# CURRICULUM VITAE

**NAME:** Peter Nkedi-Kizza

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University of Florida
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**EDUCATION**:

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|---|---|
| PhD, 1979 | University of California, Davis, Soil Science, major Soil Physics |
| MS, 1973 | Makerere University, Uganda, Agriculture, major Meteorology |
| BS, 1969 | Uppsala University, Sweden, Soil Science |

**PROFESSIONAL EXPERIENCE**:

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| 1980-1986 | Post Doctoral Research Associate, Soil and Water Science Department, University of Florida. |
| 1986-1991 | Assistant Professor, Soil and Water Science Department, University of Florida. |
| 1991-1997 | Associate Professor, Soil and Water Science Department, University of Florida. |
| 1997-present | Professor, Soil and Water Science Department, University of Florida |

**AREAS OF SPECIALIZATION:**

**RESEARCH:**

Water and Solute transport in aggregated and non-aggregated soil materials. Characterization of spatial and temporal variability of soil properties that influence water and solute movement under different crop-management practices. Sorption of agrochemicals (ionogenic and neutral organics, and nutrients) on soils and organoclays in aqueous and mixed solvent systems. Transformation of agrochemicals (pesticides and nutrients) in soils. Modeling fate and transport of agrochemicals in the environment (under various cropping systems).

**TEACHING: STUDENTS/POST-DOCS SUPERVISED IN MY PROGRAM**

Undergraduates working in my laboratory, short time employment (11)
Graduates working in my laboratory, short time employment (8)
Graduates-chair (11)
Graduates-member (31)
Post-Docs (11)

**RESEARCH EXPERIENCE:**

The research program I have been involved in for the past twenty six years at the University of Florida, Gainesville, has focused on understanding the disposition and fate of a variety of agrochemicals (fertilizers and pesticides) and toxic and nontoxic wastes (TOS) applied to cropped and un-cropped land areas. This research addresses questions related to agricultural production as well as environmental quality. I have investigated various physical and chemical processes that determine the fate of agrochemicals under laboratory and field conditions. These studies include the characterization of adsorption-desorption, transformations, crop uptake and transport of pesticides and nutrients in aqueous and mixed-solvent (water + organic solvents) systems for a broad spectrum of U.S. soil types. The research data have been used to develop and verify process-oriented simulation models. These models have been used in turn to describe the behavior of chemicals in agro-ecosystems as well as at toxic waste disposal sites. I have also been involved in field studies to characterize the spatial variability of soil physical and chemical properties that influence the fate of organic and inorganic chemicals in the environment.

## TEACHING, ADVISING, AND OTHER INSTRUCTIONAL ACCOMPLISHMENTS

**Soil Physics (SOS 4602C), 3 credit hours. Taught since 1986.**

This is a lecture and laboratory course with the overall objective of improving students' understanding of the most common and important basic processes in soil physics. The subject matter includes soil physical properties, chemical properties, and microbiological properties that influence the movement of water, solutes, gases, and heat in soils. The laboratory provides hands-on training in determination of soil properties such as bulk density, particle density, water content, water potential, and hydraulic functions. A field laboratory is available at the UF-Irrigation Park where students carry out an experiment on vertical water infiltration for two weeks. The students are guided in installing and using modern equipment (TDR, Neutron probe, and tensiometers equipped with transducers). Students also work on samples which they collect together from a soil in the field, and relate findings to the field context using principles presented in the course. They also work independently on samples of interest to them, and orally report on their findings to the class. The course is intended to prepare students to understand basic principles of transfer processes in soils for water, solutes, gases, and heat so that they can be able to interpret soil physics data they read in the literature, and to appreciate the role that soils physics plays in understanding the potential for agrochemical to pollute surface and ground water resources.

