Curriculum Vitae

DUKE URHOBO OPHORI

Home address:
127 BERKELEY AVE.
BLOOMFIELD, NJ 07003
USA
Phone: 1-973-566-0118(h)/1-973-464-6238(c)

Office address:
DEPARTMENT OF EARTH & ENVIRONMENTAL STUDIES
MONTCLAIR STATE UNIVERSITY
UPPER MONTCLAIR, NJ
Phone: 1- 973-655-7558 (office)
Fax: 1-973-655-4072
Email: ophorid@mail.montclair.edu

Duke U. Ophori
Curriculum Vitae

SUMMARY OF SKILLS AND ABILITIES:

I would describe myself as an enthusiastic individual who has always thrived on being in challenging learning situations. To this end, I am willing to accept a great deal of responsibility in my professional and personal life, yet I remain innovative and resourceful when dealing with tough problems. Largely due to my broad background of work experience, education and travel, I feel that I am a good communicator, able to present a positive public image in writing and at an interpersonal level. I am very capable of relating to a variety of people.

Ph.D. THESIS TOPIC:

A Numerical Simulation Analysis of Regional Groundwater Flow for Basin Management: Plains Regions, Alberta.

Achievements:
-- (Study completed in March, 1986)

Conducted under Dr. J. Tóth, Dept. of Geology, University of Alberta, Edmonton, Alberta, Canada.

EDUCATIONAL BACKGROUND:

University of Alberta
Department of Geology
Edmonton, Alberta, Canada
Attended: 9/82 - 3/1986
Degree: **Ph.D. (Hydrogeology), 1986**

University of Waterloo
Department of Earth Sciences
Waterloo, Ontario, Canada
Attended: 9/80 - 6/1982
Degree: **M.Sc. (Hydrogeology), 1982**

University of Ibadan
Department of Geology
Ibadan, Oyo State, Nigeria
Attended: 9/73 - 6/1976
Degree: **B.Sc. (Geology), 1976**

Government College Ughelli
Ughelli, Bendel State
Nigeria
Attended: 1/65 - 12/1971
Higher School Certificate (HSC), 1971
West African School Certificate (WASC), 1969
Activities: School Prefect

PROFESSIONAL EXPERIENCE:

Hydrogeological Consultant 1980 - 1982
Regional Municipality of Waterloo, Ontario
(alongside my M.Sc. Studies)

Hydrogeological Consultant 1982 - 1986
Alberta Environment, Lethbridge, Alberta
(alongside my Ph.D. studies)

(*Please see relevant reports on list of publications and reports*)

Assistant Professor 1986 - 1987
Department of Geology
University of Port Harcourt, Port Harcourt, Nigeria

Post-Doctoral Fellow 1987 - 1989
Department of Geology
University of Alberta, Edmonton, Alberta, Canada

Research Hydrogeologist/Scientist 1989 - 1995
Atomic Energy of Canada Limited
Whiteshell Laboratories, Pinawa, Manitoba, Canada

Assistant Professor 1995 –2000
Associate Professor 2000 - 2008
Professor 2008 - Present
Department Chairperson 2007 - 2010
Department of Earth & Environmental Studies
Montclair State University, Upper Montclair, NJ, U.S.A.

CAREER EXPERIENCE:

Teacher 1972 - 1973
Baptist High School, Orerokpe
Bendel State, Nigeria

Responsibilities: Math. and Physics to senior school students

Soil Testing Officer 1976 - 1977
Laboratory Section, Min. of Works & Housing
Kano, Kano State, Nigeria
Responsibilities: Atterberg tests of soil materials/Field supervision of soil sampling

CAREER EXPERIENCE (Con.)

