

Engr. Prof. Constantine Crowner MBAJIORGU, FNIAE, FNAHS
(Curriculum Vitae)

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Date/Place of Birth: 19 May 1957, Enugu, Nigeria

Citizenship: Nigeria

Marital Status: Married with 3 children

Hometown: Ihiala, Ihiala LGA, Anambra State

Permanent Residence: 1, Prof. Jonah Onuoha Street, Olivet Hill, Off Ibagwa Road,
Amogbo, Nsukka, Enugu State

Education

- 1971-1975: College of the Immaculate Conception (C.I.C), Enugu, Nigeria; **General Certificate of Education** (Ordinary Level) of the University of London and **West African School Certificate**.
- 1975-1980: University of Ife (now *Obafemi Awolowo University*), Ile-Ife, Nigeria; **B.Sc. (Agricultural Engineering)** with Second Class (Honors) Upper Division.
- 1982-1983: Ahmadu Bello University, Zaria, Nigeria; **M.Eng. (Water Resources and Environmental Engineering)**.
- 1988-1992: Technical University of Nova Scotia (now *Dalhousie University, Sexton Campus*), Halifax NS Canada; **Ph.D. (Agricultural Engineering)**.

Professional Training

- International Institute for Land Reclamation and Improvement (ILRI), Wageningen, The Netherlands; August to December 1984. Postgraduate Certificate in Land Drainage.
- Nova Scotia CAD/CAM Centre, Halifax NS, Canada; August 1 - 29 1989. Certificate in Computer Aided Design (AutoCAD).
- West Africa Capacity Building Network for IWRM (WA-Net), National Water Resources Institute, Kaduna, Nigeria; December 6 - 10 2004. Certificate in Integrated Water Resources Management (IWRM).

Work Experience:

- Tutor (National Youth Service Primary Assignment) in Dept. of Agricultural Engineering, Rivers State University of Science and Technology, Port Harcourt; September 1980 to July 31, 1981.
- Lecturer in Water Resources Engineering, National Water Resources Institute, Mando Road, Kaduna; August 1, 1981 to January 30, 1986.
- Lecturer in Agricultural Engineering, Faculty of Engineering, University of Jos, Makurdi Campus, Makurdi; January 31, 1986 to May 31, 1987.
- Lecturer in Agricultural Engineering, Faculty of Engineering, University of Nigeria, Nsukka; June 1, 1987 to September 30, 1995.
- Senior Lecturer in Agricultural & Bioresources Engineering, Faculty of Engineering, University of Nigeria, Nsukka; and, Adjunct Senior Lecturer in Agricultural & Bioresources Engineering, Faculty of Engineering, Enugu State University of Science and Technology, Enugu; October 1, 1995 to September 30, 2008.

- Commonwealth Fellow in Applied Hydrology at Water Resource Systems Research Laboratory, University of Newcastle upon Tyne, United Kingdom; September 1, 2000 to August 31, 2001.
- Acting Head, Agricultural & Bioresources Engineering Dept., Faculty of Engineering, University of Nigeria, Nsukka; September 18, 2003 to August 1, 2005.
- Coordinator, Eco-Hydrological Systems Research Unit (EHSRU) in Agricultural & Bioresources Engineering Dept., Faculty of Engineering, University of Nigeria, Nsukka; September 2001 to date.
- Professor of Agricultural & Bioresources Engineering, University of Nigeria, Nsukka; and, Adjunct Professor, Enugu State University of Science and Technology, Enugu; October 1, 2008 to date.
- Associate Dean, Faculty of Engineering, University of Nigeria, Nsukka; August 2009 to 2012.
- Head, Agricultural & Bioresources Engineering Dept., Faculty of Engineering, University of Nigeria, Nsukka; August 1, 2016 to date.

