Police Advisory Council Applicant Package - Member

Police Advisory Council - Member

Term: 7 Dec 2023 - 18 Oct 2027

Positions Available: 2

Number of applicants in this package: 1

- Smith, Scot

Name: Smith, Scot

Address: 1929 NW 10th Ave., FL, 32605

Email: scotearle52@yahoo.com

Board Name: Police Advisory Council

Please confirm Full Name, including middle initial, prefix, and physical mailing

address:

Scot E. Smith

1929 NW 10th Ave.

Gainesville FL 32605

In what city district do you live?:

District 4

Employer:

University of Florida

Phone Number:

3523258691

Occupation:

Professor

Why are you interested in serving on this board? (Please answer separately for each board you are applying to.):

I am interested in quality of life issues in Gainesville. I am particulary interested in reducing noise from motorcycles, cars and trucks

How many terms have you served on this board previously?:

0

Disclaimer:

Under Florida law, all information, including e-mail, written letters, documents and phone messages, sent to the Gainesville City Commission are subject to Public Records law. This includes the sender's e-mail address, home address or phone number if shown in the message, the content of the message and any associated attachments to the mail.

Do you claim any exemption to public record disclosure pursuant to FLA. STAT. Section 119?:

No

Have you been removed from any advisory board for attendance, behaviour or another reason?:

No

what is your gender identity?:	
Male	
Are you a City of Gainesville Employee?:	
No	
Are you a City of Gainesville Intern?:	
No	
Are you currently on a City Advisory Board/Committee?:	
No	
Some of the boards and committees appointed by the City Commiss required to comply with Chapter 112, Florida Statutes, the Financial Law. If applicable, would you be willing to file the required financial status of the complex control of the control of th	Disclosure
Yes	
Do you affirm that your personal and business (if applicable) affairs of Gainesville and Alachua County are in substantial compliance wit county regulatory and taxing authorities rules and regulations? *:	
Yes	
Do you agree with the following statement? Appointees to advisory board/committees are required to attend scheduled meetings as spe "Advisory Board Handbook." *:	ecified in the
Yes	
Do you agree with the following statement? I understand that this coapplication is the property of the City of Gainesville, is subject to purequests and I hereby certify that the statements made on this applicand correct.:	blic record
Yes	
Time of Submission: 10/17/23 10:09:49 PM	
Attachments:	
- Scot E.pdf	

Scot E. Smith

Education

University of Michigan	Environmental Health Sciences	Ph.D.	1982
University of Michigan	Environmental Health Sciences & Natural Resources	M.Sc.	1978
Michigan State University	Resource Development	B.Sc.	1975

Areas of Specialization

Remote sensing principles and applications, environmental monitoring and remediation, geographic information systems, photogrammetry, surveying, and digital image processing.

Employment

- University of Florida, School of Forestry, Fisheries and Geomatic Sciences, Professor 2004 2021
- University of Florida, Department of Civil Engineering, Associate Professor 1989 2004
- Kodak, Senior Researcher 1988 1989
- Ohio State University, Department of Civil Engineering, Assistant Professor 1982 1988

Research

- "Using Drone-Based Hyperspectral Imagery to Predict Peanut Maturity". Sponsor American Peanut Board. Budget: \$227,000. Co-PI: D. Rowland. 2017-2020.
- "Integration, Validation, and Fusion of Small Unmanned Aircraft System Multimodal Sensor Data in Support of the U.S. Geological Survey". Sponsor: U.S. Geological Survey, Project No. P0009641. Budget: \$1 million. Co-PIs: B. Wilkinson, P. Ifu and R. Carthy. 2008-2020.
- "Collection of Digital Imagery in Support of Aquatic Invasive Species Program and CERP". Sponsor: U.S. Army Corps of Engineers, Budget: \$100,000. Co-PIs: B. Wilkinson, P. Ifu and R. Carthy. 2011-2012.
- "Development of a Geospatial Soil-Crop Inference Engine for Smallholder Farmers". Sponsor: National Science Foundation. Budget: \$300,000. Co-PI: S. Grenwald. 2011-2015.
- "Development of an Unmanned Autonomous Vehicle for Wildlife and Ecological Research". Sponsor: U.S. Army Corps of Engineers. Budget: \$330,000. Co-PIs: F. Percival and P. Ifu. 2006-2009.
- "Rapid Assessment of the Urban Forest Following a Hurricane: Damage, Removal and Restoration". Sponsor: US Forest Service. Budget \$320,000. Co-PI: F. Escobedo2007-2010.
- "Assessment of Tree Cover Change between 1986 and 1996 in Miami-Dade and Broward Counties". Sponsor: U.S. Forest Service. Budget: \$98,000. Co-PI: F. Escobedo, 2006-2008.
- "Improvement of the Biological Degradability of Wastewater using Activated Zeolites". Sponsor: NATO. Budget: \$300,000. Co-PI: P. Princz. 1998-2006.