**Environmental Soil Physics (SOS 5605C/SOS6932, 3 credit hours). Taught since 1986.**

This course was originally taught as SOS 6932 (Topics in Soil Science) in anticipation of SOS 5602C being approved. SOS 5605C was approved to be taught on campus and also as a Distance-Education course in 2003. The course focuses on the understanding of transport processes for water, gases, solutes, and heat in the soil. Important soil properties (physical, chemical, and biological) which influence transport processes are characterized in the field and laboratory. Field and laboratory experiments are designed to exemplify theoretical principals and measurements that yield quantitative results important to transport processes in soils. Data from the experiments or literature are simulated with appropriate processes oriented models. All students receive computer-assisted instructions. The laboratory experiments are conducted in order to illustrate and test

theoretical principles and also to develop research orientation which provides basic experience with physical measurements that yield quantitative results of important transfer processes in the vadose-zone. Each experiment is accompanied by theoretical development in sufficient detail to provide a clear understanding of the methods to be used, the calculations required, and the significance of the final results. Data from the experiments are simulated with appropriate models that either exist in the literature or developed specifically for the course. All students in the course are expected to be computer literate. Guidelines for writing laboratory reports are outlined in the laboratory manual.

**Seminar (SOS 6931), 1 credit hour. Taught since 2005.**

The course has been taught by me during the fall, spring, and summer semesters since 2005. The course covers basic principles in presenting a good seminar. These include delivery, clarity of organization, quality of text and images on slides, and response to questions.

**Soil and Water Science Laboratory Methods (SOS 6932), 1 credit hour. Taught since 2005.**

The course is team taught once a year during the summer semester, to DE-education students. The component of the course I teach is laboratory methods in Soil Physics. The course was first offered in summer 2006.

## PUBLICATIONS

### a. Books, editor:

Hopmans, J. W., Wendroth, O., Nkedi-Kizza, Peter. 2003. Soil Hydrological Properties and Processes and their Variability in Space and Time. Netherlands: Journal of Hydrology, Elsevier, 290 pages

### b. Books, Contributor of Chapter

Rao, P. S. C., P. Nkedi_Kizza, J. M. Davidson, and L. T. Ou. 1983. Retention and transformations of pesticides in relation to non-point source pollution from croplands. In: Agricultural Management and Water Quality (Edited by F. Schaller and G.Bailey), Iowa State Univ. Press, Ames, IA. Pages 126-40.

Davidson, J. M., P. S. C. Rao, and P. Nkedi_Kizza. 1983. Influence of physical processes on water and solute transport in soils. in: Solubility and Reactivity in Soil Systems (Edited by D. W. Nelson, K. K. Tanji, and D. E. Elrick), American Society of Agronomy, Madison, WI, USA. Pages 35-47.

Rao, P. S. C., P. Nkedi_Kizza, and J. M. Davidson. 1986. Abiotic processes affecting the transport of organic pollutants in soils. IN: Land Treatment: A Hazardous Waste Management Alternative. Edited by R. Loehr. Univ. of Texas, Austin, TX. Pages 63-72.

Nkedi-Kizza, P. 1986. Consumptive use of water by the banana crop. IN: African Agricultural Development: Technology, Ecology, and Society, Proceedings of International Conference. California State Polytechnic University, Pomona, CA. edited by Y. T.

Moses. Pages 21-2.
Rao, P. S. C., K. S. V. Edvardsson, L.-T. Ou, R. E. Jessup, P. Nkedi_Kizza, and A. G. Hornsby. 1986. Spatial Variability of pesticide sorption and degradation parameters. In: Evaluation of Pesticides in Ground Water. Edited by W. Y. Garner, R. C. Honeycutt, and H.N. Nigg. American Chemical Society Symposium Series #315, Washington DC. Pages 100-115.
Rao, P. S. C., L. S. Lee, P. Nkedi_Kizza, and S. H. Yalkowsky. 1989. Sorption and transport of organic pollutants at a waste disposal site. In: Toxic Organic Chemicals in Porous Media. Edited by Z. Gerstl, Y. Chen, U. Mingelgrin, and B. Yaron). Springer-Verlag Berlin,Heidelberg New York, London, Paris, Tokyo, Hong Kong Pages 176-190.
Gladwin C., K. L. Buhr, A. Goldman, C. Hiebsch, P. E. Hilderbrand, G. Kidder, M. Langham, D. Lee, P. Nkedi-Kizza, and D. Williams. 1997. Gender and Soil Fertility in Africa. In Replenishing Soil Fertility in Africa. Edited by R. J. Buresh, P. A. Sanchez, and F. Calhoun. SSSA Special Publication Number 51, Madison, Wisconsin, USA