Honors and Awards

- 1977-1980: Undergraduate Scholarship, Government of Anambra State of Nigeria, Nigeria.
- 1981-1983: Postgraduate Scholarship, Federal Government of Nigeria, Nigeria
- August-December 1984: UNESCO/UNDP Fellow in Wageningen, The Netherlands
- 1988-1992: Postgraduate Student Scholarship, Canadian International Development Agency, Canada.
- 2000-2001: Commonwealth Fellowship in Applied Hydrology, Association of Commonwealth Universities, London, UK.
- 2005-2006: Subject of Biographical Record in The Marquis *Who's Who in Science and Engineering*, Eighth Edition, Marquis Who's Who, New Providence NJ, USA.
- 1 - 30 September, 2016: TRECCAfrica I Staff Exchange Fellow at Institute of Resource Assessment, University of Dar es Salaam, Tanzania.

Membership of Professional Bodies:

- Member, Nigerian Institution of Agricultural Engineers; M236 (1986)
- Member, American Society of Agricultural and Biological Engineers; M0153918 (1992)
- Member, Nigerian Society of Engineers; 06320 (1993)
- Member, Canadian Society of Agricultural Engineering (1993)
- Member, British Hydrological Society; P60270174 (2001)
- Member, International Association of Hydrological Sciences; 6926 (2001)
- Member, Nigerian Association of hydrological Sciences (2003)
- Registered Engineer, Council for the Regulation of Engineering in Nigeria (COREN); R.10,538 (2004)
- Fellow, Nigerian Institution of Agricultural Engineers; F60 (2006)
- Fellow, Nigerian Association of Hydrological Sciences; FNAHS/003 (2012)

Language Skills

- English: Reading - fluent, Writing - fluent, Speaking - fluent
- French: Reading - basic, Writing - basic, Speaking - basic
- Igbo: Reading - basic, Writing - basic, Speaking - fluent

Publications:

- (1) Mbajjorgu, C.C (1987). Attenuation of Streamflow Seasonality for Water Conservation in the Humid Tropics. Proc. of the NSAE, Vol.11, pp.355-377.
- (2) Arbour, J.H., C.C. Mbajjorgu, M. Kane, L.M. Edwards and D. Riordan (1990). A Knowledge Based Approach to Soil Conservation Practices Selection. Proc. of Conf. XXI of the International Erosion Control Assoc., Washington D.C., 10pp.