- "Assessment of the Use of Remote Sensing Techniques for Locating and Mapping of Ordinary High-Water Line for the Kissimmee Chain of Lakes". Sponsor: Florida Department of Environmental Protection. Budget: \$130,000. Co-PI: B. Dewitt, 2001-2002.
- "Mapping and Monitoring of Sedimentation and Sand Dune Encroachment in Lake Nasser Using Remote Sensing Techniques". Sponsor: National Science Foundation, Budget: \$30,000. 2001-2002.
- "Land-Use and Land-Cover Change: Decadal-Scale Dynamics of Carbon Storage Patterns as a Function of Land Ownership in the Southeastern Lower Coastal Plain Region of the U.S." Sponsor: NASA. Budget: \$370,000. Co-PIs: G. Barnes and M. Binford. 1999-2002.
- "Biological Diversity in Florida: An Evaluation of Potential Species in Relationship to Habitat and Existing Reserves". Sponsor: U.S. Geological Survey. Budget: \$1 million. Co-PI: L. Pearlstein, 1992-2000.
- "Natural and Human Resources Assessment of Wadi Watir, South Sinai, Egypt. Sponsor: U.S. Agency for International Development. Budget: \$50,000. 1997-1999.
- "Aerial Sampling for Brazilian Pepper on Canaveral National Seashore". Sponsor: National Park Service. Budget: \$5,000. 1997.
- "Aerial Sampling of St. Johns River Water Management District Natural Vegetation Using Digital Photography and Analog Videography". Sponsor: St. Johns River Water Management District, Budget: \$25,000. 1997-1998.
- "Landcover and Change Analysis of Florida Using Landsat Thematic Mapper Imagery." Sponsor: Florida Game and Fresh Water Fish Commission. Budget: \$124,000. 1996-1998.
- "Field and Image Processing Support for Land Cover Classification of South Florida". Sponsor: National Oceanographic and Atmospheric Administration. Budget: \$18,000. Co-PI: L. Pearlstein. 1996-1997.
- "Analysis of Land Use/Cover Change in the Szigetköz Area Since Construction of the Gabcikovo Barrage System". Sponsor: National Science Foundation, the Hungarian Academy of Sciences, and the Hungarian Ministry of Environmental Protection. Budget: \$100.000. 1995-1999.
- "Update and Change Detection Mapping of Potential Wildlife Habitat." Sponsor: Florida Game and Fresh Water Fish Commission. Budget: \$100,000. Co-PI: L. Pearlstein. 1995-1996.
- "Enhanced Community College Interface, SUCCEED: A National Engineering Education Coalition". Sponsor: National Science Foundation. Co-PIs: J. Abbot, B. Crane, et al. Budget: \$350,000. 1992-1999.
- "Visualization and Imaging Across the Disciplines, Shared University Research Program". Sponsor: International Business Machines Corporation. Budget: \$128,000. Co-PIs: R. Shrestha and B. Dewitt. 1995.
- "Coast of Florida GIS Project". Sponsor: U.S. Army Corps of Engineers. Budget: \$42,000. 1994.
- "Mapping of a Preliminary Route for a Central American Biological Corridor." Sponsor: Caribbean Conservation Corporation. Budget: \$7,500. 1993-1994.
- "Geographic and Resource Mapping of Miskito Cays". Sponsor: Caribbean

- Conservation Corporation. Budget: \$6,000. 1993-1994.
- "Technology Transfer Program for Local Transportation Agencies Research Implementation Plan". Sponsor: Florida Department of Transportation. Budget: \$127,000. Co-PI: B. Dewitt. 1991-1992.
- "Land Use/Cover Accuracy Assessment". Sponsor: Southwest Florida Water Management District. Budget: \$27,000. 1992.
- "Terminal Interconnected Equipment and Protocol Development for a GPS Monitoring Base Station". Sponsor: National Aeronautics and Space Administration. Budget: \$29,000. Co-PI: B. Dewitt. 1991-1992.
- "Identification of Land Use/Transportation Network Change". Sponsor: National Oceanographic and Atmospheric Administration. Budget: \$79,000. Co-PIs: R. Shrestha and B. Dewitt. 1990-1991.
- "Site Verification Using Global Positioning System". Sponsor: Florida Department of Environmental Protection. Budget: \$65,000. Co-PIs: R. Shrestha and B. Dewitt. 1990-1991.
- "Expanded Geodetic Control Along the Primary Road System by Use of Satellite Surveying Technology" Sponsor: Florida Department of Transportation. Budget: \$214,000. Co-PIs: R. Shrestha and B. Dewitt. 1990-1991.
- "Satellite Remote Sensing Imagery". University of Florida Libraries Sponsor: Florida Lottery Grant. Budget: \$58,000. Co-PI: H. Armstrong. 1991.
- "Soils Mapping by Use of Satellite Imagery". Sponsor: U.S. Department of Agriculture. Budget: \$20,000. 1990.
- "Georeferencing of Landsat Thematic Mapper and SPOT Data to Universal Transverse Mercator Coordinates". Sponsor: Southwest Florida Water Management District. Budget: \$17,000. 1990-1991.
- "Space Commercialization of Remote Sensing". Sponsor NASA, Budget \$5 million, Co-PI: I. Mueller, 1988-1993.

Publications

Books

- Princz, P., S. Smith, K. Hatfield and J. Oláh, 2004. "Improvement of the Biological Degradability of Wastewaters Using Modified Zeolites" In: Humics for Environmental Remediation. I. Perinova, K. Hatfield and H. Herbert (eds.), Kluwer Academic Publishers, The Netherlands, 42 pg.
- Smith, S. 2004, "Mapping of the Soil Surface" In: Environmental Soil and Landscape Modeling. Geographic Information Technologies by S. Grunwald and M. Collins (eds.), Marcel Dekker, Inc. Publishers, NY, 36 pg.
- Smith, S. 2003, "*The Aswan High Dam at 30 Years*" In: <u>Conservation, Ecology and Management of African Fresh Water.</u> T. Crisman, L. Chapman, C. Chapman and L. Kaufman (eds.), University of Florida Press, pp. 305-326.
- Smith, S. 1987, "Environmental Impacts of the Aswan High Dam: Prospects and Analysis." In: A Multidisciplinary Approach to Renewable Energy Resources in Developing Countries. Hitzhusen and MacGregor (eds.), Publishing Horizons, pp. 169183.

