



WILLIAM T. PECORA AWARD

Ronald J.P. Lyon

For outstanding and sustained scientific, educational, and professional leadership in geological remote sensing

Dr. Ronald J.P. Lyon is a true pioneer of geological remote sensing, with an illustrious career spanning more than 40 years. While perhaps best known for his seminal research on thermal-infrared analysis of minerals, he has addressed a range of other significant topics, including the use of infrared absorption spectroscopy for mineral studies, the definition and evaluation of instruments for early satellite missions, and the application of hyperspectral remote sensing to geology. His scientific contributions appear in more than 100 books, journals, and conference proceedings, and his research methods have been used operationally in the mining and remote sensing industries.

In the 1960's, Dr. Lyon contributed to the development of the NASA Post-Lunar Landing Program, and he chaired the Geology Group of the National Academy of Sciences Committee on Earth Resources Technology Satellite – which was later renamed Landsat. In the 1970's, he investigated the role of Landsat for mapping sedimentary terrain, the use of Skylab S-191 data for determining rock compositions, and the potential for using Heat Capacity Mapping Mission data to evaluate the thermal inertia properties of rocks. Most recently, Dr. Lyon has been investigating the role of hyperspectral imagery for obtaining lithologic information.

Dr. Lyon's pioneering work in geological remote sensing reveals only one dimension of his accomplishments. Dr. Lyon has also had an exceptional career as an educator, where he has molded the next generation of remote sensing scientists. He has had a distinguished academic career at Stanford University, where he has held academic positions in the School of Earth Sciences since 1965. He taught Remote Sensing and Mineral Exploration for 28 years. During this period, Dr. Lyon launched many students on successful national and international remote sensing careers. Dr. Lyon has been Professor Emeritus since 1993, continuing to teach courses on the integration of remote sensing and geographic information systems. In addition to being an outstanding scientist and educator, Dr. Lyon is also an excellent ambassador for geologic remote sensing, and is well known for his sense of humor and generosity in sharing his perspectives.

In recognition of these accomplishments, the Department of the Interior and the National Aeronautics and Space Administration take great pleasure in presenting the 2001 William T. Pecora Award to Dr. Ronald J. P. Lyon.

A handwritten signature in black ink, appearing to read "Sean O'Keefe", is positioned above the title of the Administrator.

Administrator
National Aeronautics and Space Administration

A handwritten signature in black ink, appearing to read "Gale A. Norton", is positioned above the title of the Secretary of the Interior.

Secretary of the Interior