Geologist 1977
Geological Survey of Nigeria
Kano, Kano State, Nigeria

Responsibilities: Geological mapping of a map sheet

Graduate Assistant 1977-1979
Department of Geology, University of Ilorin
Ilorin, Kwara State, Nigeria

Responsibilities: Teaching both the theory and labs. to undergraduate students in Igneous & Metamorphic Petrology, and Paleontology (Geology 101, 102)

Assistant Lecturer 1979 - 1980
Department of Geology, University of Port Harcourt
Port Harcourt, Rivers State, Nigeria

Responsibilities: Teaching both the theory and labs. to undergraduate students in Igneous & Metamorphic Petrology, and Paleontology (Geology 202, 203)

Teaching Assistant 1980 - 1982
Department of Earth Sciences, University of Waterloo
Waterloo, Ontario, Canada

Responsibilities: Conducting laboratories for undergraduate students in Physical & Historical Geology (Geology 221, 222)

Teaching Assistant 1982 - 1985
Department of Geology, University of Alberta
Edmonton, Alberta, Canada

Responsibilities: Conducting labs. for undergraduate students in Physical Geology & Earth History (Geology 202, 203). Conducting labs. for undergraduate/graduate students in **Petroleum Hydrogeology** and dealt with the understanding and interpretation of regional groundwater flow patterns and parameters in relation to petroleum occurrences, migration and accumulation (Geology 527).

CAREER EXPERIENCE (Con.)

Assistant Professor 1986 - 1987
Department of Geology, University of Port Harcourt
Port Harcourt, Rivers State, Nigeria

Responsibilities: Teaching both the theory and labs. to undergraduate students in Igneous & Metamorphic Petrology, Paleontology, and Hydrogeology (Geology 101, 102, 406)

Post-Doctoral Fellow 1987 - 1988
Department of Geology, University of Alberta
Edmonton, Alberta, Canada

Responsibilities: **Applying regional groundwater flow principles to petroleum exploration**

Hydrogeologist 1989 - 1995
Atomic Energy of Canada Limited
Whiteshell Laboratories, Pinawa, Manitoba, Canada

Responsibilities: Numerical modeling of regional groundwater flow, heat and contaminant transport in the Canadian Nuclear Fuel Waste Management Program (CNFWMP). Assessing the Concept of disposal of nuclear fuel waste deep in plutonic rocks of the Canadian Shield.

Assistant Professor 1995 – 2000
Associate Professor 2000 - 2008
Professor 2008 - Present
Department Chairperson 2007 - 2010
Department of Earth & Environmental Studies
Montclair State University, Upper Montclair, NJ, U.S.A.

Responsibilities: Teaching various courses to both undergraduate and graduate students in the Geoscience/Environmental Science Program. **Served as Department Manager**.

PROFESSIONAL ORGANIZATIONS:

Member: American Geophysical Union
Member: Association of Groundwater Scientists and Engineers
Member: International Association of Hydrogeologists

RECOGNITION AND AWARDS:

Involved in 1977, in an International Paleontological Expedition to Sokoto State,Nigeria. Study involved a team of experts from the United Kingdom (Drs. B.Halstead, D. Moody, C. Walker, E. Buffetaut, J. Halstead, P. Allsworth-Jones),and Dr. S.W. Peters and **D.U. Ophori** (myself). Details are published in MonographNo. 1, *The Nigerian Field: The International Field Studies Journal of West Africa,*1979, by L.B. Halstead, University of Reading, U.K.

Recognized locally and internationally through scientific publications in different journals in Canada, United States, United Kingdom, The Netherlands and Nigeria (see list of publications). Request for reprints of my papers have come from parts of North and South America, Europe, Asia, Australia and Africa (evidence available).

Our paper " *A Hydraulic Trap for Preventing Collector Well Contamination" by Duke U. Ophori and R.N. Farvolden* (published in the journal "*Ground Water*", 1985) was selected by the *British Commonwealth Science Council* for publication in the book "*A Practical Manual on Groundwater Modelling" by F.F. Akindunni and E.O. Frind,* 1993. This Manual describes a practical approach to groundwater modeling in developing commonwealth countries.

Special request was made to us to use figures from our paper "*Characterization of Ground-Water Flow by Field Mapping and Numerical Simulation, Ross Creek Basin, Alberta, Canada" by Duke U. Ophori and J. Tóth*. (published in the journal *Ground Water,* 1989) in the book " *Applied Groundwater Modeling: Simulation of Flow and Advective Transport" by M.P. Anderson and W.W. Woessner* (1992). This book has been published, and acts as a major source of information to Groundwater modelers in Universities and Research Agencies in North America and all over the world.