Refereed Journal Articles

- Darwish, K. and S. Smith. 2022. "Monitoring Coastline Dynamics Using Remote Sensing and GIS: A Review of the Literature", Journal of Remote Sensing. In Review.
- Darwish, K. and S. Smith. 2022. "Spatial-Temporal Morphological Changes in the North Sinai Coastline Between 1990 and 2020". Journal of Remote Sensing. In Review.
- Shokar, M., M. Abdellatif, A. Abdelaziz, A. Belal, A. El Baroudy, J. Antonio J., T. Guerra, C. Maria, Jorge, S. Smith, A. Abdullah A. Kheir and M. Jalhoum. 2022. "High Resolution Digital Soil Mapping Using Machine Learning: A Case Study of the Bahariya Oasis, Egypt". Journal of Remote Sensing. In Preparation.
- Xu, Y., L. Bin L., B. Junhong, S. Smith, Z. Guangliang, C. Guannan and X. Wang, 2021, "Effects of Multi-Temporal Environmental Variables on SOC Spatial Prediction Models in Coastal Wetlands of a Chinese Delta", Journal of Remote Sensing.
- Monsef, H. and S. Smith, 2019, "Integrating Remote Sensing, Geographic Information System, and Analytical Hierarchy Process for Hazardous Waste Landfill Site Selection", Arabian Journal of Geosciences, Vol. 12, pp. 155-162.
- Abd-Elrahman, A., G. Barnes, A. Benjamin, K. Britt, B. Dewitt, H. Hochmair, S. Smith and B. Wilkinson, 2019, "Geomatics Education at the University of Florida: A Case Study of Challenges and Adaption", Surveying and Land Information Systems, Vol. 78, No. 1, pp. 5-16.
- Monsef, H., S. Smith, N. Abd El Rasol and D. Rowland, 2019, "Using Hyperspectral Imagery to Extract Pure Spectral Canopy Signatures for Predicting Peanut Maturity", Computers and Electronics in Agriculture. Vol. 162, pp. 561-572.
- Liu, T., B. Dewitt, S. Smith, A. Abd-Elrahman, J. Morton and V. Wilheim, 2018, "Evaluating the Potential of Multi-View Data Extraction from Small Unmanned Aerial System with Consumer Grade Camera for Object-based Land Cover Classification Aided by Bidirectional Reflectance Distribution Function Modeling". GIScience & Remote Sensing. Vol. 56, No. 1, pp. 130-159.
- Xu, Y., S. Smith, S. Grunwald, A. Abd-Elrahman and S. Wani, 2018, "Effects of Image Pan Sharpening on Soil Total Nitrogen Prediction Models in South India". Geoderm. Vol. 320, pp. 52-66.
- Xu, Y., S. Smith, S. Grunwald, A. Abd-Elrahman and S. Wani, 2017, "Evaluating the Effect of Remote Sensing Image Spatial Resolution on Soil Exchangeable Potassium Prediction Models in Smallholder Farm Settings". Journal of Environmental Management. Vol. 200, pp. 423-433.
- Xu, Y., S. Smith, S. Grunwald, A. Abd-Elrahman and S. Wani, 2017, "Estimating Soil Total Nitrogen in Smallholder Farm Settings Using Remote Sensing Spectral Indices and Regression Kriging", Elsevier, Catena Vol. 163, pp. 111-122.
- Xu, Y., S. Smith, S. Grunwald, A. Abd-Elrahman and S. Wani, 2017, "Spatial Downscaling of Soil Prediction Models Based on Weighted Generalized Additive Models in Smallholder Farm Settings", Environmental Monitoring and Assessment. Vol. 189: 502 DOI 10.1007/s10661-017-6212-z.
- Monsef, H., A. Mohamed, A. Hassan, S. Smith and S. Shata, 2017, "Using Spatial Data Analysis for Delineating Existing Mangroves Stands and Siting Suitable Locations for Mangroves Plantation". Arabian Journal of Earth Science. Vol. 12, pp. 30-39.
- Szántói, Z. L. Koh, S. Smith and S. Wich, 2017, "Mapping of Orangutan Habitat Using

