *ERM*, Vol. 12:1, Fall, 1979, pp. 11-17 and Vol. 11:1, Fall, 1978, p. 28.
15. J. B. T. Yabu-uti, D. A. Rogers, and A. J. Giarola, "Microwave Filters for a Laser Communications Systems." *Revista Brasileira de Tecnologia*, Vol. 8, 1977, pp. 155-167.
16. D. A. Rogers, "A few words on tropo." (Letter) *Microwaves*, Vol. 16:3, March

1977, p. 91.

17. D. A. Rogers, "Effective Teaching in a Foreign Language." *Technos*, Vol. 5:3, July-Sept. 1976, pp. 62-63.
18. D. A. Rogers and H. M. Swarm, "A Note on the Measurement and Interpretation of Average Power in Troposcatter." *IEEE Transactions on Antennas and Propagation*, Vol. AP-23:6, Nov. 1975, pp. 866-868.
19. L. B. Craine, D. A. Rogers, and H. M. Swarm, "Troposcatter Signal Enhancement Due to Aircraft." *IEEE Transactions on Antennas and Propagation*, Vol. AP-23:5, Sept. 1975, pp. 722-723.

B. Refereed Symposium Proceedings

1. M. Selekwa, G. Padmanabhan, and D. A. Rogers, co-editors, *Proceedings of the 2013 ASEE North Midwest Section Conference*, Fargo, ND, Oct. 17-18, 2013, 474 pages.
2. D. A. Rogers and B. D. Braaten, "The Graduate Course in Electromagnetics: Integrating the Past, Present, and Future." *Proceedings*, 2011 North Midwest Sectional Meeting of the American Society for Engineering Education, Duluth, MN, October 13-15, 2011, Session 2C, paper no. 1, 7 pages.
3. O. R. Baiocchi, D. A. Rogers, and M. H. M. Costa, "Electrical and Computer Engineering Programs in Two Countries: A New Paradigm for Cooperation," *Proc. ASEE 2011 Annual Conference*, Vancouver, BC, Canada, June 29, 2011, Paper No. AC 2011-2291, 7 pages.
4. O. R. Baiocchi, D. A. Rogers, and L. Wear, "Teaching Electromagnetic Phenomena in Computer Engineering," *Proceedings*, 81st Annual American Society for Engineering Education Pacific Northwest Spring Conference, Gonzaga University, Spokane, WA, March 31-April 2, 2011.
5. D. A. Rogers and O. R. Baiocchi, "Tenure: Observations and Consequences." *Proceedings*, 2010 North Midwest Sectional Meeting of the American Society for Engineering Education, Minnesota State University Mankato, Mankato, MN, October 21-23, 2010, paper I.C.4, pp. 92-98.
6. B. D. Braaten, D. A. Rogers, and R. M. Nelson, "Ongoing Development of a Modern Radio-Frequency (RF) and Microwave Engineering Laboratory." *Proceedings*, 2010 North Midwest Sectional Meeting of the American Society for Engineering Education, Minnesota State University Mankato, Mankato, MN, October 21-23, 2010, paper III.A.2, pp. 202-209.

7. J. T. Anderson, M. R. Weisz, J. A. Meyer, D. L. Hanson, B. D. Braaten and D. A. Rogers, "A Cost Effective Antenna Positioning System for Modern Radio-Frequency (RF) and Microwave Antenna Measurements." *Proceedings*, 2010 North Midwest Sectional Meeting of the American Society for Engineering Education, Minnesota State University Mankato, Mankato, MN, October 21-23, 2010, paper I.B.4, pp. 64-72.
8. B. D. Braaten, D. A. Rogers, and R. M. Nelson, "Current Distribution of a Printed Dipole with Arbitrary Length Embedded in Layered Uniaxial Anisotropic Dielectrics." *Proceedings, SBMO/IEEE Int. Microwave and Optoelectronics Conf.*, Belem, Brazil, November 3-6, 2009, pp. 72-77, Invited Paper.
9. B. D. Braaten, R. M. Nelson and D. A. Rogers, "Mutual coupling between broadside printed dipoles embedded in stratified anisotropic dielectrics," *Proc. IEEE Int. AP-S Symp.*, Charleston, SC, Jun. 1-5, 2009, 4 pages.
10. D. Bais and D. A. Rogers, "Developing a CAD Tool for Radio Frequency and Microwave Engineering Education." *Proceedings*, 2008 North Midwest Sectional Meeting of the American Society for Engineering Education, University of Wisconsin at Platteville, Oct. 17, 2008, Session 1B, Paper No. 3, 7 pp.
11. D. A. Rogers, "Teaching Technology and Society." *Proc., ASEE North-Midwest Section Meeting*, Michigan Technological University, Houghton, MI, September 2007.
12. O. F. Swenson, D. A. Rogers, F. M. Patterson, and A. Campiglia, "Optics for Scientists and Engineers." *Proceedings, 2002 ASEE-IEEE Frontiers in Education Conference*, Boston, Nov. 2002, pp. S4A8-S4A12,
13. P. S. M. Pires and D. A. Rogers, "Free/Open Source Software: An Alternative for Engineering Students." *Proceedings, 2002 ASEE-IEEE Frontiers in Education Conference*, Boston, Nov. 2002, pp. T3G7-T3G11.
14. A. Fallah, L. Davidson, D. Banerjee, R. M. Nelson, and D. A. Rogers, "An Inexpensive and Simple Method for Characterizing Passive Components." *Proc., IEEE Int. Symp. Electromagn. Compat.*, Montreal, Canada, Aug. 2001, Vol. 1, pp. 1141-1145.
15. L. Davidson, A. Fallah, R. M. Nelson, and D. A. Rogers, "Evaluating and Choosing Decoupling Capacitors." *Proc., IEEE Int. Symp. Electromagn. Compat.*, Montreal, Canada, Aug. 2001, Vol. 1, pp. 448-452.
16. D. A. Rogers, R. M. Nelson, J. A. Jorgenson, and O. F. Swenson, "Developing Instruction in Applied Electromagnetics to Foster Economic Development." *Proc., SBMO/IEEE Int. Microwave and Optoelectronics Conf.*, Belem, Brazil, August 2001, Invited Paper, pp. 65-73.