- (3) Mbajiorgu, C.C. (1994). Planning for Water Quality in Rural Environments Using WRM Model. *J. of Agric. Eng. & Tech.*, Vol.2, pp.1-2.
- (4) Mbajiorgu, C.C. (1995a). Watershed Resources Management (WRM) Model 1: Model Description. *Computers and Electronics in Agric.*, Elsevier, Vol.13, No.3, pp.195-216.
- (5) Mbajiorgu, C.C. (1995b). Watershed Resources Management (WRM) Model 2: An Application to the Upper Wilmot Watershed. *Computers and Electronics in Agric.*, Elsevier, Vol.13, No.3, pp.217-226.
- (6) Mbajiorgu, C.C. (1995c). A Continuous Simulation Model for Watershed Resources Management. *Proc. of NSAE*, Vol.17, pp.196-204.
- (7) Mbajiorgu, C.C. and K.I. Wilkie (1995). Automation of an Evaporation Pan for Water Level Control and Digital Recording. *Proc. of NSAE*, Vol.17, pp. 123-133.
- (8) Mbajiorgu, C.C. (1996a). Application of Expert Systems to Soil Conservation Planning. *NSAE Proc.*, Vol.18, pp.136-138.
- (9) Mbajiorgu, C.C. (1996b). Watershed Resources Management Model Evaluation. *NSAE Proc.*, Vol.18, pp.169-172.
- (10) Mbajiorgu, C.C. (1997). Use of the AGNPS Model to Estimate Runoff, Erosion and Pollution at the Upper Nnom Watershed. *Proc. of NSAE's 1st Regional Symp. on Hydrology of Tropical Watersheds*, Univ. of Nigeria, Nsukka, 20pp.
- (11) Mbajiorgu, C.C. and R.N.C. Anyadike (1997). A GIS-based Approach to the Management of Tropical Agricultural Watersheds, *Proc. of NSAE's 1st Regional Symp. on Hydrology of Tropical Watersheds*, Univ. of Nigeria, Nsukka, 18pp.
- (12) Mbajiorgu, C.C. and G.O. Chukwuma (1997a). A Computer-based Direct Solution Technique for the Reservoir Routing Problem. *Proc. of NSAE's 1st Regional Symp. on Hydrology of Tropical Watersheds*, Univ. of Nigeria, Nsukka, 17pp.
- (13) Mbajiorgu, C.C. and G.O. Chukwuma (1997b). An Application of the SCS Micro-Scheduler to Maize Crop Production at Nsukka. *Proc. of NSAE's 1st Regional Symp. on Hydrology of Tropical Watersheds*, Univ. of Nigeria, Nsukka, 28pp.
- (14) Mbajiorgu, C.C. and J.S.C. Mbagwu (1997). Land Imprinting for Desertification Control. *Proc. of NSAE'S 1st Regional Symp. on Hydrology of Tropical Watersheds*, Univ. of Nigeria, Nsukka, 15pp.
- (15) Mbajiorgu, C.C. and A.A. Muhammad (1997). The Impact of Kano River Project on Local Farmers: A Case Study of Kadawa Irrigation Scheme. *NSAE Proc.*, Vol. 19, pp.143-151.
- (16) Mbajiorgu, C.C. (1999). Planning for the Mitigation of Hydrologic Droughts in Nigeria. *NSE Tech Trans.*, Vol. 34, No.1, pp.71-78.
- (17) Mbajiorgu, C.C. (2001). Comparison of Watershed Simulation Models for Application in the Humid Tropics. *Nigerian Agricultural Engineer*. Vol.2, No.2, pp.23-29.
- (18) Ugwuishiwu, B.O. and C.C. Mbajiorgu (2002). Analysis and Computer Simulation of a Natural Convective Solar-heated Animal Building. *Global Journal of Engineering Research*, Vol.1, No.2, p.127-136.
- (19) Mbajiorgu, C.C. (2002). Managing Natural Resources for Sustainable Use: The Watershed Approach, In: *Food Security and Poverty Alleviation in West Africa*. *Proc. of the 2nd International Conf., West African Society for Agric. Engr. (WASAE)*, Abuja, p.304-311.
- (20) Ugwuishiwu, B.O. and C.C. Mbajiorgu (2003). An Assessment of Livestock and Crop Storage Structures in South Eastern Nigeria. *NIAE Proceedings*, Vol.25, pp. 281 - 286.
- (21) Mbajiorgu, C.C. (2003). A Water Quality Study of Ulasi River at Selected Locations, In: *Towards the Millennium Development Goals - Actions for Water and Environmental Sanitation*. *Proc. of the 29th WEDC International Conf.*, Abuja, p.247-249.
- (22) Mbajiorgu, C.C. (2004a). Determination of Watershed BMPs for Soil and Water Conservation Using AGNPS. *J. of Agric. Engr. & Tech.*, Vol.12, pp.115-133.