- Landsat Imagery Augmented with Unmanned Autonomous Vehicle Photography". International Journal of Remote Sensing. http://dx.doi.org/10.1080/01431161.2017.1280638.
- Monsef H. and S. Smith, 2017, "A New Approach for Estimating Mangrove Canopy Cover Using Landsat 8 Satellite Imagery". Computers and Electronics in Agriculture. Issue 135. pp. 183-194.
- Xu, Y., S. Smith, S. Grunwald, A. Abd-Elrahman and S. Wani, 2017. "Incorporation of Satellite Remote Sensing Pan-sharpened Imagery into Soil Prediction Models to Characterize Soil Property Variability in Small Agricultural Fields". ISPRS Journal of Photogrammetry and Remote Sensing. Vol. 123, pp. 1–19.
- Darwish, K, S. Smith and M. Torab, 2016, "Geomorphological Change Detection along the Nile Delta Coastline between 1945 and 2014 Using Satellite Remote Sensing". Journal of Coastal Research. DOI: 10.2112/JCOASTRES-D-16-00056.1).
- Szántói, Z., F. Escobedo, A. Abd-Elrahman L. Pearlstine, B. Dewitt and S. Smith, 2015, "Classifying Spatially Heterogeneous Wetland Communities Using Machine Learning Algorithms and Spectral and Textural Features", Environmental Monitoring Assessment. DOI 10.1007/s10661-015-4426-5
- Monsef, H., S. Smith and K. Darwish, 2015, "Impacts of the Aswan High Dam 50 Years On", Water Resources Management, Vol. 29, Issue 6, pp 1873-1885. Kursad D., Levent G., E. Melis M. Inalpulat, S. Smith and U. Kimal, 2014, "Yield Estimates Using Spectral Indices in Eggplant and Bell Pepper Grown Under Deficit Irrigation". Fresenius Environmental Bulletin Vol. 23, No. 5, pp. 1232-1237.
- Genc, L. M. Inalpulat, M. Kizil, U. Mirik and S. Smith., 2013, "Determination of Water Stress with Spectral Reflectance on Sweet Corn Using Classification Tree Analysis". Zemdirbyste-Agriculture, Vol. 100, No. 1, pp. 81-90.
- Szántói, Z., F. Escobedo, A. Abd-Elrahman, S. Smith and L. Pearlstine. 2013, Analyzing Fine-Scale Wetland Composition Using High Resolution Imagery and Texture Features". International Journal of Applied Earth Observation and Geoinformation, Vol. 23, pp. 204–212.
- Szántói, Z., S. Malone, F. Escobedo, O. Misas, S. Smith and B. Dewitt. 2012, "A Tool for Rapid Post-Hurricane Urban Tree Debris Estimates Using High Resolution Aerial Imagery". International Journal of Applied Earth Observation and Geoinformation Vol. 18, pp. 548–556.
- Szántói, Z., F. Esobedo, J. Wagner., J. Rodreguez and S. Smith, 2012, "Socioeconomic Factors and Urban Tree Cover Policies in a Subtropical Urban Forest", GIS Sciences and Remote Sensing, Vol. 49:3 pp.428-449.
- Szántói, Z., S. Malone, F. Escobedo, O. Misas, S. Smith and B. Dewitt, 2011, "A Tool for Rapid Post-Hurricane Urban Tree Debris Estimates Using High Resolution Aerial Imagery", International Journal of Applied Earth Observation and Geoinformation. Vol. 18, pp. 598-556.
- Levent G., Ü. Kızıl, N. M. Müftüoğlu and S. Smith, 2011, "Identification of Phosphorus-Sensitive Regions Using Field Data, Remote Sensing Imagery and Kriging Techniques to Mitigate Overuse of Fertilizer in a Northwestern Town in Turkey". Fresnius Environmental Bulletin, Freisling, Germany. Vol. 20, No. 10, pp. 2555-2561.
- Genc, L. and S. Smith, 2011, "Determination of Plant Water Stress Using Spectral Reflectance Measurements in Watermelon (Citrullus Vulgaris) American-Eurasia",

- Journal of Agriculture and Environmental Science, Vol. 11, No. 2, pp. 296-304.
- Abd-Elrahman A. M. Croxton, R. Pand-Chettri, G. Toor, S. Smith and J. Hill, 2010, "Insitu Estimation of Freshwater Aquaculture Pond Water Quality Parameters Using Hyperspectral Image Analysis". International Journal of Photogrammetry and Remote Sensing. Vol. 66, Issue 4, pp. 463-472.
- Smith, S. Z. Szántói, J. Perry and B. Evers, 2010, "Design Considerations for Remote Sensing Payloads on Inexpensive Unmanned Autonomous Aerial Vehicles" Journal of Surveying and Land Information Sciences. Vol. 70; Issue 3. pp.131-137.
- Genc, L., H. Turhan H., A. Burak and S. Smith, 2009, "Comparison of Spectral Indices Derived from QUICKBIRD and Ground Based Hyper-Spectral Data for Winter Wheat", World Applied Sciences Journal. Vol. 7, No. 6, pp. 756-762.
 Smith, S., and H. Rasol, 2009, "Geographic Assessment of Public Libraries in Egypt". World Applied Sciences Journal, World Applied Sciences Journal. Vol. 6, No. 7, pp. 861-887.
- Hersey, D. and S. Smith, 2008. "Analysis of Watershed Vulnerability to Flooding in Haiti", World Applied Sciences Journal. Vol. 4, No. 6, pp. 869-885.
- Turhan, H., L. Genc, S. Smith, B. Bostanci and S. Turkmen, 2008, "Assessment of the Effect of Salinity on the Early Growth Stage of the Common Sunflower (Sanay cultivar) Using Spectral Discrimination Techniques", African Journal of Biotechnology. Vol. 7, No. 6, pp. 750-756.
- Genc, H., L. Genc, H. Turhand, S. Smith and J. Nation, 2008, "Vegetation Indices as Indicators of Damage by the Sunn Pest (Hemiptera scutelleridae) to Field-Grown Wheat", African Journal of Biotechnology Vol. 7, No. 2, pp. 173-180.
- H. Abd-El Monsef, S. Smith and J. Aufmuth, 2008, "Site Selection for Mangrove Plantations Along the Egyptian Red Sea Coast", World Applied Sciences Journal. Vol. 7, No. 6, pp. 127-139.
- Turhan, H., L. Genc, S. Smith, B. Bostanci and S. Turkmen, 2008, "Assessment of the Effect of Salinity on the Early Growth Stage of the Common Sunflower (Sanay cultivar) Using Spectral Discrimination Techniques", African Journal of Biotechnology. Vol. 5, No. 4, pp. 750-756.
- Genc, L. and S. Smith, 2005, "Assessment of Principal Component Analysis for Interpretation of Moderate and High-Resolution Satellite Imagery, Trakya Journal of Science, Vol. 18: pp. 32-41.
- Princz, P., J. Oláh and S. Smith, 2005, "Complex Analytical Procedure for the Characterization of Modified Zeolite and for the Assessment its Effects on Biological Wastewater Treatment, IMEKO Measurements Journal, Vol. 12. Pp. 46-51.
- Genc, L., S. E. Smith, and B. A. Dewitt. 2005. "Using Satellite Imagery and LIDAR Data to Corroborate an Adjudicated Ordinary High-Water Line." International Journal of Remote Sensing. Vol. 26, No. 17, pp. 683-3693.
- Genc, L. and S. Smith, 2005, "Assessment of Principal Component Analysis for Interpretation of Moderate and High-Resolution Satellite Imagery", Trakya Journal of Science, Vol. 18: pp. 32-41.
- Genc, L. and S. Smith, 2004, "Determination of Forest Cover Age Classes Using the Normalized Difference Vegetation Index and Surface Temperature Derived from Landsat Thematic Mapper Imagery", Turkish Journal of Agricultural Forestry, Vol. 3, pp. 33-47.
- Genc, L., B. Dewitt and S. Smith. 2004. "Determination of Wetland Vegetation Height with

