

JAMES PAUL AVERY

I. Professional Preparation

B.S. in Computer Science, Michigan State University, 1972

Ph.D. in Analytical Chemistry, University of Illinois, Urbana, Illinois, 1978

II. Appointments

Associate Dean for Academic Affairs, College of Engineering and Applied Science,
September 2000 - August, 2002.

Technical Director, Integrated Teaching and Learning Laboratory, January 1993 -
September, 2001.

Associate Chairman, Department of Electrical and Computer Engineering, University of
Colorado, Boulder, CO, June 1990 - December 1994.

Associate Professor, Department of Electrical and Computer Engineering, University of
Colorado, Boulder, CO, August 1989 - present.

Assistant Professor, Department of Electrical and Computer Engineering, University of
Colorado, Boulder, CO, August 1982 - July, 1989.

Fellow of Cooperative Institute for Research in Environmental Sciences, March, 1983 -
1993.

Assistant Professor, Department of Chemistry, School of Chemical Sciences, University
of Illinois, Urbana, IL, June 1978 - August 1982.

III. Publications

1. Lau, E.M., S.K. Avery, J.P. Avery, D. Janches, S.E. Palo: Statistical characterization of the meteor distribution at the South Pole using a VHF interferometric meteor radar, in press.
2. de la Pena, S., S.K. Avery, J.P. Avery, E. Lau, D. Janches: Wind measurements of MLT region using the Platteville, CO MEDAC 50 MHz meteor radar, *Journal of Atmospheric and Solar-Terrestrial Physics*, in press.
3. D. Janches, S. Palo, E.M. Lau, J. Avery, S.K. Avery, S. de la Pena, N.A. Makarov: Diurnal and seasonal variability of the meteoric flux at the South Pole measured with radars, *Geophysical Research Letters*, Vol. 31, No. 20, L20807, 10.1029/2004GL021104, 23 October 2004.
4. Valentic, T.A., S.K. Avery, J.P. Avery, Meteor radar interferometry and array calibration, in *Proceedings of the seventh workshop on technical and scientific aspects of MST radar*, Hilton Head Island, South Carolina. Solar-Terrestrial Energy Program, 399-40, 1996.
5. Valentic, T.A., J.P. Avery, S.K. Avery, MEDAC/SC: A third generation meteor echo detection and collection system, *IEEE Transactions on Geoscience and Remote Sensing*, 34, 15-21, 1996.
6. Valentic, T.A., S.K. Avery, J.P. Avery, R.A. Vincent, M.A. Cervera, I.M. Reid, W.G. Elford: A comparison of winds measured by meteor radar systems and an MF radar at Buckland Park, in *Proceedings of the seventh workshop on technical and scientific aspects of MS T radar*, , Hilton Head Island, South Carolina. Solar-Terrestrial Energy Program, 154-157, 1996.

IV. Synergistic Activities

1. I have been very active in the development of the Integrated Teaching and Learning Laboratory program and building at the University of Colorado, and in the development and construction of the Discovery Learning Center at the University of Colorado.
2. I have been involved since its inception in a program to teach design to first-year students at the University of Colorado. This program has been shown to increase the retention rate of engineering undergraduates. My sections design and deliver devices for the persons with disabilities.
3. I was general co-chair of the 2003 Frontiers in Education Conference, one of the premier engineering education conferences in the United States.
4. I have participated, both as Associate Dean and as a faculty member in the support and development of special programs, offered through the Multi-cultural Engineering Program of the College of Engineering and Applied Science.

V. Collaborators and Other Affiliations

Collaborators

Scott Palo, Assistant Professor, University of Colorado.

Susan Avery, Professor, University of Colorado.

Melinda Picket-May, Associate Professor, University of Colorado.

Todd Valentic, SRI, Palo Alto, California.

Robert Vincent, Professor, University of Adelaide, Australia.

Graham Elford, University of Adelaide, Australia.

Jackie Sullivan & Larry Carlson, co-directors, Integrated Teaching and Learning Laboratory, University of Colorado.

Denise Thorsen, Assistant Professor, University of Alaska, Fairbanks.

Graduate Advisor

Howard V. Malmstadt, then at the University of Illinois, now deceased.

Thesis Advisor and Post-doctoral Scholar Sponsor

Elias Lau, Ph. D. student and post-doctoral scholar, University of Colorado.

Santiago de la Pena, Ph. D. student, University of Colorado.

Robert Schafer, Post-doctoral scholar, University of Colorado.

Four other Ph. D. students graduated.