17. D. A. Rogers and D. A. Smith, "Research Methods for the Graduate Student." *Proceedings, 1999 ASEE-IEEE Frontiers in Education Conference*, San Juan, PR, Nov. 12, 1999, Paper No. 1516, pp. 12d7.12-12d7.16.
18. D. A. Rogers, "A Preliminary Report on Teaching Fiber Optics Using Interactive Television" *Proceedings, 1999 ASEE-IEEE Frontiers in Education Conference*, San Juan, PR, Nov. 13, 1999, Paper No. 1509, p. 13d2.1.
19. D. A. Rogers, "Video Resources for Technology and Society." *Proceedings, 1997 ASEE-IEEE Frontiers in Education Conference*, Pittsburgh, PA, Nov. 1997, Paper No. 1162, Vol. II, pp. 1090-1095. IEEE Catalog No. 97CH36099, 0-7803-4086-8.
20. D. A. Rogers and P. F. Ribeiro, "Ethics, Technology, and Society in the Heartland: Their Role in Engineering Education." *Technical Expertise and Public Decisions: Who Knows What? Proceedings, IEEE International Symposium on Technology and Society 1996*, Princeton, New Jersey, June 1996, pp. 172-176.
21. P. F. Ribeiro and D. A. Rogers, "An Experiment with Electronic Instruction: A Power Systems Course via E-Mail/Internet." *Proceedings, 1994 ASEE-IEEE Frontiers in Education Conference*, San Jose, California, Nov. 5, 1994, Session 5B5, paper no. 4, pp. 440-443.
22. P. F. Ribeiro and D. A. Rogers, "Power Electronics, Power Quality and Modern Analytical Tools: The Impact on Electrical Engineering Education." *Proceedings, 1994 IEEE-ASEE Frontiers in Education Conference*, San Jose, California, Nov. 5, 1994, Session 6B4, paper no. 3, pp. 448-451.
23. D. A. Rogers, A.C. Cater, G. K. Clambey, M. Garrison, R. Hanson, R. L. Harrold, W. M. Henderson, A. J. Keogh, and H. E. Lindgren "Education for Interdisciplinary, Multicultural, and International Understanding." *Proceedings, 1993 ASEE-IEEE Frontiers in Education Conference*, Johns Hopkins University, Washington, DC, Nov. 1993, pp. 105-111.
24. P. F. Ribeiro and D. A. Rogers, "Integrated Engineering Education: Educating World-Class Engineers." *Proceedings, 1992 Annual Meeting of the American Society for Engineering Education*, Toledo, Ohio, Session 3532, June 24, 1992, pp. 1843-1847.
25. D. A. Rogers and P. F. Ribeiro, "Options for Engineering Design Education: Electromagnetics, Microwave Engineering, and Communications Electronics." *Proceedings, 3rd International Symposium on Recent Advances in Microwave Technology*, University of Nevada-Reno, Reno, Nevada, August 1991, pp. 180-183.

