

R.I.T.

Chester F. Carlson

College of Science

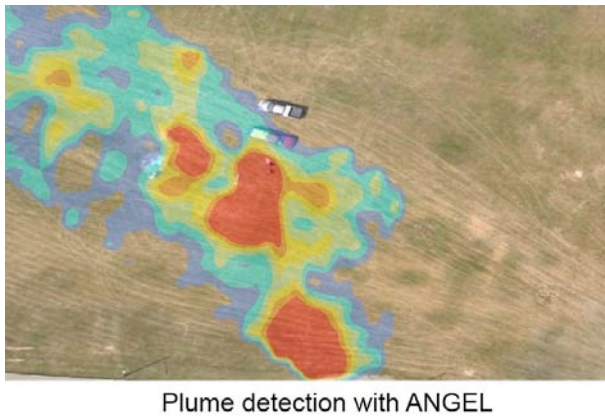
Center for **IMAGING** SCIENCE

Seminar Series

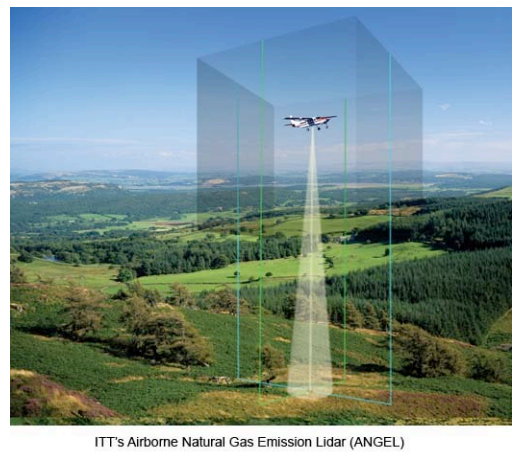
## Applications of Spectral Imaging

Rulon Simmons

*Supervisor of Spectral Studies and Analysis  
ITT Space Systems Division, LLC*



Plume detection with ANGEL



ITT's Airborne Natural Gas Emission Lidar (ANGEL)

**4pm, Wednesday  
Jan. 17, 2007**

**Auditorium of the Center for Imaging Science**

As lead of the Spectral Studies and Analysis Group at ITT Space Systems, LLC (formerly part of Kodak) for several years, Rulon is well qualified to discuss the spectral Remote Sensing programs being conducted within his organization. His talk will cover the use of LIDAR to detect natural gas leaks, spectral exploitation algorithms, tunable spectral filters, spectral image quality, monitoring of forest health and water quality with hyperspectral imaging, taggant dyes for covert marking, and color management of IKONOS data. Come and get a sense of the exciting possibilities of spectral imaging.

**[www.cis.rit.edu/seminar](http://www.cis.rit.edu/seminar)**

**for up-to-date seminar schedule, video archives and abstracts.**

**Speaker Bio**

Rulon was employed by the Eastman Kodak Company in Rochester, NY from 1972 to 2004. He has been working at ITT Space Systems Division, LLC since the sale of his Kodak division to ITT Corporation. Rulon manages the Spectral Studies and Analysis Group that supports spectral imaging studies across a wide variety of multispectral and hyperspectral programs. Rulon and his group perform analytical studies in areas of image quality, atmospheric characterization, band selection, automatic target recognition, modeling and simulation, and system trade studies and optimization. Rulon has 34 years of experience in supporting a variety of remote sensing systems including photographic, electro-optical, thermal, radar, and multi/hyperspectral. Rulon recently managed a successfully three-year study for the Air Force Research Labs in the fusion of spectral data with ELINT. He also managed a joint Kodak/RIT study for NASA on water quality monitoring with hyperspectral imagery. Rulon leads internal work focused on using hyperspectral imagery for monitoring forest health. Rulon also currently serves on the CIE TC 8-07 international committee for multispectral imaging, which is in the process of developing a standard format for the storage and dissemination of multispectral imagery.

Rulon enjoys photography as a hobby and is the author of "National Geographic Photographic Field Guide: Birds."