- (23) Mbajiorgu, C.C. (2004b). An Investigation into Erosion around Structures in Alluvial Channels. *J. of Agric. Engr. & Tech.*, Vol.12, pp.134-142.
- (24) Adinna, E.N., O. Olokesusi, F.N. Anijah-Obi, C.C. Mbajiorgu, N.S. Olaniran, O. Alo, M.F.A. Ivbijaro, I.A. Jaiyeoba and C.A. Okuofu (2005). *Mainstreaming Environment into Development in Nigeria - A Training Manual*. Department of Planning, Research & Statistics, Fed. Min. Environment, Abuja. 113pp.
- (25) Alo, O., M.F.A. Ivbijaro, I.A. Jaiyeoba, C.A. Okuofu, C.C Mbajiorgu, E.N. Adinna, O. Olokesusi, F.N. Anijah-Obi, and N.S. Olaniran (2005). *Development of Poverty-Environment and Environmental Sustainability Indicators in Nigeria*. Department of Planning, Research & Statistics, Fed. Min. Environment, Abuja. 156pp.
- (26) Udom, I.J. and C.C. Mbajiorgu (2006). Mining Effects on the Quality of Irrigation Water from an Effluent Stream. *Intern. J. of Environmental Issues*. Vol.4, Nos.1&2, pp.50-56.
- (27) Mbajiorgu, C.C. (2006). Information Technologies in Agro-Industrial raw Materials Production in the Southeast Zone, In: *Agro Industrial Raw Materials Processing for Sustainable Development of South East Nigeria*. J.C. Adama, S.C. Obasi and A.P. Onwualu (Eds), Raw Materials Research & Dev. Council, Abuja, pp.73-75.
- (28) Nwakonobi, T.U., N.N. Osadebe and C.C. Mbajiorgu (2007). An Optimization Model Development for Laterized-Concrete Mix Proportioning in Building Constructions. *Nigerian Journal of Technology*, Vol. 26, No.1, pp.37-46.
- (29) Anyadike, C.C. and C.C. Mbajiorgu (2007). An Overview of AQUATOX and Its Application. *NIAE Proceedings*, Vol. 29, pp.281-292.
- (30) Nwagugu, N.I. and C.C. Mbajiorgu (2007). Drainage Problems of Nsukka Urban, *NIAE Proceedings*, Vol. 29, pp.89-99.
- (31) Ani, A.O. and C.C. Mbajiorgu (2008). Development of a Digital Cone Penetrometer. *J. of Agric. Engr. & Tech.*, Vol.16, No.1, pp.83-92.
- (32) Mbajiorgu, C.C. (2008). Ecological Problems Identification within Watersheds in Nigeria. *J. of Agric. Engr. & Tech.*, Vol.16, No.1, pp.93-107.
- (33) Okonkwo, G.I. and C.C. Mbajiorgu (2008). Hydraulic and Hydrological Design of a Dam Across Uiasi River at Okija, Anambra State, Using SITES. *J. of Agric. Engr. & Tech.*, Vol.16, No.2, pp.61-70.
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- (35) Mbajiorgu, C.C. (2009). Effects of Climate Change on Water Resources. *Scientific Bulletin of the Nigerian Hydrological Services Agency (Hydroviews)*, Vol.1, No.1, pp.9-15.
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- (37) Ogbu, K.N. and C.C. Mbajiorgu (2010). Application of the WEPP Model for Runoff and Erosion Prediction in Nsukka. Southeastern Nigeria. *NIAE Proceedings*, Vol.31, pp.310-321.
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- (39) Esin, W.M., A.P. Adegede and C.C. Mbajiorgu (2010). Application of ANSWERS (A Watershed Planning Model) to the Upper Ndrup Watershed, Ogoja LGA, Southeastern Nigeria. *NIAE Proceedings*, Vol.31, pp.329-337.
- (40) Ikrang, E.G. and C.C. Mbajiorgu (2010). Effect of Fertilizer Application on Water Quality. *NIAE Proceedings*, Vol.31, pp.361-373.