**b. <u>Monographs</u>**

Rao, P. S. C., and P. Nkedi_Kizza. 1984. Pesticide sorption on whole soils and soil size-separates. In: Estimation of Parameters for Modeling the Behavior of Selected Pesticides and Orthophosphate. EPA Ecological Research Series, # EPA-600/3-84-019, USEPA, Athens, GA. Edited by P. S. C. Rao, V. E. Berkheiser and L. T. Ou). Pages 5-44.
Rao, P. S. C., A. G. Hornsby, and P. Nkedi_Kizza (Editors). 1984. Sorption and transport of toxic organic substances in soils; Evaluation of protocols and effects of solvents. USEPA Ecological Research Series, pp. 210.
Rao, P. S. C., R. E. Jessup, C. W. McVoy, and P. Nkedi_Kizza. CHEMRANK: 1986. A Protocol for Selecting Potentially Hazardous Constituents in a Waste Stream Designated for Land Treatment. Technical Guidance Document, SKERL_USEPA, Ada, OK. 1986, pp. 120.
Nkedi-Kizza, P., and P. S. C. Rao. (Editors). 1986. Development and Testing of Protocol for Selecting the Principal Hazardous Constituents (PHC) in a Waste Stream. USEPA Technical Report, Ada, OK. pp. 300.
Baarveld, R., P. Nkedi_Kizza, and O. K. Odongkara. (Editors). 1995. Emergency Control of Waterhyacinth on Lake Victoria. Technical Cooperation Programme, TCP/RAF/2371. FAO Mission Report . Food and Agricultural Organization of the United Nations Kampala, March 1995. pp 48.

Nkedi-Kizza, P., R. P. Baarveld, and O. K. Odongkara. (Editors). 1995. Emergency Waterhyacinth Control on Lake Victoria: Time_Bound Action Plan for Uganda. Technical Cooperation Programme. FAO Programme Document, TCP/RAF/2371. Food and Agricultural Organization of the United Nations Rome, June 1995. pp 51.

Rao, P. S. C., R. E. Jessup, C. W. McVoy, and P. Nkedi_Kizza. CHEMRANK: 1986. A Protocol for Selecting Potentially Hazardous Constituents in a Waste Stream Designated for Land Treatment. Technical Guidance Document, RSKERL-USEPA, Ada, OK. 1986, pp. 120.

**Proceedings**

Nkedi-Kizza, P., P. S. C. Rao, L. T. Ou, and J. M. Davidson. 1982. Fate of pesticides applied to crop lands in relation to nonpoint source pollution. Proceedings, IFAS Conference on Nonpoint Source Pollution Control Technology in Florida. Edited by L. B. Baldwin and A. D. Bottcher. Pages 267-290.

Hornsby, A. G., P. S. C. Rao, P. Nkedi_Kizza, W. B. Wheeler, and R. B. Jones. 1984. Fate of aldicarb in Florida citrus soils: 1. Field and laboratory studies. In: Proceedings of Conference on "Characterization and Monitoring of the Vadose_Zone". Edited by D. M. Nielsen. National Well Water Association, Worthington, OH. Pages 936-958.

Muchovej, R. M., J. E. Rechcigl, and P. Nkedi_Kizza. 1995. Impacts of Nitrogen Fertilizers on Water Quality. Proceedings of Conference, Clean Water- Clean Environment - 21st Century, March 5_8, 1995, Kansas City, Missouri. USDA and ASAE, Volume II:143-145.

**REFEREED PUBLICATIONS**

Singer, M. J., and P. Nkedi_Kizza. 1980. Properties and history of an exhumed Tertiary Oxisol in California. Soil Sci. Soc. Am. J. 44:587-590.

Nkedi-Kizza, P., P. S. C. Rao, R. E. Jessup, and J. M. Davidson. 1982. Ion-exchange and diffusive mass transfer during miscible displacement through an aggregated Oxisol. Soil Sci. Soc. Am. J. 46:47-476.

Nkedi-Kizza, P., P. S. C. Rao, and J. W. Johnson. 1983. Adsorption of diuron and 2,4,5-T on soil particle-size separates. J. Environ. Qual. 12:195-197.