Played a major and active role in the research and development of the Canadian Concept for the Disposal of Nuclear Fuel Waste deep in Plutonic Rocks of the Canadian Shield. This concept of Atomic Energy of Canada Limited (AECL), a major producer of Nuclear (CANDU) Power Reactors in the world, has been reviewed and accepted by the Government of Canada. Following acceptance by the Canadian Government, the basic ideas behind the concept are now being applied worldwide (Please refer to the list of publications for my role in the concept assessment).

Served as a technical/peer reviewer in many other scientific papers and reports that have been written to establish the above concept by the Atomic Energy of Canada Limited.

Prize for Best Graduating Student, Geology Dept., University of Ibadan, Ibadan, Nigeria, 1976.

Awarded the Montclair State University (MSU) Alumni Association Faculty Grant, 1996.

Awarded the (MSU) Margaret and Herman Sokol Faculty/Student Research Grant, 1996.

Awarded U.S. Environmental Protection Agency (EPA) Hydrogeological Environmental Research Grant, 1997, 1998, 1999.

RECOGNITION AND AWARDS (Con.)

Awarded the (MSU) Global Education Grant, 1997, 1998.

Awarded the (MSU) Student/Faculty Research Grant, 1999.

Awarded National Science Foundation Grant (Co-PI), 2000.

Awarded the (MSU) Global Education Grant, 2000.

Awarded the (MSU) Student/Faculty Research Grant, 2002.

Awarded the New Jersey Dept. of Environmental Protection Grant (Co-PI), 2002.

Named the (MSU) Margaret and Herman Sokol Faculty Fellow, 2002.

Awarded National Science Foundation Grant (Co-PI), 2003.

Awarded the (MSU) Judy and Josh Weston and Family Mentor Faculty Grant, 2003.

Awarded the (MSU) Global Education Grant, 2004.

Awarded the (MSU) Student/Faculty Research Grant, 2005.

Awarded the (MSU) Global Education Grant, 2006.

Awarded the (MSU) Global Education Grant, 2007.

Co-Participant: Pre-MARC Coordinator in a Grant Awarded by National Institute Health (NIH) with Dr. Reginald Halaby as Principal Investigator, 2007

Awarded the (CSAM, MSU) Proposal Development Grant, 2009.

Awarded the (MSU) Global Education Grant, 2009.

Recently (2014) honored by the University of Ghana, Legon, Ghana with an appointment as a Diasporan Fellow to the Department of Earth Science. 2014.

In 2011, the University of Ghana established a Diaspora Linkage Programme (UG-DLP) under its Next Generation of African Academics project funded by the Carnegie Corporation of New York. The UG-DLP seeks to promote partnerships with African Professors in the diaspora in order to draw on their expertise to enhance UG's faculty strength for post-graduate teaching, supervision and thesis examination, with particular emphasis on PhD training. It is expected that such partnerships will lead also to collaborative research that will enhance research productivity.

PUBLICATIONS:

Papers

Ophori, D.U. and R.N. Farvolden. 1985. A hydraulic trap for preventing collector well contamination: A case study. *Ground Water*, Vol. 23, No. 5, pp. 600-610 (Also published in "A Practical Manual on Groundwater Modelling" by F.F. Akindunni and E.O. FrindBritish Commonwealth Science Council, Series No. CSC(93) WMR-16. Technical Paper 292, pp. 141-151.

Ophori, D.U. and J. Tóth. 1989. Patterns of groundwater chemistry, Ross Creek Basin, Alberta, Canada. *Ground Water,* Vol. 27, No. 1, pp. 20-26.

Ophori, D.U. and J. Tóth. 1989. Characterization of ground-water flow by field mapping and numerical simulation, Ross Creek Basin, Alberta, Canada. *Ground Water,* Vol. 27, No. 2, pp. 193-201.

Ophori, D.U. and J. Tóth. 1990. Influence of the location of production wells in unconfined groundwater basins: An analysis by numerical simulation. *Canadian Journal of Earth Sciences*, Vol. 27, No. 5, pp. 657-668.