- (41) Mbajiorgu, C.C, M.E. Okechukwu and G.I. Ezenne (2010). Effect of Climate Change on Agriculture. NIAE Proceedings, Vol.31, pp.562-572.
- (42) Uzoigwe, L.O. and C.C. Mbajiorgu (2010). Design and Development of an Electronic Object Detector for Agricultural Purposes. NIAE Proceedings. Vol.31, pp.573-584.
- (43) Uzoigwe, L.O. and C.C. Mbajiorgu (2010). Design and Construction of Battery Charging System for DC Supply. NIAE Proceedings, Vol.31, pp.585-597.
- (44) Adegede, A.P., C.C. Mbajiorgu and O.O. Ogunkoya (2010). Validating ACRU Model for Agbogbo Catchment, Ile-Ife, Southwestern Nigeria. J. of Agric. Eng'g & Tech. (JAET), Vol.18, No.1, pp.81-89.
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- (46) Uzoigwe, L.O., C.C. Mbajiorgu and O.C. Igbe (2011). Design and Construction of a Farmstead Curtain using LDR Sensory Device. NIAE Proc. Vol.32, pp. 1050-1058.
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- (48) Ezeoha, S. L., C. C. Mbajiorgu, and V. U. Obi (2011). Development of a Digital Densitometer. J. of Agric. Engr. & Tech., Vol.19, No.1, pp.71-79.
- (49) Mbajiorgu, C.C. and K.N. Ogbu (2011). Testing the WEPP Model for a Single Event Runoff and Soil Loss from a Plot in Nsukka, Southeast Nigeria. J. of Agric. Engr. & Tech., Vol.19, No.2, pp.100-107.
- (50) Anyanwu, C.N., C.C. Mbajiorgu and E.C. Anolefo (2012). Design and Implementation of a Water Level Controller. Nigerian Journal of Technology, Vol.31, No.1, pp.89-92.
- (51) Nwakonobi, T.U., N.N. Osadebe and C.C. Mbajiorgu (2012). Application of Initial Value Method in the Static Analysis of Laterized Concrete Cylindrical Shells under Hydrostatic Loading. Intern. J. of Struct. Eng'g, Vol.3, No.4, pp.229-249.
- (52) Anyanwu, C.N., C.C. Mbajiorgu, O.U. Oparaku, E.U. Odigboh and U.N. Emmanuel (2012). A Design Algorithm for Batch Stirred Tank Transesterification Reactors. Elsevier's J. of Energy Conversion and Management, Vol.62, pp.40-46.
- (53) Okechukwu, M.E. and C.C. Mbajiorgu (2012). Lysimeter Study of Crop Evapotranspiration of African Spinach in Nsukka, Southeast Nigeria. Nigerian Journal of Hydrological Sciences Vol.1, pp.67-75.
- (54) Uzoigwe, L.O., C.C. Mbajiorgu and O.P. Alakwem (2012). Development of Intensity Duration Frequency (IDF) Curve for Parts of Eastern Catchments Using Modern ArcView GIS Model. In: Martins O., Idowu O.A., Mbajiorgu C.C., Jimoh O.D. and Oluwasanya G.O. (eds), Hydrology for Disaster Management, Special Publication of the Nigerian Association of Hydrological Sciences, 2012, pp.24-44.
- (55) Okechukwu, M.E., V. Ogwo, C.U. Onuegbu and C.C. Mbajiorgu (2012). Water Quality Evaluation of Spring Waters in Nsukka, Nigeria. In: Martins O., Idowu O.A., Mbajiorgu C.C., Jimoh O.D. and Oluwasanya G.O. (eds), Hydrology for Disaster Management, Special Publication of the Nigerian Association of Hydrological Sciences, 2012, pp.223-229.
- (56) Onuegbu, C.U., C.C. Mbajiorgu and S.C. Ezekafor (2012). Water Quality Management Efficiency of Biofiltration in a Recirculating Aquacultural System. In: Martins O., Idowu O.A., Mbajiorgu C.C., Jimoh O.D. and Oluwasanya G.O. (eds), Hydrology for Disaster Management, Special Publication of the Nigerian Association of Hydrological Sciences, 2012, pp.239-244.
- (57) Anyadike, C.C., C.C. Mbajiorgu and G.N. Ajah (2012). Water Quality Management in Aquacultural Production Using AQUASMAT. In: Martins O., Idowu O.A., Mbajiorgu C.C., Jimoh O.D. and Oluwasanya G.O. (eds), Hydrology for Disaster