- LIDAR." Turkish Journal of Agriculture and Forestry. Vol. 8, No. 1, pp. 63-71.
- Dewitt, B., S. Smith, L. Genc and J. Nunley. 2004. "Use of LIDAR for Locating Ordinary High-Water Level in Florida Lakes." Surveying and Land Information Sciences. Vol. 64, No. 3, pp. 308-317.
- Smith, S., J. Nunley, B. Dewitt and L. Genc, 2004, "Use of Remote Sensing for Locating Ordinary High-Water Level in Florida Lakes," Journal of Surveying and Land Information Sciences.
- Pearlstine, L., K. Portier and S. Smith, 2004, "Textural Discrimination of an Invasive Plant, Schinus terebinthifolius, from Low Altitude Aerial Digital Photography," Photogrammetric Engineering and Remote Sensing. Vol. 71, No. 3, pp. 289-296.
- Monsef, H., S. Smith, and M. El Ghawaby, 2004, "Design and Application of a Geographic Information System for Assessing Sulphide Mineralization, Journal of Surveying and Land Information Sciences. Vol. 64, pp. 280-291.
- Genc, L., B. Dewitt and S. Smith, 2004, "Wetland Vegetation Classification with LIDAR," Turkish Journal of Agricultural Forestry, Vol. 78, pp. 63-71.
- Smith, S., F. McCorry and L. Genc, 2003, "A Comparison of Landsat Thematic Mapper and Indian Remote Sensing Satellite Imagery for Land Use/Land Cover Assessment," Journal of Surveying and Land Information Sciences. Vol. 63, No. 4, pp. 261-274.
- Genc, L., S. Smith, B. Dewitt, and G. Barnes. 2003. "Forest Cover Mapping Using Image Transformation Techniques." Journal of Surveying and Land Information Sciences. Vol. 63, No. 3.
- Barnes, G., A. Agrawal, L. Genc, B. Ramachandran, V. Sivaraman, B. Pudi, M. Binford and S. Smith, 2003, "Developing a Spatial-Temporal Cadastral Database Using County Appraisal Data from Northern Florida,", Journal of Surveying and Land Information Sciences, Vol. 63, pp. 243-251.
- Genc, L. and S. Smith, 2003, "Forest Cover Change Assessment in North Central Florida Using Landsat Thematic Mapper Images", Journal of Surveying and Land Information Systems, Vol. 63, pp. 149-154.
- Monsef, H., M. El Ghawaby and S. Smith, 2003, "A Geographic Information System of Development Planning. A Case Study of the Wadi Watir Valley in Sinai," Journal of Surveying and Land Information Systems, Vol. 63, pp. 37-45.
- Abdelrahman, A., L. Pearlstine and S. Smith, 2002, "Detection of Positional Errors in Systems Utilizing Small-Format Digital Aerial Imagery and Navigation Sensors Using Area-based Matching Techniques," Photogrammetric Engineering and Remote Sensing, Vol. 67, pp. 825-831.
- Benhanifia, K., A. Bekradda and S. Smith, 2002, "Multitemporal Remote Sensing and GIS: A Useful Tool for Detecting and Mapping Forest Changes," Journal of Surveying and Land Information Systems, Vol. 62, pp. 180-188.
- Pearlstine, L., S. Smith, L. Brandt, C. Allen, W. Kitchens and J. Stenberg, 2002, "Assessing State-Wide Biodiversity in Florida," Journal of Environmental Management, Vol. 66, pp. 127-144.
- Smith, S., L. Pearlstine and J. Stenberg, 2002, "A Comparison of Aerial Videography and Digital Camera Imagery for Improving Land Cover Classification," Journal of Surveying and Land Information Systems, Vol. 62, pp. 163-170.
- Smith, S., F. Szilagyi and L. Horváth, 2002, "Environmental Impacts of the Gabcikov Barrage System to the Szigetköz Region," Journal of Clean Technologies and

