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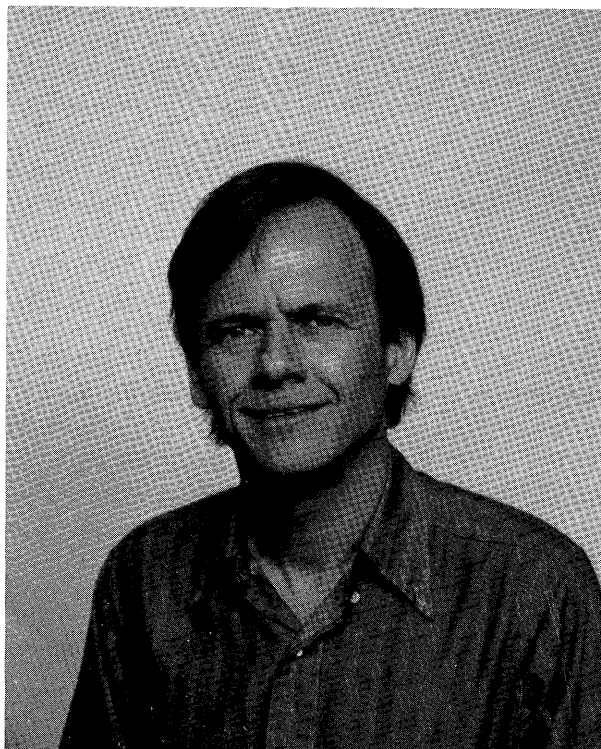
### PRESIDENT OF THE TENNESSEE ACADEMY OF SCIENCE FOR 1988

Our editor has reminded me that it is traditional for the new president to introduce himself to the members in the April issue of our *Journal*. This is probably a good idea in that it may help to stimulate better communication between members.

Finding that I was inclined to think as a generalist, I chose to pursue the education of a physicist, and obtained my B.S. degree (1966) in physics and mathematics with a minor in chemistry from Murray State University. While an undergraduate, I was employed by Argonne National Laboratory, General Electric Company, and Murray State University. I obtained the M.S. and Ph.D. degrees (1968 and 1972) in solid state physics from the University of Wisconsin-Madison, where I performed studies in several areas, including experimental investigations and analyses of thermally activated processes in solids.

Except for a year's leave in 1977 to teach courses in electronics and computer applications at Murray State University and a period in 1984 to perform research in West Germany with their Federal Health Office, I have been since 1972 working as a physicist in the Health and Safety Research Division and the Computer Sciences Division at Oak Ridge National Laboratory, where my research activities have included the development of mathematical models and computer codes for predicting airborne pollutant transport, sediment transport in freshwater river systems, nutrient and trace contaminant transport in forested ecosystems, and hydrologic transport of radionuclides in surface and subsurface flow systems. More recent work has led to the development of a methodology and numerical procedure for examining the potential consequences of shallow-land disposal of radioactive wastes. I have documented this research in 180 publications and presentations and two patents, and am currently investigating artifacts related to events that might cause a nuclear winter.

We at the laboratory must tread a challenging path between giving our attentions to the often unfunded areas of research that we find deserving and the mundane realms of better supported work. In both of these areas are found



**Dr. David Fields**

nuggets that help justify one's existence, and in both may be developed contributions that enrich our society and provide opportunities for ourselves and others. Closer ties between the Laboratory and the academic world would engender rewards to both communities and we need to work together to develop such ties. On a personal level, I have helped bring students and faculty to the Laboratory for summer programs, and have found these appointments to be mutually rewarding.

I am pleased to be active in the academy. Other organizations that I support include the American Physical Society, the Health Physics Society, and the American Geophysical Union. Thank you for electing me president for 1988.