- Management, Special Publication of the Nigerian Association of Hydrological Sciences, 2012, pp.245-255.
- (58) Ogwo, V., K.N. Ogbu, C.J. Okoye, M.E. Okechukwu and C.C. Mbajiorgu (2012). Comparison of Soil Erosion Models for Application in the Humid Tropics. In: Martins O., Idowu O.A., Mbajiorgu C.C., Jimoh O.D. and Oluwasanya G.O. (eds), Hydrology for Disaster Management, Special Publication of the Nigerian Association of Hydrological Sciences, 2012, pp.265-277.
- (59) Okechukwu, M.E. and C.C. Mbajiorgu (2012). Design, Construction and Testing of a Drainage Lysimeter. *J. of Agric. Engr. & Tech.*, Vol.20, No.1, pp.84-95.
- (60) Ezenne, G.I., C.C. Mbajiorgu and M. Okechukwu (2012). Proceedings of the Nigerian Institution of Agricultural Engineers Vol.33, pp224-234.
- (61) Anyanwu, C.N., C.C. Mbajiorgu, C.N. Ibeto and P.M. Ejikeme (2013). Effect of Reaction Temperature and Time on Neem Methyl Ester Yield in a Batch Reactor. *Elsevier's Journal of Energy Conversion and Management*, Vol.74, pp.81-87.
- (62) Nwakonobi, T.U., N.N. Osadebe and C.C. Mbajiorgu (2013). Static Analysis of Laterized Concrete Cylindrical Shells under Food Grain Pressures by Initial Value Method. *Intern. J. of Engineering Research & Technology (IJERT)*, Vol. 2 No.6, pp.1037-1060.
- (63) Okechukwu, M.E., V. Ogwo, C.U. Onuegbu, C.C. Mbajiorgu and G.I. Ezenne (2013). Water Quality Evaluation of Spring Waters in Nsukka, Nigeria. *Nig. Journal of Tech. (NIJOTECH)*, Vol.32, No.2, pp.233-240.
- (64) Udom, I.J. and C.C. Mbajiorgu (2013). Suitability of Aggregate Mine Drainage Water for Irrigation. In: C.C. Mbajiorgu, M.C. Obeta and C.N. Anyanwu (Eds.), *Water Resources and National Development, NAHS Proceedings Vol.5*, pp.128-134.
- (65) Mbajiorgu, C.C. (2013). Essential Ingredients Applicable for Flood Early Warning Systems. In: C.C. Mbajiorgu, M.C. Obeta and C.N. Anyanwu (Eds.), *Water Resources and National Development, NAHS Proceedings Vol.5*, pp.196-209.
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- (67) Okoye, C.J., V. Ogwo, K.N. Ogbu, C.C. Mbajiorgu, and K.E. Nwakor (2013). Predicting Streamflow and Sediment Yield from the Upper Ebonyi River Watershed Using WEPP Model. In: C.C. Mbajiorgu, M.C. Obeta and C.N. Anyanwu (Eds.), *Water Resources and National Development, NAHS Proceedings Vol.5*, pp.230-237.
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- (91) Ogwo, V., C.C. Mbajorgu, Ndulue, E.L., K.N. Ogbu and C.C. Anyadike (2015). Evaluation of Change in Critical Source Area Values on Simulated Runoff and Sediment Yield Using ANN-AGNPS Model, In: Sustainable Water Management in a Changing Environment. Proc of Nigeria Association of Hydrological Scs., Vol.6, pp.364-371.
- (92) Udom, I.J. and C.C. Mbajorgu (2015). Attenuation of Livestock-Environment Interaction Impacts on Water Quality Using Constructed Wetlands, In: Sustainable Water Management in a Changing Environment. Proc of Nigeria Association of Hydrological Scs., Vol.6, pp.478-487.
- (93) Anyadike, C.C., C.C. Mbajorgu and G.N. Ajah (2015). Aquacultural System Management Tool (AQUASMAT) I: Model Development. *Aquacultural Engineering* Vol.69, pp.60-77.
- (94) Anyadike, C.C., C. C. Mbajorgu and G. N Ajah (2016). Review of Aquacultural Production System Models. *Nigerian Journal of Technology (NIJOTECH)*, Vol. 35, No. 2, April 2016, pp. 448 - 457.
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- (96) Ogbu, K.N., E.L. Ndulue, V. Ogwo and C.C. Mbajorgu (2016). Development and Testing of a Capacitive Digital Soil Moisture Metre. *Nigerian Journal of Technology (NIJOTECH)*, Vol. 35, No. 3, July 2016, pp. 686 - 693.