- Environmental Policy, Vol. 60, pp. 54-64.
- Abd-Elrahman, A., L. Pearlstine, B. Dewitt and S. Smith, 2001, "Detection of Positional Errors in Systems Utilizing Small-Format Digital Aerial Imagery and Navigation Sensors Using Area-Based Matching Techniques." Photogrammetric Engineering and Remote Sensing. Vol. 67, No. 7, pp. 825-834.
- Monsef, H. and S. Smith, 2000, "Enhancing Landsat Thematic Mapper Imagery for Wetlands Mapping," Journal of Surveying and Land Information Systems, Vol. 60, pp. 138-146.
- Smith, S., L. Horváth, F. Szilágyi, G. Büttner and J. Aufmuth, 2000, "Assessment of the Environmental Impacts of the Gabcikov Barrage System Using Satellite Remote Sensing Techniques," Journal of Water Resources Planning and Management, Vol. 26, pp. 128-137. [The same article was published (with permission from ASCE) in the Water Resources Journal of the United Nations, ST/ESCAP/SER.C/207 pp. 32-44. December 2000].
- Smith, S., H. Monsef and H. Fawzy, 2000, "Assessment of the Need for New Land Development in Egypt: A Case Study and Prototype for Site Selection and Land Registration Procedure in the Sinai Peninsula," Journal of Surveying and Land Information Systems, Vol. 60, pp. 121-129.
- Smith, S. and H. El Monsef, 1997, "Locating Regions of High Probability for Groundwater in Wadi El Arish Basin, Sinai, Egypt," Journal of African Earth Sciences, Vol. 25, pp. 88-95.
- Smith, S., B. Dewitt, P. Gonzalez and W. Hurt, 1995, "Georeferencing of Satellite Imagery for Digital Soil Mapping," Journal of Surveying and Land Information Systems, Vol. 55, pp. 1320.
- Shrestha, R., A. Nazir, B. Dewitt and S. Smith, 1993, "Surface Interpolation Techniques to Convert GPS Ellipsoid Heights to Elevations," American Congress on Surveying and Mapping, Journal of Surveying and Land Information Systems, Vol. 53, pp. 133144.
- Smith, S., and D. Gibson, 1993, "County Level Geographic Information Systems in Florida," Journal of Geodetical Info, Vol. 7: pp. 5558.
- Moussa, O., S. Smith and R. Shrestha, 1991, "A Hydrologic Regression Sediment Yield Model for Two Ungauged Watershed Outlet Stations in Africa," Journal of Environmental Geology and Water Resources, Vol. 7, pp. 177183.
- Smith, S. and H. Al Rawahy, 1991, "Water Allocation in Egypt–A Contemporary Assessment of an Ancient Problem," Journal of Current World Leaders, Vol. 34, pp. 589608-.
- Shrestha, R., R. Taylor, S. Smith and L. Stanislawski, 1990, "Preliminary Results for the Florida High Precision GPS Network," Journal of Surveying and Land Information Systems, Vol. 50, pp. 299302.
- Smith, S., 1990, "A Revised Estimate of the Life Span of Lake Nasser," Journal of Environmental Geology and Water Resources, Vol. 15, pp. 123129.
- Smith, S., and H. Al -Rawahy, 1990, "The Blue Nile: Potential for Conflict and Alternatives for Meeting Future Demands," Journal of Water Resources International, Vol. 15, pp. 217-222.
- Smith, S., and M. McCord, 1989, "Ocean Current Mapping An Historical Perspective and Preview of the Future", Journal of Surveying and Mapping, Vol. 49, pp. 189194.
- Smith, S. and A. Abdel Kader, 1988, "Coastal Erosion Along the Egyptian Delta," Journal

- of Coastal Research, Vol. 4, pp. 245255.
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- Smith, S., "Effect of the Sahaelian Drought on Water Management in Egypt," 1986, Journal of Soil and Water Conservation, Vol. 41, pp. 297300.
- Smith, S., "General Impacts of the Aswan High Dam", 1986, Journal of Water Resources Planning and Management, Vol. 112, pp. 551562.

Proceedings

- Burgess, M., R. Carthy, B. Wilkinson, S. Tyler, P. Ifju, S. Smith, 2017, "*Measuring Fine Scale Fire Behavior and Fire Effects*", http://www.auvsi.org/blogs/auvsi-news/2017/04/26/.
- Burgess, M., C. Zweig, M. Cook, H. Rodgers, R. Carthy, B. Wilkinson, T. White, T. Ward, J. DiRodio P., Frederick, P. Ifju, S. Smith and F. Percival, 2015, "Applications of High-Resolution Aerial Photography and a Small Unmanned Aircraft System in Everglades Science", Greater Everglades Ecosystem Restoration.
- Darwish, K, M. Torab and S. Smith, 2015, "Geomorphic Changes of Coastal Lagoon Barriers along the Nile Delta Coast in the 20th Century" The XIX Congress on Quaternary Perspectives on Climate Change, Natural Hazards and Civilization. Nagoya, Japan.
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- Percival, F., H. Watts, W. Bowman, A. Abd-Elrahman, A. Mohamed, B. Wilkinson, J. Perry, S. Smith, B. Dewitt, M. Morton, and Y. Kaddoura. 2007, "Unmanned Aircraft Systems for Natural Resource Monitoring and Ecological Research," Kissimmee Chain of Lakes Standing Team, Florida Fish and Wildlife Conservation Commission, Kissimmee, FL.
- Watts, A., F. Percival, L. Pearlstine, P. Ifju, B. Dewitt, S. Smith, A. Mohamed and W. Bowman. 2007, "Unmanned Aircraft Systems for Natural Resource Monitoring and Ecological Research," Plenary Presentation, Association for Unmanned Vehicle Systems International, Washington, D.C.
- Watts, A. C., F. Percival, L. G. Pearlstine, P. Ifju, B. A. Dewitt, S. Smith, A. Mohamed, and W. Bowman. 2007, "Unmanned Aircraft Systems for Natural Resource Monitoring and Ecological Research," Invited Presentation, Florida Exotic Pest Plant Council, Cocoa Beach, FL.
- Watts, A., F. Percival, L. Pearlstine, P. Ifju, B. Dewitt, S. Smith, A. Mohamed and W. Bowman. 2007, "Unmanned Aircraft Systems for Natural Resource Monitoring and Ecological Research," National Conference on Ecological Restoration, Kansas City, MO.

