

Doran J. Baker
Professor

Education

Ph.D.	Electrical Engineering-Phyx	University of Utah	1956
B.S.	Electrical Engineering-High Honors	University of Utah	1953

USU Employment History

1997-present	Co-Founder and Co-Director of the NASA Affiliated Research Center at USU
1989-present	Co-Founder and Co-Director, Rocky Mountain NASA Space Grant Consortium
1978-1985	Department Head, Electrical & Computer Engineering Department
1959-1978	Assistant/Associate/Full Professor of USU; Founder and Director of the Electro-Dynamics Laboratories (EDL) (presently the Space Dynamics Laboratory) of USU

Other Related Experience

1997-1998	Director of the Utah Research Institute
1996-present	Adjunct Professor of Geography & Earth Resources
1988-1998	Vice President of the USU Research Foundation, dba Space Dynamics Laboratory
1975-present	Adjunct Professor of History
1967 - 1972	Member of the Board of Directors of the Utah State University Foundation
1966 - 1967	President, Logan Engineering Products Co. (now WESCOR)
1961	Co-founder of the Concord Radiance Laboratory (now Stewart Radiance Laboratory, Bedford, MA)
1958	Team Leader, Remote Optical Sensing of Nuclear & Thermonuclear Tests, Marshall Islands and Nevada Test Site
1958	Project leader, USAF Rocket Team, White Sands Missile Range, New Mexico

Consulting/Patents

2000	Chairman of Advisory Board for DOE Pacific Northwest National Lab Lab
1983-1985	Technical Consultant, Eyring Research Institute

Professional Registration

None

Principal Publications of the Last Five Years

Wright, D.L., R.D. Ramsey, V.P. Rasmussen, J. Ellsworth and D.J. Baker, "Midseason Nitrogen Application Using Remote Sensing," @ 7th International Conference on Precision Agriculture, ASA/CSSA/SSSA, Madison, Wisconsin (July 2004).

Fielding, R.L., D.J. Baker, and G.A. Ware, "3-D Spatial Distributions of Mesospheric OH ($\Delta v = 2$) IR Emissions Observed from SABER," Presented at CEDAR Conference, Santa Fe, New Mexico (June 2004).

Wright, D.L., R.D. Ramsey, D.J. Baker, and V.P. Rasmussen, "Applied Remote Sensing in Agriculture: Managing Grain Protein in Wheat," @ American Society of Photogrammetry and Remote Sensing Conference, Denver, Colorado (May 2004).

Wright, D.L., V.P. Rasmussen, D.J. Baker, J. Ellsworth, D. Grant and H. Hayden, "Reflectance Techniques for Wheat Stress and Protein Management," @ 2004 Wheat Industry Research Forum Conference, Atlanta, Georgia (January 2004).

D.J. Baker and K.M. Olson, editors, *Space Signals*, Rocky Mountain Nasa Space Grant Consortium, Vols. 1 through 14, Logan (1991-2004).

Gordley, L., J.R. Russell, M.G. Mlynczak, C.J. Mertens, R.H. Picard, M. Lopez-Puertaz, P. Wintersteiner, J. Winick, D.E. Siskind, D.J. Baker, E.E. Remsberg, and R. Garcia, "An Overview of the SABER Experiment and Science Results," presented at the AGU TIMED Meetings, San Francisco, CA (December 2003).

Ware, G.A., D.C. Chabries and D.J. Baker, @ Multispectral Imaging for Archaeology, @ 5th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2001) Proceedings (July 2001).

Kirkland, J.S., D.J. Baker and G.A. Ware, A Unsupervised Clustering for Data Reduction and Analysis of Multispectral Archaeological Images, @ 5th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2001) Proceedings (July 2001).

Baker, D.J., A.J. Steed, H.O. Ames and A.T. Stair, Jr., A Satellite-borne Infrared Multispectral Imager, @ 5th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2001) Proceedings (July 2001).
Gunderson, R.W., M.W. Torrie, N.S. Flann, C.M.U. Neale, and D.J. Baker, A The Collective: GIS and the Computer-Controlled Farm, *Geospatial Solutions* (October 2000).

Society and Professional Society Membership

Member of IEEE, AIAA

Honors and Awards

- 2004 Awarded College of Engineering Advisor of the Year
- 1994 Presented award as co-founder of Space Dynamics Laboratory at dedication of the Jake Garn Space Research Building, USU Research & Technology Park, North Logan, UT
- 1989 Selected to receive the Governor's Award by Governor Matheson for Contributions to Science and Technology in the State of Utah, Salt Lake City, UT
- 1986 Named Outstanding Faculty Researcher by the USU College of Engineering, Logan, UT, in the first year of his eligibility
- 1983 Co-organizer of the MAPSTAR remote sensing of infrared airglow hyperspectral images
- 1980 Selected as the first recipient of the Dr. D. Wynn Thorne Award, as the outstanding researcher, Utah State University, Logan, UT
- 1980 Elected as one of the three finalists as Engineer of the year selected annually by the American Institute of Aeronautics and Astronautics, Washington, D.C., and Salt Lake City, UT

Institutional and Professional Service in the Last Five Years

- 2000 Organized and hosted the NASA National Space Grant Consortium Conference in Salt Lake City, Utah, with Senator Robert Bennett as the keynote speaker
- 1998-1999 Special Programs Scientist, Utah State University Research Foundation
- 1997-1998 Director of the Utah Research Institute

Professional Development Activities in the Last Five Years

- Baker, D.J., AV-2 Attempts by Utahns to Search Outer Space, @ Keynote address at USU NASA GAS Banquet, April (1999).
- Rasmussen, V. Philip, D.J. Baker, G. Searle, R. Newhall, and D. Wright, AA Low-Cost Alternative for Precision Nutrient Management in Arid Agriculture, @ Remote Sensing Conference, Alabama (1999).