Nkedi-Kizza, P., J. W. Biggar, M. Th. van Genuchten, P. J. Wierenga, H. M. Selim, J. M. Davidson, and D. R. Nielsen. 1983. Modeling tritium and chloride-36 transport through an aggregated Oxisol. Water Resour. Res. 9:691-700.

Nkedi-Kizza, P., J. W. Biggar, H. M. Selim, P. J. Wierenga, M. Th. van Genuchten, J. M. Davidson, and D. R. Nielsen. 1984. On the equivalence of two conceptual models for describing ion exchange during transport through an aggregated Oxisol. Water Resour. Res. 20:1123-1130.

Nkedi-Kizza, P., R. Jackson, and J. McIntyre. 1985. Triple labeling in miscible displacement studies using $^{3}H_2O$, $^{36}Cl$ and $^{45}Ca$. Soil Sci. Soc. Am. J. 49:780-783.

Nkedi-Kizza, P., P. S. C. Rao, and A. G. Hornsby. 1985. Influence of organic cosolvent on sorption of toxic organic substances (TOS) in soils. Environ. Sci. Technol.19:975-979.

Rao, P.S.C., A.G. Hornsby, D.P. Kilcrease, and P. Nkedi-Kizza. 1985. Sorption and transport of toxic organic substances in mixed_solvent systems: Model development and preliminary evaluation. J. Environ. Qual.14:376-383.

Ko Hui, L., R. S. Mansell, P. S. C. Rao, and P. Nkedi-Kizza. 1985. Miscible displacement of NH4-N solutions through columns of Oldeman fine sand. Soil and Crop Sci. Soc. Florida Proc. 40:98-102.

Woodburn, K. W., P. S. C. Rao, M. Fukui, and P. Nkedi-Kizza. 1986. Solvophobic approach for predicting sorption of hydrophobic organic chemicals by model sorbents and soils. Jour. Contam. Hydrol. 1:227-241.

Roberts, P., M. N. Gholtz, R. Scott Summers, J. Crittenden, and P. Nkedi-Kizza. 1987. The influence of mass transfer on solute transport in column experiments with an aggregated soil. Jour. Contam. Hydrol. 4:375-384.

Nkedi-Kizza, P., P. S. C. Rao, and A. G. Hornsby. 1987. The influence of organic cosolvents on leaching of hydrophobic organic chemicals through soils. Environ. Sci. Technol. 21:107-111.

Bouchard, D. C., A. L. Wood, M. L. Campbell, P. Nkedi-Kizza and P. S. C. Rao. 1988. Sorption nonequilibrium during solute transport. Jour. Contam. Hydrol. 2:209-223.

Nkedi-Kizza, P., M. L. Brusseau, P. S. C. Rao, and A. G.Hornsby.1989. Nonequilibrium sorption during displacement of hydrophobic organic chemicals and 45Ca through soil columns with aqueous and mixed-solvents. Environ. Sci. Technol., 23:817-820.

Gaston, L., P. Nkedi-Kizza, G. Sawka, and P. S. Rao. 1990. Spatial variability of morphological properties at a Florida Flatwoods site. Soil Sci. Soc. Am. J., 54:527-533.

Anamosa , P. R., P. Nkedi-Kizza, W. G. Blue, and J. B. Sartain. 1990. Water movement through an aggregated, gravely Oxisol from Cameroon. Geoderma, 46:263-281.

Lee, L.S., P. S. C. Rao, P. Nkedi-Kizza, and J. J. Delfino. 1990. Influence of solvent and sorbent characteristics on distribution of pentachlorophenol in octanol_water systems. Environ. Sci. Technol., 24:654-661.

Nkedi-Kizza, P., and J. Owusu_Yaw. 1992. Simultaneous High_Performance Liquid Chromatographic Determination of Nitrate, Nitrite, and organic Pesticides in Soil Solution Using a Multidimensional Column with Ultraviolet Detection Determination J. Environ. Sci. Health, A27(1):245-259.

Ou, L_T, P. Nkedi-Kizza, J. L. Cisar and G. H. Snyder.1992. Microbial Degradation of Propoxur in Turfgrass soil. J. Environ. Sci. Health, B27(5):545-564

Mansell, R. S., S. A. Bloom, B. Burgoa, P. Nkedi-Kizza and J. S. Chen, 1992. Experimental and Simulated PTransport in Soil Using a Multireaction Model. Soil Science, 185-194.