Ophori, D.U. and J. Tóth. 1990. Relationships in regional groundwater discharge to streams: An analysis by numerical simulation. *Journal of Hydrology,* Vol. 119, pp. 215-244.

Ophori, D.U. 1991. On management of groundwater in Ross Creek Basin, Alberta, Canada. *Journal of Water Resources Planning and Management, American Society of Civil Engineers (ASCE)*, Vol. 117, No. 2, pp. 195-216.

Akpokodje, E. G**. Ophori, D.U.,** Enebeli, V. V. & Nwadibia, E. O., 1991. Anomalous response of groundwater level to seasonal rainfall variations in parts of Imo state: A preliminary Study. *J. Min. & Geol.,* Vol. 4. No. 1, pp. 55-60.

Ophori, D.U. 1992. The stability of a basin under groundwater development: A numerical experiment. *Modern Geology,* Vol. 16, pp. 317-335.

Ophori, D.U. 1998. Flow of groundwater with variable density and viscosity, Atikokan Research Area, Canada. *Hydrogeology Journal,* Vol. 6, No. 2, pp. 193-203.

Ophori, D.U. 1998. The significance of viscosity in density-dependent flow of groundwater. *Journal of Hydrology,* Vol. 204, pp. 261-270.

Ophori, D.U., T. Chan and F.W. Stanchell. 1998. Hydrologic response to pumping and contaminant advection in a fractured rock environment. *Journal of the American Water Resources Association*, Vol. 34, No. 1, pp. 57-72.

Papers (Con.)

Ophori, D.U. 1999. Constraining permeabilities in a large-scale groundwater system through model calibration. *Jour. of Hydrology*, Vol. 224, pp. 1-20.

Ophori, D.U. 2000. Simulating large scale groundwater flow for waste disposal purposes. *Földtani Kozlony*, Vol. 130, No. 2, pp. 263-273.

Ophori, D.U. and B. Maharjan. 2000. First approximations of soil moisture retention curves using the filter-paper method, Long Island, New York *Hydrological Processes*, Vol. 14, pp. 1131-1138.

Ophori, D.U. and M. McGill. 2000. Alternative conceptual models of groundwater flow and contaminant transport, Northeastern New Jersey. *Northeastern Geology & Environmental Science*, Vol. 22, No. 2, pp. 130-141.

Davison, C.C., A. Brown, M. Gascoyne, D. Stevenson and **D.U. Ophori.** 2000. Understanding large scale groundwater flow in fractured crystalline rocks to aid in repository siting. *Hydrogéologie*, n° 2, pp. 3-11.

Rodriquez, E. K.A. McGuinness and **D.U. Ophori**. 2003. Reductive dechlorination of chlorinated solvents in groundwater: *A Case Study. Am. Chem. Soc. Div. Fuel. Chem. Prepr*. Vol. 48, No.2, pp.925-926.

Rodriquez, E. K.A. McGuinness and **D.U. Ophori**. 2004. A field evaluation of enhanced reductive dechlorination of chlorinated solvents in groundwater, New York Metropolitan Area. *Environmental Geology*, Vol. 45, pp. 623-632.

Ophori, D.U. 2004. A simulation of large-scale groundwater flow and travel time in a fractured rock environment for waste disposal purposes. *Hydrological Processes,* Vol. 18, pp. 1579-1593.

Ophori, D.U. and R. Riberdy. 2005. An analysis of groundwater flow at a proposed wetland mitigation site, Central New Jersey. *Northeastern Geology & Environmental Sciences*, Vol. 27, No. 2, pp. 123-135.

Ophori, D.U. 2005. An analysis of groundwater movement for environmental waste control. *In* URBAN DIMENSIONS OF ENVIRONMENTAL CHANGE Science, Exposures, Policies and Technologies, May 25-28, 2004, Shanghai, China: (Eds) Feng, H., L. Yu and W. Solecki, Science Press USA Inc, Monmouth Junction, New Jersey, pp. 59-66.