26. D. A. Rogers and P. F. Ribeiro, "The New Engineering Educator Teaches Design." *Proceedings, 1991 Annual Meeting of the American Society for Engineering Education*, New Orleans, LA, Session 3332, June 19, 1991, pp. 1783-1787.
27. P. F. Ribeiro and D. A. Rogers, "Integrated Use of Computer Software in Electrical Engineering Education." *Proceedings, 1991 Annual Meeting of the American Society for Engineering Education*, New Orleans, LA, Session 2220, June 18, 1991, pp. 635-639.
28. D. A. Rogers, A. J. Giarola, R. F. Souza, "Seventeen Years of Graduate Research and Education in Engineering Electromagnetics at Unicamp." *Proceedings, 1989 ASEE Annual Conference*, University of Nebraska-Lincoln, Lincoln, Nebraska, June 1989, pp.527-529.
29. D. A. Rogers, "Preparing Students for Personal Issues in Professional Engineering." *Proceedings, 1987 Frontiers in Education Conference*, Rose-Hulman Institute of Technology, Terre Haute, Indiana, October 1987, pp.160-163.
30. R. M. Nelson, D. A. Rogers, and A. G. d'Assuncao, "Effect of Dielectric Anisotropy on the Resonant Frequency of Rectangular Resonators with Several Dielectric Layers." *Digest 1987 IEEE AP-S International Symposium*, Vol. II, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, June 1987, pp. 1032-1035.
31. A. G. d'Assuncao, M. R. G. Maia, D. A. Rogers, and A. J. Giarola, "A Generalized Dispersive Analysis of Integrated Circuit Transmission Line Structures on Anisotropic Substrates." *Digest, 1987 IEEE MTT-S International Microwave Symposium*, Vol. I, Las Vegas, Nevada, June 1987, pp. 331-332.
32. A. G. d'Assuncao, M.R.M.L. de Albuquerque, and D. A. Rogers, "A Simplified Analysis of Strip Transmission Lines on Anisotropic Layers." *Proceedings, 1986 Frontiers in Education Conference*, University of Texas at Arlington, October 1986, pp. 139-144.
33. R. C. Filho, A.G. d'Assuncao, A.J Giarola, and D. A. Rogers, "Analysis of Coupled Non-Homogeneous Striplines with Arbitrary Anisotropic Layers." *Studies in Electrical and Electronics Engineering*, Vol. 28A & B, T. Berceli (Ed.), New York: Elsevier, 1986, pp. 185-187. [*Proceedings, URSI International Symposium on Electromagnetic Theory*, Section U4, Budapest, Hungary.]
34. G.P.S. Cavalcante, D. A. Rogers, and A.J. Giarola, "Optimization of Radio Communication in Three-Layered Media." *1982 IEEE Antennas and Propagation Symposium*, Albuquerque, May 1982, pp.328-331.

35. A.G. d'Assuncao, A. J. Giarola, and D. A. Rogers, "Analysis of Single and Coupled Striplines with Anisotropic Substrates." *Digest, 1981 IEEE MTT-S International Microwave Symposium*, Los Angeles, June 1981, pp. 83-85.
36. H. Waldman, R. F. Souza, D. S. Arantes, and D. A. Rogers, "The Development of Digital Communications Technology at the State University of Campinas (Unicamp), Brazil." *Proceedings, 1980 National Telecommunications Conference*, Houston, December 1980, 5 pp.
37. A. J. Giarola, D. A. Rogers, C. I. Z. Mammana, and R. F. Souza, "The Development of Microwave Technology for Communications at the State University of Campinas - Brazil." *Proceedings, 1979 International Conference on Communications*, Boston, June 1979, pp.26.7.1-7.4.
38. A. J. Giarola and D. A. Rogers, "A Successful Approach to Teaching Microwave-Integrated-Circuit Techniques." *Proceedings, 1978 Frontiers in Education Conference*, Lake Buena Vista, Florida, Oct. 1978, pp. 105-108.

D. Other Symposium Proceedings or Presentations

1. S. S. Sharma, D. Bais, and D. A., Rogers, "The Computer-Aided Microwave Design System (CAMDS): Implementation and Verification," *Proceedings, 2012 North Midwest Sectional Meeting of the American Society for Engineering Education*, St. Cloud, MN, October 5, 2012, Session 2, paper no. 4, 18 pages.
2. O. F. Swenson, D. A. Rogers, I. T. Lima, "Optics for Scientists and Engineers Laboratory Syllabus," Topical Conference on Advanced Laboratories, American Association of Physics Teachers, University of Michigan, July 23-25, 2009.
3. O. F. Swenson, D. A. Rogers, I. T. Lima, "Laboratory Emphasis in Interdisciplinary Photonics Related Courses," Topical Conference on Advanced Laboratories, American Association of Physics Teachers, University of Michigan, July 23-25, 2009.
4. D. A. Rogers, "Ethics in the Impact of Technology on Society Course," *Proceedings, 2005 ASEE North Midwest Regional Conference*, Brookings, SD, pp. 65-72.
5. P. F. Ribeiro and D. A. Rogers, "Work in Progress—Establishing a Foundation for Engineering Ethics." *Proceedings, 2005 ASEE-IEEE Frontiers in Education Conference*, Indianapolis, IN, October 2005, pp. T2D15-T2D16.
6. D. A. Rogers and P. F. Ribeiro, "Work in Progress—Integrating Ethics into Engineering Courses." *Proceedings, 2004 ASEE-IEEE Frontiers in Education Conference*, Savannah, Georgia, October 2004, pp. S1E22-S1E23,