Nkedi-Kizza, P., L. A. Gaston and H. M. Selim. 1994. Extrinsic spatial variability of selected macronutrients in a sandy soil. Geoderma, 63:95-106.

Chirwa, P., P. K. R. Nair, and P. Nkedi-Kizza. 1994. Pattern of water depletion in alley cropping under semiarid conditions in Zambia. Agrofrostry Systems, 26:89-99

Mathews, B. W., L. E. Sollenberger, P. Nkedi-Kizza, L. A. Gaston, and H. D. Hornsby. 1994. Soil sampling for monitoring spatial variability of potassium in grazed pastures. Agron. J. 86:121-126.

Mansell, R. S., S. A. Bloom, and P. Nkedi-Kizza. 1995. Phosphorus transport in Spodosols impacted by dairy waste. Ecological Engineering. 5:281-299

Nzengung, V. A., E. A. Voudrias, P. Nkedi-Kizza, J. M. Wampler, and C. E. Weaver. 1996. Organic Cosolvent Effects on Sorption Equilibrium of Hydrophobic Organic Chemicals by Organoclays. Environ. Sci. Technol., 30:89-96

Chen, J. S., R. S. Mansell, P. Nkedi-Kizza, and B. Burgoa. 1996. Phosphorus Transport During Transient, Unsaturated Water Flow in an Acid Sandy Soil. Soil Sci Soc. Am. J., 60:42-48.

Nzengung, V. A., P. Nkedi-Kizza, E. A. Voudrias, and R. Jessup. 1997. Organic Cosolvent Effects on Sorption Kinetics of Hydrophobic Organic Chemicals by Organoclays. Environ. Sci. Technol.31:1470-1475.

Fares, A., A. K. Alva, S. Paramasivam, and P. Nkedi-Kizza 1997. Soil moisture monitoring techniques for optimizing citrus irrigation. Trends in Soil Sci.2:153-179.

Nkedi-Kizza, P., and K. D. Brown. 1998. Sorption, Degradation, and mineralization of carbaryl in Soils, for Single-Pesticide and Multiple-Pesticide Systems**.** J. Environ. Qual., 27:1318-1324.

Aniku, J , D. Katama, P. Nkedi-Kizza,ans Ssesanga S.PDCO and *Soil Fertility Management: Uganda Results and experience*. FAO Publication Series #.(2000)

Alva, A.K. Fares, A. and Nkedi-Kizza, P. 2001. Estimation of Soil Hydraulic Properties of a Sandy Soil Using capacitance Probes and Guelph Permeameter. Soil Science 165:768-777

Shinde, D., R. M. Savabi, and P. Nkedi-Kizza. 2001. Modeling Transport of Atrazine Through Calcareous Soils from South Florida. Transactions of ASAE V44: 251-258.

Mbuya, O. S., P. Nkedi-Kizza, and K. J. Boote. 2001. Fate of Atrazine in a Sandy Soil Cropped with Sorghum. JEQ. 30:71-77.

Snyder, R. H., J. B. Sartain, J. L. Cisar, P. Nkedi-Kizza, W. Harris, and M. A. Brown. 2001. Investigation of Coated Sands in Putting Green Construction. Soil and Crop Science Society of Florida Proceedings 609: 72-78.

Bonczek, J., Harris, W.G. and Nkedi_Kizza P. 2002. Monolayer to Bilayer Transition Arrangement of Hexadecyltrimethylammonium Cations on Sodium Montmorillonite. Clays and Clay Minerals 50:11-17.

Nkedi-Kizza, Peter, Jacob Aniku, Kafui Awuma, and Christina H. Gladwin. 2002. Gender and Soil fertility in Uganda. A Comparison of soil Fertility Indicators for Women and Men's Agricultural Plots. African Studies Quarterly. The Online Journal for African studies. V6-1: 1-17

Ouyang, Y., R. S. Mansell, and P. Nkedi-Kizza. 2002. Estimation of Gaseous Diffusion Coefficients with Changing Soil Air-Filled Porosity and temperature. Soil and Crop Science Society of Florida, Proceedings. V61:74-80

Ouyang, Y., P. Nkedi-Kizza, and R. S. Mansell, and J. Y. Ren. 2003. Spatial Distribution of DDT from Sediments and estuarine Rivers. J. Environ. Qual.32:1710-1716.