Ophori, D.U. 2006. A preliminary analysis of regional groundwater movement in the Niger Delta, Nigeria. *Journal of Environmental Systems*, Vol. 32, No. 2, pp. 125-144.

Papers (Con.)

Ophori, D.U. 2007. A simulation of large-scale groundwater flow in the Niger Delta, Nigeria. *Environmental Geosciences*, Vol. 14, No. 4, pp. 1-15.

Ophori, D.U., M. Gorring, K. Olsen, J. Hope and E. Orhuah. 2007. A preliminary analysis of groundwater chemistry in shallow boreholes, Ughelli, Nigeria. *Journal of Environmental Hydrology*, Vol. 15, Paper 13, pp. 1-8.

Mujtaba, G., Z. Ahmed and **D.U. Ophori**. 2007. Management of groundwater resources in Bari Doab, Pakistan, using a numerical groundwater flow model. *Journal of Environmental Hydrology*, Vol. 15, Paper 31, pp. 1-14.

Xeflide, S. K. and **D.U. Ophori**. 2007. Characterization and frequency analysis of one day annual maximum and two to five consecutive days' maximum rainfall of Accra, Ghana. *ARPN Journal of Engineering and Applied Sciences*, Vol. 2, No. 5, pp. 27-31.

Yidana, S.M., **D.U. Ophori** and B. Obeng. 2007. Hydrochemical analysis of groundwater from the Keta Basin, Ghana. *Journal of Environmental Hydrology*, Vol. 15, Paper 23, pp. 1-11.

Yidana, S.M., **D.U. Ophori** and B. Banoeng-Yakubo. 2007. Irrigation water resource management for sustainable agriculture – The Ankobra Basin, Ghana. *Journal of Irrigation and Drainage Engineering, American Society of Civil Engineers (ASCE),* Vol. 133, No. 6, pp. 609-615.

Xeflide, S. K. and **D.U. Ophori**. 2008. Return period analysis as a tool for urban flood prediction in the Accra Plains, Southern Ghana. *Journal of Environmental Hydrology,* Vol. 16, Paper 15, pp. 1-8.

Yidana, S.M., **D.U. Ophori** and B. Banoeng-Yakubo. 2008. A multivariate statistical analysis of surface water chemistry data – The Ankobra Basin, Ghana. *Journal of Environmental Management*, Vol. 86, pp. 80-87

Yidana, S.M., **D.U. Ophori** and B. Banoeng-Yakubo. 2008. Hydrogeological and hydrochemical characterization of the Voltaian Basin: The Afram Plains Area, Ghana. *Environmental Geology,* Vol. 53, pp. 1213-1223.

Yidana, S.M.., **D.U. Ophori** and B. Banoeng-Yakubo. 2008. Groundwater quality evaluation for productive uses – The Afram Plains Area, Ghana. *Journal of Irrigation and Drainage Engineering, American Society of Civil Engineers (ASCE)*, Vol. 134, No. 2, pp. 222-227.

Papers (Con.)

Yidana, S.M., **D.U. Ophori** and B. Banoeng-Yakubo. 2008. Hydrochemical evaluation of the Volta Basin: The Afram Plains Area, Ghana. *Journal of Environmental Management,* Vol. 88. pp. 697-707.

Yidana, S.M. and **D.U. Ophori**. 2008. Groundwater resources management in the Afram Plains Area, Ghana. *KSCE Journal of Civil Engineering,* Vol. 12, No. 5, pp. 339-347.

Yidana, S.M. and **D.U. Ophori**. 2008. Groundwater availability in the shallow aquifers of the southern voltaian system: a simulation and chemical analysis. *Environmental Geology*, Vol. 55, pp. 1647-1657.

Barry, F., **D.U. Ophori**, J. Hoffman and R. Canace. 2009. Groundwater flow and capture zone analysis of the Central Passaic River Basin, New Jersey. *Environmental Geology*, Vol. 56, pp. 1593-1603.

Xeflide, S.K. and **D.U. Ophori.** 2009. An assessment of the time-dependent structure of streams in New Jersey, USA. *Environmental Geology*, Vol. 58, pp. 785-793.