- Watts, A., F. Percival, L. Pearlstine, P. Ifju, B. Dewitt, S. Smith, A._Mohamed and W. Bowman. 2006. "Development of an Autonomous Unmanned Aerial Vehicle System for Wildlife and Ecological Research," 3rd National Conference on Coastal and Estuarine Habitat Restoration, New Orleans, LA.
- Princz, P., J. Oláh, S. Smith and K. Hatfield, 2003, "Complex Analytical Procedures for the Characterization of Modified Zeolites for the Assessment of Biological Wastewater Treatment," Proceedings, XVII IMEKO World Congress, Dubrovnik, Croatia.
- Gholz, H., M. Binford, G. Starr, S. Smith, K. Clark, and T. Martin, 2002, "Resolving the Carbon Balance of a Southeastern U.S. Landscape: A Matter of Scale," Proceedings, INTECOL Symposium, Seoul, Korea.
- Levent, G., S. Smith, B. Dewitt and N. Baytorun, 2002, "Landsat TM-Based Forest Cover Change Case Study," Proceedings, 3rd International Remote Sensing of Urban Areas Conference, Istanbul, Turkey.
- Princz, P., J. Oláh, S. Smith, D. Kálló and K. Hatfield, 2002, "Improvement of the Biological Degradability of Wastewaters Using Modified Zeolites," Proceedings, 6th International Conference on the Occurrence, Properties and Utilization of Natural Zeolites, University of Thessaloniki, Greece.
- Smith, S., A. Abdelrahman and L. Pearlstine, 2001, "Accuracy Assessment of Landsat-Derived Wildlife Habitat Maps," Proceedings, Instrument Society of America/IMEKO Special Millennium Session, Houston, TX.
- Princz, P., J. Oláh, S. Smith and I. Horváth, 2001, "Complex Biological Degradability Test of Pharmaceutical Waste," Proceedings, Instrument Society of America/IMEKO Millennium Session, Houston, TX.
- Pearlstine, L., K. Portier and S. Smith, 2001, "Textural Discrimination of an Invasive Plant, Schinus terebinthifolius, from Low Altitude Digital Imagery," Proceedings, 18th Annual Workshop on Color Photography and Videography in Resource Assessment, American Society for Photogrammetry and Remote Sensing, Washington, D.C.
- Leslie, C., G. Barnes and S. Smith, 2001, "Design of a Query System for Assessment of Land Use Change," Proceedings, American Congress on Surveying and Mapping, Las Vegas, NV, pp. 129-135.
- Abd-Elrahman, A., L. Pearlstine and S. Smith, 2000, "Use of Small Format Digital Images for Classification of Satellite Images," Proceedings, IMEKO World Congress, Vienna, Austria,
- Princz, P., S. Smith, K. Hatfield and J. Oláh, 1998, "Simultaneous Removal of Ammonia, Humic Acids and Organic Micropollutants from Drinking Water Using Mixed Zeolite Bentonite Filtering Materials," Proceedings, KEMIA 98. Finnish Chemical Conference, Finnish Chemical Society, Helsinki, pp. 121-127.
- Smith, S. and L. Pearlstine, "GAP Analysis in Florida", 1998, Proceedings, 3rd Annual GIS Conference, Florida Department of Environmental Protection, Tallahassee, FL, pp. 89-95.
- Smith, S., 1995, "Application of Geographic Information Systems for Coastal Zone Management," *Journal of the Faculty of Science*, United Arab Emirates University, Vol. 8, Part 2, pp. 173-184.
- S. Smith and M. El -Moattassem, 1992, "Determination of Cross-Section Locations for Sedimentation Studies in Lake Nasser Using Remote Sensing Techniques," Proceedings, International Conference on Protection and Development of the Nile and Other Major

- Rivers, Cairo, Egypt, pp. 5-15.
- Smith, S., A. Aguib and A. Makary, 1992, "Applications of Satellite Remote Sensing Techniques to Monitoring Sedimentation Patterns in Lake Nasser," Proceedings, International Conference on Protection and Development of the Nile and Other Major Rivers, Cairo, Egypt, pp. 16 to 20.
- Moussa, O., S. Smith and A. Ward, 1990, "GIS for Monitoring SedimentYield from Large Watersheds," Proceedings, American Society for Photogrammetry and Remote Sensing Fall Convention, Anaheim, CA, pp. 946954.
- Moussa, O., K. Bedford and S. Smith, 1990, "Determination of Soil Erodibility Factor by Using the AVHRRNOAA Satellite Data," Proceedings, American Society for Photogrammetry and Remote Sensing Spring Convention, Denver, CO, pp. 96103.
- Moussa, O., K. Bedford and S. Smith, 1989, "Satellite Data Based Sediment Yield for the Blue Nile and Atbara River Watersheds," Proceedings, American Society for Photogrammetry and Remote Sensing Fall Convention, Cleveland, OH, pp. 379386.
- McCord, M. and S. Smith, 1989, "Improved Ocean Routing Using Satellite Data," *Proceedings, Annual Conference of Maritime Shippers*, New Orleans, LA, pp. 5869.
- Smith, S., 1986, "Assessment of the Effect of the African Drought on Water Resource Management in Egypt Using Remotely Sensed Data," Proceedings, 20th International Symposium on Remote Sensing of Environment, Nairobi, Kenya, pp. 985991.
- Smith, S., 1985, "Use of Remotely Sensed Data for Watershed Analysis," Proceedings, U.S./India Symposium on Remote Sensing, Achmabad, India, pp. 282297.
- Smith, S., K. Mancy and E. Fosnight, 1983, "Assessment and Monitoring of Sedimentation in the Aswan High Dam Reservoir," Proceedings, International Symposium on Remote Sensing and Remote Data Transmissions, Hamburg, Germany, pp. 499508.
- Smith, S. and K. Mancy, 1980, "The Application of Remote Sensing Techniques Towards Management of the Aswan High Dam Reservoir," Proceedings, 14th International Symposium on Remote Sensing of Environment, San Jose, Costa Rica, pp. 12971307.