Zhough, M.., Y. C. Li, P. Nkedi-Kizza, and S. K. O'Hair. 2003. Endosulfan losses through runoff and leaching from calcareous gravelly marl soils. Vadose Zone 2:231-238

Savabi, M. R., D. Shinde, K. Konomi, P Nkedi-Kizza, and K. Jayachandran. 2003. Modeling the effect of soil amendments on soil water balance and water quality. In Proceedings of the Water Pollution 2003, June 18-23, Cadiz, Spain.

Ouyang, Y., R. S. Mansell, and P. Nkedi-Kizza. 2004. A Simple High Performance Liquid Chromatography Method for Analyzing Paraquat in Soil Solution Samples. Journal of Environmental Quality, 33:406-408

Ouyang, Y., R. S. Mansell, and P. Nkedi-Kizza. 2004. Displacement of Paraquat Solution

through Saturated Soil Column with Contrasting Organic Matter Content. Bulletin of Environmental Contamination & Toxicology, 73:725-731.

Allen, S. C., S. Jose, P. K. R. Nair, B. J. Brecke, P. Nkedi-Kizza, and C. L. Ramsey. 2004. Safety-net role of tree roots: Evidence from a pecan (*Carya illinoensis* K. Koch)–cotton (*Gossypium hirsutum* L.) alley cropping system in the southern United States. *Forest Ecology and Management 192: 395-407*

Konomi, K., Savabi, R. M., Shinde, D., Jayachandran, K., Nkedi-Kizza, P. & Reed, S. T. 2005. Water and Atrazine Movement in a Calcareous Compost Applied Soil During Simulated Multiple Storms Events. Water Air and Soil Pollution. 165:365-377

Wang, X., Li, Y., Olczyk, T., Munoz-Carpena, R. & Nkedi-Kizza, P. 2005. Phosphorus Leaching in a Sweet Corn Field with Natural Zeolite Amendment. Proceedings - Soil and Crop Science Society of Florida. 64:55-59

Savabi, R. M., Shinde, D., Konomi, K., Nkedi-Kizza, P. & Jayachandran, K. 2005. Modeling the Effect of Soil Amendments (Compost) on Water Balance and Water Quality. Journal of Environmental Hydrology. 13:1-14

Nkedi-Kizza, P., D. Shinde, R. Savabi, Y Ouyang and L. Nieves. 2006. Sorption Kinetics and Equilibria of Pesticides in carbonatic Soils from South Florida. J. Environ. Qual. 35:268-276

Kasozi, G. N., Kiremire, B. T., Bugenyi, F. W. B., Kirsch, N. H., and P. Nkedi-Kizza . 2006. Organochlorine Residues in Fish and Water Samples from Lake Victoria, Uganda. J. Environ Qual.35: 584-589.

Ouyang, Y., P. Nkedi-Kizza, Q. T. Wu, D. Shinde, C. H. Huang. 2006. Assessment of seasonal Variation in Surface Water Quality. Water Research 40:3800-3810.

Reed, S., D. Shinde, Konomi, K. Jayachandran, P. Nkedi-Kizza, and M. R. Savabi. 2006. Phosphorus Leaching Potential from Compost Amendments in a Carbonatic Soil. Soil Science 171:865-8

**Creative Works**

Everglades Agro Hydrology Model (EAHM). 2003. R. Savabi, D. Shinde, P. Nkedi-Kizza, D. Flanagan, and J. Arnold. USDA-ARS, Subtropical Horticulture Research Station, 13601 Old Cutler Road, Miami, FL 33158

**Abstracts: Over 100**

## LECTURES/SPEECHES PRESENTED AT PROFESSIONAL MEETINGS

### National

1. Oral presentations at National Meetings, for most of the abstracts

2. Nkedi-Kizza,P., P. S. C. Rao, and Linda. S. Lee. 1992. Sorption of organic chemicals in soil in single and multi-sorbate systems. Special Symposium, Industrial and Engineering Chemistry Division, American Chemical Society, ACS. Atlanta Georgia, September 21-23/1992.