Xeflide, S. and **D. Ophori.** 2009. Analysis of reservoir performance metrics of streams, New Jersey, USA. *Journal of Environmental Hydrology,* Vol. 17, Paper 30, pp. 1-4.

Nwachukwu M.A., H. Feng and **D. Ophori**. 2010. Groundwater flow model and particle track analysis for selecting water quality monitoring well sites, and soil sampling profiles. *Journal of Spatial Hydrology,* Vol. 10, No. 1, Spring 2010.

Ophori, D. and M. Yidana. 2010. An analysis of groundwater for domestic and irrigation purposes in the Afram Plains, Ghana. *Scientia Africana*. Vol. 9, No. 1, pp. 9-19.

Chanda, S. and **D. Ophori**, 2012. Assessment of water balance of the semi-arid region in southern San Joaquin Valley California using Thorthwaite and Mather's Model", *Journal of Environmental Hydrology*, Vol. 20, pp 15.

Roy, S., **D. Ophori**, and S. Kefauver. 2013. Estimation of actual evapotranspiration using surface energy balance algorithms for land model: a case study in San Joaquin Valley, California. *Journal of Environmental Hydrology,* Vol. 21, Paper 14.

Yidana, S.M., **D.U. Ophori** and **C.A. Alo**. 2014. Hydrological characterization of a tropical crystalline aquifer system. *Journal of Applied Water Engineering and Research,* Vol. 2(1): 13-24.

Papers (Con.)

Ophori, D.U. and S. Roy. 2014. Simulation of Regional Groundwater Flow using MODFLOW in southern San Joaquin Valley, California". Journal of Environmental Geology (in press).

Papers in Conference Proceedings and Presentations

Ophori, D.U. 1985. Clay minerals and weathering in a glacial till. *Proc. of the International Clay Conference*, University of Port Harcourt, Nigeria, 5 pages.

Ophori, D.U. and R.N. Farvolden. 1985. Containment of contamination at an induced infiltration site (abstract). *Proc. of the 2nd Annual Canadian/American Conference on Hydrogeology: Hazardous Wastes in Groundwater - A Soluble Dilema,* Banff, Alberta, Canada, pp. 195.

Ophori, D.U. and J. Tóth. 1985. Regional groundwater flow and baseflow regularities (abstract). *Proc. of the 5th Annual Hydrology Days, American Geophysical Union Front Range Branch,* Fort Collins, Colorado.

Ophori, D.U. and J. Tóth, 1986. Petroleum Hydrogeology: A hydrogeological approach to petroleum exploration and basin analysis. *Proc. of the 3rd Canadian/American Conference on Hydrogeology,* Banff, Alberta, Canada, pp. 108-111.

Chan, T., **D.U. Ophori** and F.W. Stanchell. 1991. Sensitivity of advective contaminants to pumping near a hypothetical nuclear fuel waste disposal vault. *Proc. of the International Association of Science and Technology for Development (IASTED) International Symposium on World Environment,* Calgary, Alberta, pp. 125-129.

Ophori, D.U. and T. Chan. 1994. Simulation of ^{18}O and ^{3}H distributions in the Atikokan Research Area. *Proc. of the 1994 Nuclear Simulation Symposium,* October 12-14, 1994, Pembroke, Ontario, pp. 244-258.

Ophori, D.U. and T. Chan. 1995. Two-dimensional groundwater flow and advective solute transport in conceptual models of the Whiteshell Research Area. *Proc. of Solutions '95, International Association of Hydrogeologists, Congress XXVI,* June 4-10, 1995, Edmonton, Alberta, Canada, 6 Pages.

Stevenson, D.R., A. Brown, C.C. Davison, M. Gascoyne, R.G. McGregor, **D.U. Ophori,** N.W. Scheier, F.W. Stanchell, G.A. Thorne and D.K. Tomsons. 1995. A revised conceptual hydrogeological model of a crystalline rock environment, Whiteshell Research Area, southeastern Manitoba, Canada. *Proc. of Solutions '95, International Association of Hydrogeologists, ongress XXVI,* June 4-10, 1995, Edmonton, Alberta, Canada, 9 pages.