7. D. A. Rogers and O. F. Swenson, "Laboratory Emphasis in Optical Signal Transmission." *Proc., ASEE North-Midwest Section Meeting*, Iowa State University, Ames, IA, October 2003, Session J-1, 5 pp.
8. D. A. Rogers, O. F. Swenson, F. M. Patterson, and A. Campiglia, "A Video Report of Optical Fiber Experiments." 2002 IEEE-SBT International Telecommunications Conference, Natal Brazil, Plenary Session Presentation, September 10, 2002.
9. D. A. Rogers, "Numerical Analysis as a First Course for M.S. Students." *Proc., ASEE North-Midwest Section Meeting*, University of North Dakota, Grand Forks, ND, September 2001, Session III-C-1, pp. 1-6.
10. D. A. Rogers, "Reflections on Ethics Across the Engineering Curriculum." *Proceedings, 2000 North-Midwest Section Meeting of the American Society for Engineering Education*, Institute of Technology, University of Minnesota, Twin Cities Campus, Sept. 29, 2000, Paper PPR-032.
11. D. A. Rogers, "Strategies and Resources for Teaching the History of Technology and Its Social Impact." *Proceedings, III CEE Conference*, Waxhaw, NC, June 23-25, 1999, pp. 54-63.
12. D. A. Rogers and P. F. Ribeiro, "Concepts in Optoelectronics Using MATLAB." *Proceedings, 1998 North-Midwest Section Meeting of the American Society for Engineering Education*, Winona State University, Winona, MN, Oct. 8-9, 1998, Session 10, pp. 10.2.1-10.2.10.
13. D. A. Rogers and R. M. Nelson, "Showcasing Electromagnetics and Optoelectronics: EMC and Fiber Optics in the BSEE Curriculum." *Proceedings, 1997 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference*, Invited Paper, Panel Session on Education and Technology in Microwaves and Optoelectronics, Natal, Brazil, Aug. 14, 1997, p. 585.
14. D. A. Rogers, "Linear Circuit Methods in Antenna Theory." *Proceedings, 1997 North-Midwest Section Meeting of the American Society for Engineering Education*, University of Iowa, Iowa City, Oct. 10, 1997, pp. IV.A.4.1-IV.A.4.8.
15. D. A. Rogers, "Current Status of Social Impact of Technology and Engineering Ethics Courses." *Proceedings, 1995 North-Midwest Section Meeting of the American Society for Engineering Education*, St. Cloud State University, St. Cloud, MN, Oct. 5-7, 1995, paper Ib.2.1-Ib.2.10.
16. D. A. Rogers, "Overcoming Intolerance Through Chartered Pluralism: A New Topic for Engineering Ethics." *Proceedings, 1993 North-Midwest Section Meeting of the American Society for Engineering Education*, Mankato State

University, Mankato, MN, Sept. 30 - Oct. 2, 1993, pp. 6B2.1-6B2.6.

17. D. A. Rogers, "Motivating Students in Fiber Optics Through Communications System Design Studies." *Proceedings, 1993 North-Midwest Section Meeting of the American Society for Engineering Education*, Mankato State University, Mankato, MN, Sept. 30 - Oct. 2, 1993, pp. 4B3.1-4B3.7.
18. F. E. Stevens and D. A. Rogers, "PC Software for Microwave Engineering Design." *Proceedings, 1993 Annual Meeting of the North Dakota Academy of Science*, Vol. 47, North Dakota State University, Fargo, ND, held at Jamestown, ND, April 30, 1993, p. 76.
19. P. F. Ribeiro, D. Mugler, and D. A. Rogers, "Fourier Analysis Across the Curriculum: An Integrated Approach." *Proceedings, 1992 North-Midwest Section Meeting of the American Society for Engineering Education*, Marquette University, Milwaukee, WI, Oct. 8-10, 1992, pp. 6.2.1-6.2.8.
20. D. A. Rogers and P. F. Ribeiro, "Engineering Ethics for the Twenty-First Century." *Proceedings, 1992 North-Midwest Section Meeting of the American Society for Engineering Education*, Marquette University, Milwaukee, WI, Oct. 8-10, 1992, pp. 8.2.1-8.2.5.
21. J. Kooiman, L. Ho, D. Blauw, J. Van Grouw, P. F. Ribeiro, and D. A. Rogers, "Using the Windows Environment for Integration of Computer Software into Electrical Engineering Classwork: Some Applications." *Proceedings, 1992 North-Midwest Section Meeting of the American Society for Engineering Education*, Marquette University, Milwaukee, WI, Oct. 8-10, 1992, pp. 10.4.1-10.4.6.
22. P. F. Ribeiro and D. A. Rogers, "Using Mathcad/Windows in Introduction to Power System Analysis." *Proceedings, 1992 North-Midwest Section Meeting of the American Society for Engineering Education*, Marquette University, Milwaukee, WI, Oct. 8-10, 1992, pp. 10.5.1-10.5.6.
23. K. K. Evanson and D. A. Rogers, "Design and Validation Procedures for Professional Antenna Software." *Proceedings, 1992 Annual Meeting of the North Dakota Academy of Science*, Vol. 46, North Dakota State University, Fargo, ND, April 1992, p. 65.
24. P. F. Ribeiro and D. A. Rogers, "Integrated Engineering Education vs. Industrial Specialization." *Proceedings, 1991 North-Midwest Section Meeting of the American Society for Engineering Education*, University of Wisconsin-Platteville, Platteville, Wisconsin Oct. 6-8, 1991, pp. 1.15-1.22.
25. D. A. Rogers, "Managing Electrical Engineering Design Education." *Proceedings, 1990 North-Midwest Section Meeting of the American Society for*