3. Nkedi-Kizza, P. 1994. Effects of Agrochemicals on Environmental Pollution. Uganda North American Association, 6th Annual Convention, Los Angels, November, 23-28/94.

4. Nkedi-Kizza, P., J. Owusu_Yaw, and K, Awuma. 1994. HPLC- Determination of Nitrate, Nitrite, and Organic Pesticides in a Soil Solution Sample Using a Multi- Dimensional Column with UV Detection. 21st Annual National Conference, National Organization for the Professional Advancement of Black Chemists and Chemical Engineers NOBCChE), Atlantic City, April 4_9/94.

5. Nkedi-Kizza, P. 1995. The Waterhyacinth Problem on Lake Victoria. Uganda North American Association, 7th Annual Convention, Chicago, September 2-4/95.

6. Nkedi-Kizza, P.Environmental Pollution. 1994. Panel member and chair. Uganda North American Association, 6th Annual Convention, Los Angels, November 23-28/94.

7. Nkedi-Kizza, P. Environmental Pollution in Uganda. The Death of Lake Victoria. 1995. Panel member. Uganda North American Association, 7th Annual Convention, Chicago, September 2-4/95.

**State**

1. Nkedi-Kizza, P. 1992. Environmental Pollution from Agricultural chemicals. Presented at the South East Florida Geological Society Meeting, West Palm, Fl., May 4/1992.

2. Nkedi-Kizza, P. 1991. Factors that influence the potential for pesticides to pollute groundwater. Florida A&M University Advisory Council Field Day/Workshop, 2/18_ 20, 1991.

3. Nkedi-Kizza, P. 1993. Agricultural activities and non_point source pollution (pesticides). "Critical Issues in Water Quality Workshop", FAMU_USDA. (4/19 _ 21/1993, Tallahassee, Florida).

4. Nkedi-Kizza, P. 1996. Fate and Transport of Agricultural Chemicals in soil Materials. Florida A&M University, April 26/1996.

**International Involvement**

1. Nkedi-Kizza, P., and J. M. Davidson. 1994. The effect of agrochemicals on environmental pollution. Examples from United States and Uganda. Presented at the third International Social Studies Conference, Nairobi, Kenya, June 27_29/94.

2. Nkedi-Kizza, P. 1994. Sorption and transport of cations and anions in an aggregated Oxisol. ICRAF, Nairobi, Kenya 6/30/94.

3. Nkedi-Kizza, P.1994. The Waterhyacinth Problem in Florida: What can Uganda Learn from the Florida Experience? Uganda Ministry of Agriculture Animal Industry and Fisheries, Kampala, Uganda, July 14/94.

4. Nkedi-Kizza, P. 1996. Pesticide Usage and Potential for Environmental Pollution in Third World Countries: Uganda and Malawi. 22nd Annual Third World Conference, Chicago, March 27-30, 1996.

5. Nkedi-Kizza, P. 1996. The Waterhyacinth Problem in Uganda: The Death of Lake Victoria. 22nd Annual Third World Conference, Chicago, March 27_30, 1996.

6. Nkedi-Kizza, P. 1999. Use of banned pesticides and the potential for environmental pollution in Third World countries: Examples from Uganda and Malawi. Presented a seminar at Makerere University, Uganda.

7. Nkedi-Kizza, P. Sorption of organic bases in soils and organoclays. 2002. Presented a seminar at Makerere University, Uganda.

8. I was invited to develop and teach a six week's course to 11 PhD and MS students from Uganda, Tanzania, Ethiopia and Kenya in 2002. The course was entitled "The interactions of organic pesticides with tropical soils". The course was taught at Makerere University, and was funded by the Swedish International Development Agency (SIDA).

9. In 2005 I taught a similar course to 27 students (PhD and MS) from Uganda, Tanzania, Kenya, Ethiopia, Sudan, and Zimbabwe.

10. The MOU between UF/IFAS and Makerere University, Uganda, was signed in October 2003. I am the program manager for the MOU.

11. The MOU between UF/IFAS and FAO Eastern and Southern Africa, Zimbabwe, was signed in October 2003. I am the program manager for the MOU.