Davison, C.C., A. Brown, M. Gascoyne, D. Stevenson and **D.U. Ophori.** 1996. Understanding large scale groundwater flow to aid in repository siting. *Proc. of the Canadian Nuclear Society (CNS) Conference*, September, 1996, Winnipeg, Manitoba, Canada, 7 pages.

Papers in Conference Proceedings and Presentations (Con.)

Ophori, D.U. and T. Chan. 1997. Calibration of a regional groundwater flow model using solute transport modeling (abstract). *Abstract with Programs*, GSA 32nd Annual Meeting, Northeastern Section, March, 1997, King of Prussia, Pennsylvania, U.S.A., pp. 71.

Ophori, D.U. 1997. A numerical simulation analysis of viscosity in variable-density flow of groundwater (abstract). *Abstract with Programs, GSA Annual Meeting,* October 20-23, 1997, Salt Lake City, Utah, U.S.A., pp. A75.

Ophori, D.U. 1998. Preliminary selection of a hypothetical nuclear waste disposal site by simulating regional groundwater flow (abstract). *Abstract with Programs*, GSA 33rd Annual Meeting, Northeastern Section, March 19-21, 1998, Portland, Maine, USA., Vol. 30, No. 1, pp. A65.

McGill, M. and **Ophori, D.U.** 1998. Alternative conceptual models of groundwater flow and contamination transport using computer simulation, Northeastern New Jersey (abstract). *Abstract with Programs,* New Jersey Section AWWA Spring Conference March 23-27, 1998, Atlantic City, New Jersey, U.S.A.

Ophori, D.U. 1998. Conceptual models of groundwater flow contaminant transport in Northeastern New Jersey (abstract). *Abstract with Programs,* New Jersey Science Consortium Symposium: A Wealth of Resources in New Jersey - Showcasing Research, March 30, 1998, Kean University, Union, New Jersey, U.S.A.

Ophori, D.U. and M. McGill. 1999. An evaluation of three alternative conceptual models of groundwater flow and advective transport using computer simulation, Upper Montclair, New Jersey (abstract). *Abstract with Programs*, GSA 34th Annual Meeting, Northeastern Section, March 22-24, 1999, Providence, Rhode Island, U.S.A., p. A60.

Ophori, D.U. 1999. Simulating large scale groundwater flow for waste disposal purposes (abstract). *Abstract with programs*, The Geology of Today for Tomorrow – A Satellite Conference of the World Conference on Science, June 21-22, 1999, Budapest Hungary, p 60.

Ophori, D.U. 1999. Prospects of Petroleum Hydrogeology in the Niger Delta, Nigeria (abstract). *Book of Abstracts*, First International Conference on Science, Technology and Sustained Development, Dec. 27-29, 1999. Uyo, Nigeria, 1p.

Papers in Conference Proceedings and Presentations (Con.) ***Duke U. Ophori***
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Ophori, D.U. and B. Maharjan. 1999. Estimating soil moisture retention curves using the filter-paper method (abstract). *Book of Abstracts*, First International Conference on Scien., Tech. and Sustained Development, Dec. 27-29, 1999. Uyo, Nigeria, 1p.

Ophori, D.U., B. Maharjan and M. Bender. 2000. Determination of soil moisture retention curves by the filter-paper method, Long Island, New York (abstract). *Abstract with Programs*, GSA 35th Annual Meeting, Northeastern Section, March 13-15, 2000, New Brunswick, New Jersey, U.S.A., p. A60.

Schaffner, M. and **D.U. Ophori.** 2001. A preliminary laboratory analysis of regional groundwater flow (abstract). *Abstract with Programs*, GSA 36th Annual Meeting, Northeastern Section, March 12-14, 2001, Burlington, Vermont, U.S.A., p. A35.

Maharjan, B. and **Ophori, D.U.** 2001. Simulation of groundwater flow to determine vulnerability to contamination, Long Island, New York (abstract). *Abstract with Programs,* New Jersey Section AWWA Spring Conference April 2-5, 2001, Atlantic City, New Jersey, U.S.A.