Engineering Education, Michigan Technological University, Houghton, MI, October 1990, pp. 6.28-6.32.

26. P. F. Ribeiro and D. A. Rogers, "Bridging the Gap with MathCAD: Examples from Circuits, Electronics and Electromagnetics." *Proceedings, 1990 North-Midwest Section Meeting of the American Society for Engineering Education*, Michigan Technological University, Houghton, MI, October 1990, pp. 7.2-7.9.
27. D. A. Rogers and G. Kumar, "Design Links Engineering Education with Industry and Community." Symposium on Engineering Design Education: Research, Teaching and Economic Development, *Proceedings, 1990 Annual Meeting of the North Dakota Academy of Science*, Vol. 44, North Dakota State University, Fargo, ND, April 1990, p. 28.
28. D. A. Rogers and R. M. Nelson, "Organizing the Advanced Electronics Design Course." Symposium on Engineering Design Education: Research, Teaching and Economic Development, *Proceedings, 1990 Annual Meeting of the North Dakota Academy of Science*, Vol. 44, North Dakota State University, Fargo, ND, April 1990, p. 36.
29. D. A. Rogers and A. J. Giarola, "The Doctorate in a Developing Country," *Proceedings, 1979 Annual Meeting of the American Society for Engineering Education*, Louisiana State University, Baton, Rouge, LA, Event No. 2568, June 25-28, 1979, 20 pp.

E. Book Chapters

1. D. A. Rogers, "Learning RF Safety Using the Novice License Question Pool." *Proceedings, of the 1999 ARRL National Educational Workshop: Ham Radio...Planning the Future*, Newington, CN: ARRL, August 1999, pp. 89-94, ISBN 0-87259-756-3.
2. R. G. Olsen and D. A. Rogers, "Propagation in Optical Fibers." Chapter 3 in *Fiber Optics* (J. C. Daly, Editor), Boca Raton, Florida: CRC Press, 1984, pp. 51-79.

F. Other Presentations or Publications

1. D. A. Rogers and O. R. Baiocchi, "Tenure: Past, Present, and Future," Seminar Presentation, Department of Electrical and Computer Engineering, North Dakota State University, Fargo, ND, August 30, 2011.
2. D. A. Rogers, "Introduction to Engineering Ethics," Presentation to ECE 111 (Dr. Samee Khan's class), Department of Electrical and Computer Engineering, North Dakota State University, Fargo, ND, each fall semester, 2010-present.