12. I hosted at UF the FAO representative for Southern and Eastern Africa, in January, 2004 for two days. Interactions with faculty and students at UF provided an opportunity for UF community to participate in food production in 21 countries in Sub-Saharan Africa.

13. I was invited to be an International Foundation for Science (IFS) Scientific Advisor Karlav 108, 5$^{th}$ floor, SE-11526 Stockholm, Sweden, 3/2004-present.

14. I reviewed one proposal for IFS entitled "Environmental Assessment of Pesticide Residue Levels in Drainage to Lake Victoria: A Case Study of River Nyondo Drainage

Basin of Winam Gulf in Kenya “, 4/2004.

15. I have served as major advisor for international students (T. Prabowo, Indonesia, MS; K. Mahmoud, Egypt, PhD; Gabriel Kasozi, Uganda, PhD, Augustin Muwamba, Uganda, MS)

16. I am a member of the dissertation committee of a PhD student (Mr. John Wasswa), Makerere University, Uganda, 6/2002-present

17. I was an external examiner for an MS student’s thesis (Mr. Vincent O. Madadi), University of Nairobi, Kenya, 8/2004

18. I have supervised 8 international Post Doc. Research Associate 1987-2004)

## CAREER CONTRACTS AND GRANTS

| | |
|---|---|
| Principle Investigator (PI) | $ 1,104,999 |
| Co-Principle Investigator (Co-PI) | $ 2,848,000 |
| | ---------- |
| Total | $ 3,952,999 |

## University Governance:

Member, Committee on Hunger in Africa, Center for African studies, 1986-1990.

Member of a three-man team from UF that established linkages between the University of Florida and Makerere University, Kampala, Uganda. [1/13-18/1988].

Member, Environmental Issues Committee, Center for African Studies, 1990-1994

Member, Search and Screen Committee, Director for the Center for African Studies, 1996.

Member, Advisory Board, Center for African Studies, 1995-1998; 2000-2003

IFAS Diversity Committee Member, 1997

Center for African Studies Advisory Board Member, 1995-1997; 2000-2004

IFAS Tenure and Promotion Committee Member, 1998

IFAS Search and Screen Committee Member, Director Pine Acres, 1998

IFAS Salary Adjustment Committee Member, 2000

Representative on the 2003 UF Community Campaign Employee Pledge Team 2003-present

Program Manager for MOU between UF/IFAS and Makerere University, 2003-present

Program Manager for MOU between UF/IFAS and FAO Regional Office for Southern and Eastern Africa, 2004-present

**Departmental committees since 1997:**

Liaison for International Programs, SWD, 1995-present

Search and Screen Committee Member for Drs. Jawitz, Bonczek, He, and Sickman.

positions in the department

Member of Peer Review Committee for Drs. Ogram and Jawitz courses, 2003 and 2005

Performed as Master of Ceremony for Drs Mansell and Hornsby retirement dinners 2002 & 2003.

Faculty Advisor to Agronomy and Soils Club, 2003-2005

**Service to Schools**

I participated in Science and Engineering Fair (Howard Bishop Middle School and Lincoln Middle school) Regional, and State, by supervising one student in 2002, 2003, 2004, 2005, and 2006.
I helped 3 students (from East Side High School) with a soil physics project, 2004.

**Editor of a Scholarly Journal, Service on an Editorial Advisory Board, or Reviewer or Scholarly Journal**

Regional editor (USA), Journal of Biochemicalphysics (1991-present)
Reviews for national/international journals (Soil Science Society of America Journal, Journal of Environmental Quality, Soil Science, Geoderma, Environmental Science and Technology, Science, Journal of Agriculture and Food chemistry, Vadose Zone Hydrology, Water Resources Research), chapters, and grant proposals since 1997: 40. Reviews for Departmental journal series number submissions since 1997: 30

**MEMBERSHIP AND ACTIVITIES IN THE PROFESSION**

1974-present Member of American Society of Agronomy.
1974-present Member of Soil Science Society of America.
1974-present Member, International Society of Soil Science.
1988-present Member, African Soil Science Society
1988-present Member, International Society of African Scientists

1992-present Member, American Chemical Society