Schaffner, M, M. Kawada and **Ophori, D.U.** 2002. A laboratory and simulation analysis of regional groundwater flow. (abstract). *Abstract with Programs,* New Jersey Section AWWA Spring Conference March 19-22, 2002, Atlantic City, New Jersey, U.S.A.

Rodriguez, E., K.A. McGuinness and **D.U. Ophori.** 2003. Reductive dechlorination of chlorinated solvents in groundwater: A Case Study. (abstract). *Abstract with Programs*, American Chemical Society, 226th ACS National Meeting, September 7-11, 2003, New York, NY, USA, p. 40-TECH.

Riberdy, R. and **D.U. Ophori**. 2003. Analyzing groundwater flow to aid in wetland mitigation. (abstract). *Abstract with Programs*, The Meadowlands Symposium: A Scientific Symposium on the Hackensack Meadowlands, October 9-10, 2003, Lyndhurst, New Jersey, USA, p. 25.

Riberdy, R. and **D.U. Ophori**. 2003. Groundwater flow at a proposed wetland mitigation site. (abstract). *Abstract with Programs*, The 6th US Environmental Protection Agency (US EPA) Wetlands Workshop, October 27-30, 2003, Atlantic City, New Jersey, USA.

Ophori, D.U. 2004. Analyzing groundwater movement for environmental waste control. (abstract). *Abstract with Programs*, The Urban Dimensions of Environmental Change: Science, Exposures, Policies and Technologies, May 25-28, 2004, Shanghai, China, p.67.

Yidana, S. M. and **D.U. Ophori.** 2006. A multivariate statistical analysis of water chemistry – The Ankobra Basin, Ghana (abstract). *Abstract with Programs*, GSA 41st Annual Meeting, Northeastern Section, March 20-22, 2006, Camp Hill/Harrisburg, Pennsylvania, U.S.A., p. 64.

Ophori, D.U. and F. Barry**.** 2006. Development and calibration of a groundwater flow model, Passaic River Basin, New Jersey (abstract). *Abstract with Programs*, GSA 41st Annual Meeting, Northeastern Section, March 20-22, 2006, Camp Hill/Harrisburg, Pennsylvania, U.S.A., p. 74.

Papers in Conference Proceedings and Presentations (Con.)

Ophori, D.U., M. Gorring, K. Olsen, J. Hope and E. Orhuah. 2006. Groundwater quality of shallow domestic water supply wells, Ughelli, Nigeria (abstract). *Conference Program and the Journal of Abstracts*, International Conference on Infrastructural Development and the Environment (ICIDEN-Abuja 2006), September 10-15, 2006, Abuja, Nigeria, p. 68-69.

Ophori, D.U. 2006. A preliminary simulation of large-scale groundwater flow in the Niger Delta, Nigeria (abstract). *Conference Program and the Journal of Abstracts*, International Conference on Infrastructural Development and the Environment (ICIDEN-Abuja 2006), September 10-15, 2006, Abuja, Nigeria, p. 68.

Barry, F., **D.U. Ophori**, J. Hoffman and R. Canace. 2006. Simulation of groundwater response to development, Passaic River Basin, New Jersey (abstract). *Abstract with Programs*, Second Passaic River Symposium: Progress and Challenges, October 13, 2006, Montclair State University, Upper Montclair, New Jersey, pp. 39.

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PERSONAL REFERENCES:

1. Professor Harbans Singh
   Department of Earth and Environmental Studies
   Montclair State University
   Upper Montclair, New Jersey, 07043, USA.
   Ph: 1-973-655-7383/ Email: SinghH@mail.montclair.edu

2. Professor Rolf Sternberg
   Department of Earth and Environmental Studies
   Montclair State University
   Upper Montclair, New Jersey, 07043, USA.
   Ph: 1-973-655-7386/ Email: Fsternie@aol.com

3. Professor John Enaohwo
   Department of Educational Administration
   University of Port Harcourt
   Port Harcourt, River State, Nigeria.
   Ph:08056200709, 07062567116/ 07057439618/Email: Oghwegbaena@gmail.com