3. O. F. Swenson, D. A. Rogers, F. M. Patterson, and A. Campiglia, "Interdisciplinary Applied Optics Course and Laboratory," Seminar Presentation, Department of Physics, North Dakota State University, Fargo, ND, November 27, 2002.
4. D. A. Rogers, O. F. Swenson, F. M. Patterson, and A. Campiglia, "An Undergraduate Laboratory Dedicated to Applied Optics," Seminar Presentation, Department of Electrical and Computer Engineering, North Dakota State University, Fargo, ND, November 26, 2002.
5. D. A. Rogers, O. F. Swenson, F. M. Patterson, and A. Campiglia, "Professional Optical Laboratory Techniques for the Undergraduate," Seminar Presentation, School of Information Systems and Engineering Technology (ISET), SUNY Institute of Technology, Utica, NY, November 11, 2002.
6. P. F. Ribeiro, D. A. Rogers, *et al.*, "The Need for a Unified Engineering Perspective." (Panel presentation chaired by P.F. Ribeiro) III CEE Conference, June 23-25, 1999, Waxhaw, NC.
7. D. A. Rogers and R. M. Nelson, Part I: "Progress in Research and Curriculum in EMC and in Optical and Antenna Systems Modeling" and Part II: "Can Technology and Society Courses Find a Home in a School of Engineering?" Colloquium on the occasion of the dedication of the Attilio José Giarola Laboratory of Optical Communications for the School of Electrical Engineering hosted by the Department of Microwaves and Optoelectronics, University of Campinas (Unicamp), Campinas, SP, Brazil, Aug. 18, 1997.
8. D. A. Rogers, "Responsible Technology." Second NDSU/Bush Institute on Industry, Ethics and Human Relations, North Dakota State University, Fargo, ND, March 11, 1996.
9. D. A. Rogers, "Ethics at a Professional Level." Faculty Ethics Workshop, First NDSU/Bush Institute on Industry, Ethics and Human Relations, North Dakota State University, Fargo, ND, March 29, 1995.
10. D. A. Rogers, P. F. Ribeiro, and N. Van Gaalen, "Maintaining Professional Competence While Working in a Teaching Institution." 1992 CEE Conference, Calvin College, June 26, 1992.
11. P. F. Ribeiro and D. A. Rogers, "Integrated Engineering Education vs Industrial Specialization." *CEA Newsletter* (Great Britain), Spring 1992, pp. 8-16.
12. D. A. Rogers, "New Methods of Computer-Aided Analysis and Design of Transmission Line and Waveguide Circuits." Student Sponsored Technical Seminars, College of Engineering and Architecture, North Dakota State University, Fargo, ND, March 10, 1992.

13. D. A. Rogers, "MathCAD Applications in Fiber Optics and Electromagnetics." Student Sponsored Technical Seminars, College of Engineering and Architecture, North Dakota State University, Fargo, ND, March 12, 1991.
14. D. A. Rogers, "Ethics for Engineers: Professional and Academic." Presentation to the Red River Section, IEEE, Fargo, ND, May 16, 1990.

MEMBERSHIPS

Life Senior Member, Institute of Electrical and Electronics Engineers (Antennas and Propagation Society, Microwave Theory and Techniques Society, and Education Society)
 American Geophysical Union (Atmospheric Science Division) of the American Institute of Physics. AGU Education Special Interest Group.
 Applied Computational Electromagnetics Society
 Life Member, American Society for Engineering Education
 (Divisions: Computers in Education, Ethics, Educational Research and Methods, and International)
 Life Member, University of Washington Alumni Association. Life Member, Purple and Gold Society, 2011-present
 Eta Kappa Nu Association
 Tau Beta Pi Association
 Sigma Xi
 Order of the Engineer
 American Scientific Affiliation
 Life Member, American Radio Relay League

ACHIEVEMENTS

Joint Mentor with Dr. Edward Deckard, new faculty cohort, NDSU Provost's Faculty Mentor Program, 2009-2012.
 New Faculty Mentor, Two tenure-track ECE faculty, 2005
 Co-Principal Investigator, NSF DUE Award No. 0088516, Optics for Scientists and Engineers Laboratory Course, April 15, 2001 - March 31, 2004, \$74,016.
 Optics Instructor, North Dakota Governor's School of Science and Mathematics, 2001-2003, 2005.
 Fellow, NDSU/Bush Foundation Faculty Institute for Excellence in Learning, Introducing Cooperative Education in Impact of Technology on Society Course, North Dakota State University, 2000-2001.
 NDSU-Bush Foundation Faculty Seminar, College of Engineering and Architecture Representative, July 1991 - June 1994
 1987-88 Teaching and Service Award, College of Engineering and Architecture, North Dakota State University, May 1988.
 Favorite professor, July 1977 Graduating Class, University of Campinas, Brazil.
 Founding Branch Counselor, IEEE Student Branch, University of Campinas, Brazil,

August 20, 1973.

Doctoral Studies Grant Award, Ford Foundation, University of Washington, 1969-70.

Graduate Fellow, National Science Foundation, University of Washington, Summer 1965.

Graduate Fellow, IIT Research Institute, Illinois Institute of Technology, 1963-64.

Senior Honor Award, Armed Forces Communications and Electronics Association (AFCEA), University of Washington, 1961.

Carkeek Memorial Fund Scholarship, University of Washington, 1957-1961.

University of Washington Book Store Scholarship, University of Washington, 1957-58.

Seattle High Schools Honors at Graduation, 1957.

Biography in past editions of Marquis' *Who's Who in America*, *Who's Who in American Education*, *Who's Who in Science and Engineering*, *Who's Who in the World*.

Biography in *Who's Who in Technology Today*, Fifth Edition, Volumes I (Electronics and Computer Science) and VII, 1986.

Biography in *Who's Who in Science and Technology in the State of Sao Paulo*, Vol. II, Sao Paulo Academy of Science, Brazil, 1978, pp. 204-205.

TRAINING COURSES

Mental Health First Aid Training, NDSU, July 25-28, 2011.

U.S. Army Signal Officers Orientation Course, Ft. Gordon, GA, Aug.-Sept. 1961.