Presentations

- "Decadal-Scale Dynamics of Land Ownership and Carbon Storage in the Southeastern Lower Coastal Plain Region of the U.S.," NASA-sponsored conference on Landscape Change Dynamics, Savannah, GA, August 3-8, 2003.
- "Accuracy Assessment of Landsat-Derived Wildlife Habitat Maps," Instrument Society of America/IMEKO Special Millennium Session, Houston, TX, September 2001.
- "Textural Discrimination of an Invasive Plant, Schinus terebinthifolius, from Low Altitude Digital Imagery," 18th Annual Workshop on Color Photography and Videography in Resource Assessment, American Society for Photogrammetry and Remote Sensing, Washington, D.C., May 2001.
- "Florida GAP Analysis" Annual GAP Conference, Athens, GA, 2000.
- "Florida GAP Analysis" Annual GAP Conference, Duluth, MN, 1999.
- "Florida GAP Analysis" Annual GAP Conference, Santa Barbara, CA, 1998.
- "Florida GAP Analysis," Annual GAP Conference, Reston, VA, 1997.

- "Florida GAP Analysis" Annual GAP Conference, Key Largo, FL, 1996.
- "Florida GAP Analysis" Annual GAP Conference, Fayetteville, AR, 1995.

Editorial Contributions

- Measurement, the Journal of the International Measurement Confederation (IMEKO). 1999-2005.
- Journal of Hydrology. 1998-present.
- Remote Sensing. 2019-present.
- Photogrammetric Engineering and Remote Sensing, American Society for Photogrammetry and Remote Sensing. 1994-present.
- Surveying and Land Information Sciences, American Congress on Surveying and Mapping. 1994-present.

International Research

Conducted research in Austria, Hungary, Poland, Russia, Brazil, Egypt, Ethiopia, Tanzania, and the United Arab Emirates.

- Austria: 2003. Studied the effectiveness of modified zeolites for wastewater treatment in sugar beet processing.
- Hungary:
 - Fulbright Scholarship, 1993. Hungarian Water Research Institute in Budapest.
 Conducted study of the environmental impacts of a new dam (the *Gabcikovo Barrage System*) on the Danube.
 - o Above effort led to an NSF-Hungarian Ministry of Environment and Hungarian Academy of Sciences sponsored study.
 - o Fulbright scholarship, 2004. Created a framework for monitoring water quality in Hungary with respect to entry to the European Union.
 - o Received a grant from NATO's Science for Peace program in 1999. "Improvement of the Biological Degradability of Wastewater using Activated Zeolites", resulted in the adoption of this technology for wastewater treatment throughout Hungary and Romania.
 - Poland: Studied coastal erosion along the Baltic Sea at Szczecin University in 1993. Hosted a Fulbright Scholar, Dr. Furmanechek of Szczecin University in 1995 as part of this effort.
 - Russia: Lecturer at a NATO-sponsored conference on using humic substances as a surrogate for polymers for bioremediation in 2002.

- Brazil: Short course on remote sensing at the Universidad do Parana in 1997.
- Egypt: Worked extensively in Egypt throughout my career beginning in 1977. I work primarily on problems related to water resources in Egypt. My main focus areas have been the environmental impacts of the Aswan High Dam, impact of tourism on mangroves and coral reefs along the Red Sea and sustainable development potential of Sinai. Sponsors for my work in Egypt have included the United States Agency for International Development, NSF and NATO. Trained over a dozen Egyptian graduate students over the past 30 years and was awarded "Professor of the Year" by the Egyptian Student Association in 1995. Served as external member of many Egyptian doctoral students who came to study in the United States under the "Peace Channel" program funded by the US Agency for International Development.
- Ethiopia: Short course on the use of remote sensing for water quality assessment at the Ara Minch Water Research Institute in Ethiopia, 1989.
- Tanzania: Two short courses at Dar es Salaam University in Tanzania: Courses focused on production of topographic maps for transportation routes. 1995 and 1996.
- United Arab Emirates: Invited to deliver a lecture to a regional conference dealing with protection of marine resources in the Gulf Region, 1995.
- Turkey: Keynote speaker at World Congress of Universities. Canakkale on Sekiz Mart University. Turkey, 2010.
- Saudi Arabia: Consultant to a project sponsored by the Saudi government to identify suitable locations for mangrove plantations along the Rea Sea Coast of Saudi Arabia, 2017-1918.

Professional Society Affiliations and Licensure

Professional Registration

- Certified Photogrammetrist, American Society for Photogrammetry and Remote Sensing, No. 846.
- o Registered Professional Land Surveyor and Mapper in the State of Florida.

Professional Organization and Committee Membership

- American Society for Photogrammetry and Remote Sensing, Member: 1976-2000
- National Director, Florida Region 2001-2004
- Board of Directors, Florida Region 1990-1992
 Vice-President, Eastern Great Lakes Chapter 1986-1987
- Florida Base Mapping Advisory Committee, Chair: 1991-1995

• Phi Delta Honor Society for International Scholars, Charter Member

•	International Measurement Confederation (IMEKO), Member	1993 2000	
•	 Chair, Technical Committee on Environmental Measurements 		
•	Editorial Board, Measurement, the Journal of IMEKO	1993-2000	
•	Chair, Organizing Committee of Conference for the Environmental	Measurement	
	Technical Committee	2003	

1987

Honors

- Outstanding Faculty of the Year Award (Geomatics) 2016
- Teaching Improvement Award, University of Florida 1995
- Professor of the Year, Egyptian Student's Association of the United States 1995
- Fulbright Scholarships 1993, 2003
- Abba Lichtenstein Award for overall excellence in teaching, research and contribution to the profession, Ohio State University, Department of Civil Engineering 1986
- Faculty Fellowship, American Society of Engineering Education (ASEE) NASA/Ames Research Center, Moffett Field, CA (June-August) 1986
- Faculty Fellowship, ASEE, NASA/Johnson Space Center, Houston, TX