## Special Issue on Remote Sensing in Solid and Hazardous Waste Management

### Foreword

Increasing attention has been given to the use of aerial remote sensing in obtaining site-specific data for characterizing and monitoring of solid and hazardous waste sites. The American Society for Photogrammetry and Remote Sensing cooperated in sponsoring a Symposium on Remote Sensing in Solid and Hazardous Waste Management which was held at the 36th Annual Meeting of the Association of Engineering Geologists on 14 October 1993 in San Antonio, Texas. Some of the papers presented at that symposium are included in this special issue of Photogrammetric Engineering & Remote Sensing. The methods described range from well established to new innovative techniques of remote sensing and aerial photointerpretation for use in solid and hazardous waste management. The Editors are grateful to the authors for preparing manuscripts which describe current remote sensing applications and identify promising new technological applications for waste site investigations, and to both Societies, and especially to William D. French and Don Hemenway, for cooperating in publishing these papers. The Editors would particularly like to recognize the contributions of colleagues listed below who provided their technical reviews and editorial comments to this special issue.

Christopher Stohr, Co-Guest Editor, Illinois State Geological Survey, Champaign, Illinois

Ross S. Lunetta, Co-Guest Editor, Remote Sensing Program Manager, U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Las Vegas, Nevada

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# **Guest Editors**



#### Ross S. Lunetta Environmental Monitoring Systems Laboratory U.S. Environmental Protection Agency

Ross S. Lunetta received the Master of Science degree in Aquatic Ecology in 1979. He then worked as an Ecologist for the Environmental Analysis Branch, Detroit District, U.S. Army Corps of Engineers from 1981 to 1988. He is presently an Environmental Scientist in the Remote and Air Monitoring Branch, Advanced Monitoring Division, Environmental Monitoring Systems Laboratory of the U.S. Environmental Protection Agency in Las Vegas, Nevada, where he is the Remote Sensing Program Manager, and the Technical Director of the North American Landscape Characterization (NALC) -Landsat Pathfinder Project.

### Christopher J. Stohr Illinois State Geological Survey

Christopher Joseph Stohr was born and raised in St. Louis, Missouri. He earned the bachelor of Science degree in Geology from St. Joseph's College, and a Master of Science degree in Engineering Geology from Purdue University. Chris met his wife, Sara Collins, while preparing for defense of his thesis on spectral reflectance and thermal infrared response of sinkhole slopes.

After graduation, Chris and his family moved to Missouri to perform geologic investigations of landfills, lagoons, and small earthen dams at the Missouri Geology and Land Survey in Rolla. He worked for a short time in siting a nuclear power plant in Iran, returning to Missouri to work on projects to inventory dams and review applications for hazardous waste landfills.

Chris went to the Illinois State Geological Survey to do research in design of experimental landfill covers and an investigation of a notable landfill failure. The co-authored paper, "Remote Sensing Investigation of a Hazardous Waste Landfill," showed that infiltration through depressions in the covers contributed to the faster than predicted contaminant migration, and received the Autometric Award from the American Society for Photogrammetry and Remote Sensing. He continues research on landfill covers as a Ph.D. candidate in the Agronomy Department at the University of Illinois at Urbana-Champaign. Chris and Sara have three children (all girls) who range in age from 11 to 21 and reside in Urbana, Illinois.