UNIVERSITY, PROFESSIONAL, AND COMMUNITY SERVICE

A. Departmental Committees and Duties

Member, ECE Department Chair Search Committee, Feb. 2010-May 2011.

Member, ECE Chair Review Committee, Sept. 2008-May 2009.

Member, ECE Faculty Search Committee, Sept. 2008-May 2009.

Department Promotion and Tenure Committee, Chair, Aug. 2006—Aug. 2010, Aug. 2011—Present.

Department Promotion and Tenure Committee, Member, Aug. 1986—present.

Department Undergraduate Curriculum Review Committee, 2002-2003.

B. College Committees

College Academic Affairs Committee, Fall 1997-2001; Chair, 2000-2001

Chair, College PTE Committee, October 2009-May 2010 and August 2012 to present,

Member, August 2006-May 2010 and August 2011—present.

College Executive Committee, October 2009-May 2010, August 2012-present.

C. University Committees

Member, Provost's PTE Review Committee, January-February 2010

University Senate Ad Hoc Committee on revision of the University PTE Policy, Jan. 2007—May 2008

University Goldwater Scholarship Committee, Nov. 2003--present

NDSU Jack Kent Cooke Memorial Scholarship Committee, January 2007-2009

Member, Astronaut Scholarship Foundation Committee, 2010-2011.

University Senate Academic Affairs Committee, 1998-2002

Senator, University Senate, 1992-1995 and 1986-1989

University Ad Hoc Latin-American Studies Group, 1996-1998

Ad Hoc University Senate Committee on Bush Interdisciplinary Courses, 1996-1997

NDSU/Bush Institutes on Industry, Ethics and Human Relations, Conference Committee, 1994-1997

Electrical Engineering Coordinator and Judge, Science Olympiad, 1987-1995

Optics Lab Judge, Science Olympiad, 2005

College of Engineering and Architecture Representative, Faculty Seminar, June 1991-94

Engineering Judge, Southeast Regional Science and Engineering Fair 1993, '95, '96

College Representative, Academic Integrity Committee, University Senate, 1992-1994

Chair, University Senate Special Review Committee, Aug.-Sept. 1992

D. Graduate Student Activities

Preparation and grading, portions of Ph.D. qualifying examination

Service on numerous M.S. and Ph.D. committees at NDSU

Service on University of North Dakota M.S.E.E. student committee, May 1996

External Ph.D. examiner, four candidates, Banaras Hindu University, India

E. Professional Service

Conference Responsibilities (Reviewer listed separately below) :

Conference Co-chair, 2013 ASEE North Midwest Section Conference, Fargo, ND, Oct. 17-18, 2013.

Conference Co-chair, 2013 IEEE International Conference on Electro/Information Technology, South Dakota School of Mines & Technology, Rapid City, SD, May 9-12, 2013.

Technical Committee, 2011 Brazilian Microwave and Optoelectronics Society International Symposium, Natal, Brazil, Oct. 29-Nov. 1, 2011.

Technical Program Committee and Session Chair, 2009 Brazilian Microwave and Optoelectronics Society International Symposium, Belem, Brazil, Nov. 3-6, 2009. Session Chair, FIE, Indianapolis, October 2005.

Steering Committee, 2001 Brazilian Microwave and Optoelectronics Society International Symposium, Belem, Brazil.

Program Co-Chair, First IEEE Electro/Information Technology Conference, Chicago Marriott O'Hare, June 8-11, 2000.

Session Chair, "Software Engineering II," Session 12a4, ASEE-IEEE Frontiers in Education Conference, San Juan, PR, Nov. 12, 1999.

NDSU Representative, "Minority Graduate Student Fair," ASEE-IEEE Frontiers in

Education Conference, San Juan, PR, Nov. 12, 1999.
 Session Chair, North Midwest Section Meeting, ASEE, Winona State University, Oct. 8-10, 1998.
 Session Co-chair (with Professors Phaniraj and Charles Collins), Electrical Engineering Session, 1996 ASEE North Midwest Section Annual Meeting, North Dakota State University, Fargo, ND, Oct. 3-5, 1996.
 Conference Committee Member, 58th Annual ASEE North Midwest Section Meeting, NDSU, Fargo, ND, Oct. 3-5, 1996
 Co-organizer, co-chair, and reviewer (with Robert M. Nelson) of the Symposium on Electrical Engineering Research for the 1994 Joint Meeting of the Academies, Minnesota Academy of Science/North Dakota Academy of Science. North Dakota State University, Fargo, ND, April 28, 1994.