Conference Papers:

- Mbajorgu, C.C. (1986). Local erosion around structures in alluvial channels. 10th Annual Conf. NSAE, Obafemi Awolowo Univ., Ile-Ife, Sept. 1-5.
- Mbajorgu, C.C., Burney and L.M. Edwards (1990). A continuous simulation model for watershed resources management. 7th CSAE/CWRA Atlantic Region Hydrotechnical Conf., Moncton, N.B., Canada, June 12-13.
- Mbajorgu, C.C., K.I. Wilkie and J.R. Burney (1990). Automation of an evaporation pan for water level control and digital recording. Paper No. NABEC90-305, 1990 Northeast Ag/Bio Eng. Conf., Penn State Univ., Park, PN., 16pp.
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mathematical watershed model incorporating conservation structures. CSAE Paper No.91-121. Fredericton, N.B, Canada, July 29-31.

- Mbajiorgu, C.C., J.R. Burney and Linnell Edwards (1991). Sensitivity analyses and calibration of the Watershed Resources Management Model for the Upper-Wilmot Watershed. CSAE Paper No. 91-125. Fredericton, N.B., Canada, July 29-31.
- Mbajiorgu, C.C., J.R. Burney and Linnell Edwards (1991). Watershed Resources Management Model II: Components, structure and development. CSAE Paper No.91-123. Fredericton, N.B., Canada, 29-31 July.
- Nwakonobi, T.U. and C.C. Mbajiorgu (2009). Review of agricultural storage structures for rice in Nigeria. Paper presented at NIAE-SE Regional Conf. on Rice and Global Food Security, Abakaliki, September 16 - 18.
- Ezenne, G.I. and C.C Mbajiorgu (2009). Water saving technologies in rice production. Paper presented at NIAE-SE Regional Conf. on Rice and Global Food Security, Abakaliki, Sept. 16-18.
- Mbajiorgu, C.C. and K.N. Ogbu (2011). Application of WEEP Hydrological Model for Estimation of Runoff and Soil Loss from a Plot in Nsukka, Nigeria. NAHS Paper No.9, Abuja, 18-21 October.
- Uzoigwe, L.O. and C.C. Mbajiorgu (2011). Hydrological Modelling of Some Ungauged Catchments in Southeastern Nigeria. NAHS Paper No.16, Abuja, 18-21 October.
- Uzoigwe, L.O. and C.C. Mbajiorgu (2011). Auto calibration of Hydrological Models using Scheff's Model Optimization Procedure. NAHS Paper No.16, Abuja, 18-21 October.
- Okechukwu, M.E., G.I. Ezenne and C.C. Mbajiorgu (2011). Analysis of Evapotranspiration Rates over Nsukka water Catchment. NAHS Paper No. 20, Abuja, 18-21 October.
- Okechukwu, M.E. and C.C. Mbajiorgu, (2011). Crop Evapotranspiration of African Spinach in Nsukka, Southeastern Nigeria. NAHS Paper No.22, Abuja, 18-21 October.
- Mbajiorgu, C.C. (2013). Achievements of the Predictions in Ungauged Basins (PUB) Decade for Hydrological Modelling and Data Assimilation. National Stakeholders Workshop on "Hydrological Observation Systems and the Delineation of Hydrological Areas for Water Resources Management in Nigeria", organized by the Nigeria Hydrological Services Agency, Abuja, 28-29 November.
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- Mbajiorgu, C.C. (2014). Reservoir Sedimentation Modelling and Prediction of Project Lifetime, NICOLD Symposium on "Dams Development and Flood Control in a Climate Changing Environment", organized by the Nigerian Committee on Large Dams, Abuja, 11-12 August.
- Mbajiorgu, C.C. (2016). Managing Flood Risks in a Changing Environment. NIHSA Annual Flood Outlook Presentation and Stakeholders' Workshop, Rock View Hotel, Abuja, 25 July.