Conference Paper Reviews:

Reviewer, 2013 ASEE North Midwest Section Conference Proceedings, Fargo, ND, Oct. 17-18, 2013.
 Reviewer, Proceedings, Electrical Engineering Division, 2012 ASEE Annual Conference San Antonio, Texas, June 10-13, 2012.
 Reviewer, *Proceedings*, 2011 International Meeting of the Brazilian Society for Microwaves and Optoelectronics, Natal, Brazil, Oct. 29-Nov. 1, 2011.
 Member, Technical Committee, 2011 International Meeting of the Brazilian Society for Microwaves and Optoelectronics, Natal, Brazil, Oct. 29-Nov. 1, 2011.
 Reviewer, *Proceedings*, Electrical Engineering Division, 2011 ASEE Annual Conference Vancouver, Canada, June 26-29, 2011.
 Reviewer and Editorial Board, *International Journal of Microwave and Optical Technology*, 2005-present.
 Reviewer, *Proceedings, 2010 ASEE/IEEE Frontiers in Education Conference*, Arlington, Virginia, October 2010.
 Reviewer, *Proceedings, 2008 ASEE/IEEE Frontiers in Education Conference*, Saratoga Springs, NY, October 2008.
 Reviewer, *Proceedings of the 2008 ASEE Annual Conference*, Pittsburgh, PA, June 2008.
 Reviewer, *Proceedings, 2007 ASEE/IEEE Frontiers in Education Conference*, Milwaukee, October 2007.
 Reviewer, *Proceedings, 2005 ASEE/IEEE Frontiers in Education Conference*, Indianapolis, October 2005.
 Reviewer, ASEE National Conference, June 2005.
 Reviewer, *Proceedings, 2003 ASEE/IEEE Frontiers in Education Conference*, Boulder, CO, November 5-8, 2003.
 Technical Paper Reviews, 2001 Brazilian Microwave and Optoelectronics Society International Symposium, Belem, Brazil.
 Reviewer, *Proceedings, Eighth International Symposium on Microwave and Optical Technology (ISMOT-formerly ISRAMT)*, Montreal, June 2001.
 Reviewer, *Proceedings, 2000 ASEE/IEEE Frontiers in Education Conference*, Kansas City, MO, Oct. 18-21, 2000.
 Reviewer, *Proceedings, Seventh International Symposium on Recent Advances in*

- Microwave Technology*, Spain, December 1999.
- Reviewer, *Proceedings, 1999 ASEE/IEEE Frontiers in Education Conference*, San Juan, Puerto Rico, Nov. 10-14, 1999.
- Reviewer, *Proceedings, 1998 ASEE/IEEE Frontiers in Education Conference*, Arizona State University, Tempe, Arizona, Nov. 4-7, 1998.
- Reviewer (Microstrip Devices), *Proceedings, Sixth International Symposium on Recent Advances in Microwave Technology*, Beijing, China, December 1997.
- Reviewer (Optoelectronics and Fiber Optics), *Proceedings, 1997 SBMO/IEEE MTT-S International Microwave and Optoelectronics Conference*, Natal, Brazil, August 11-14, 1997.
- Reviewer, *Proceedings, 1996 North Midwest ASEE Annual Meeting*, North Dakota State University, October 1996.
- Review Committee (Microstrip Device Papers), *Proceedings, Fifth International Symposium on Recent Advances in Microwave Technology*, Kiev, Ukraine, September 15-16, 1995.
- Review Committee, *Proceedings, Fourth International Symposium on Recent Advances in Microwave Technology*, New Delhi/Agra, India, Dec. 15-18, 1993.
- Review Committee (Antennas and Propagation Papers), *Proceedings, Third International Symposium on Recent Advances in Microwave Technology*, University of Nevada, Reno, August 1991.

Journal and Book Reviews

- Editorial Board, *International Journal of Microwave and Optical Technology*, 2005-2012.
- Reviewer, textbooks in Engineering, Brooks/Cole, Jan. 1999.
- Reviewer, textbooks in Ethics, Religion and Philosophy: Paramount Publishing, 1994.
- Reviewer, Electrical Engineering books in Portuguese, McGraw-Hill Book Co., 1991.
- Reviewer, textbooks in Electrical Engineering: McGraw-Hill Book Co., 1980-2000.
- Reviewer, textbooks in Electrical Engineering, Houghton-Mifflin, 1990.
- Editorial Review Board, *IEEE Trans. Microwave Theory and Techniques*, 1982-1997.
- Reviewer, 1992 Symposium Issue, *IEEE Trans. MTT.*, Dec. 1992.
- Reviewer, *IEEE Trans. Antennas and Propagation*, 1987-1999.
- Reviewer, *International Journal of Modelling and Simulation*, 1990-91.

National Science Foundation Reviews

- Reviewer, National Science Foundation, Quantum Electronics, Waves and Beams Program, 1983-94.
- NSF National Panel Member, Research Initiation Award Review Panel, Quantum Electronics, Beams and Waves Program, 1989.

Service to Other Universities

- Reviewer of promotion and tenure candidates, University of North Dakota and Michigan Technological University.