Poster Presentation:

- Mbajiorgu, C.C., K.I. Wilkie and J.R. Burney (1991). Automation of an evaporation pan. ACAE Workshop, Halifax, N.S., Canada, 20 Feb.
- Takoutsing, B., Z. Tchoundjeu, C.C. Mbajiorgu, K. Shepherd, E. Betemariam and K.N. Ogbu. (2014). Determination of surface runoff and soil erosion using the Soil and Water Assessment Tool (SWAT) model in the Nkam Watershed, Cameroon. Poster number WCA2014-338, World Congress on Agroforestry (WCA), Delhi, 11-14 February.

Miscellaneous Professional Activities:

- Secretary, Local Organizing Committee of the NSAE-sponsored First Regional Symposium on Hydrology of Tropical Watersheds, University of Nigeria, Nsukka, March 3-5, 1997.
- Reviewer of several articles for the NIAE proceedings; for the above-named Symposium; for the Nigerian Journal of Technology (NIJOTECH); for the Journal of Sustainable Agriculture and the Environment; for the Journal of Agric Engineering & Technology (JAET); for the Nigerian Journal of Water Resources; and for ASABE'S Transactions in the Soil and Water Division.
- Examiner of NSE's Professional Exams in two subjects (AGE204 - Hydrology; and AGE206 - Design of Soil & Water Conservation Structures) for 1997, 1998, 1999 and 2000.
- Supervisor (JAMB), Nigerian Universities Matriculation Exams, for 1998, 1999, 2000 and 2003.
- Editor, Emerging Technologies, NIAE'S Journal of Agricultural Engineering & Technology (JAET), 2004 to date.
- Associate Editor, Nigeria Journal of Technology (NIJOTECH), 2006 to 2010.
- Associate Editor, Nigeria Journal of Water Resources, 2008 to date
- Co-Editor, Book of Proceedings of the First Regional Symposium on Hydrology of Tropical Watersheds, ISBN 978-8137-28-8, De-Adroit Innovation Publishers, Enugu, 2010.
- Editor & Technical Committee Chairman, "Global Food Crisis - A Challenge to Agricultural and Bioresource Engineers", Proceedings of the 1st Annual NIAE-Southeast Regional Conference (Awka, 2008), ISBN 978-036-147-2, Immaculate Publications Ltd, Enugu, 2010.
- Editor & Technical Committee Chairman, "Rice and Global Food Security", Proceedings of the 2nd Annual NIAE-Southeast Regional Conference held at Abakaliki 16-18 Sept 2009.
- Editor & Technical Committee Chairman, "Mechanization for Sustainable Agriculture and Liberalized Economy", NIAE Proc. Vol.31, Proceedings of the 10th International Conf and 31st Annual Conf. of the Nigerian Institution of Agric Engineers, ISBN 978-036-578-8, Immaculate Publications Ltd, Enugu, 2010.
- Co-Editor, Hydrology for Disaster Management, Special Publication of the Nigerian Association of Hydrological Sciences (NAHS) 2012, ISBN 978-028-302-8.
- Co-Editor, Water Resources and National Development, NAHS Proceedings Volume 5, 2013; ISBN 978-036-579-6.
- Member, Nigerian National Committee on UNESCO International Hydrological Programme (NNC-UNESCO-IHP), 2003 to date.
- 1st Vice Chairman, NNC-UNESCO-IHP, 2011 to date.
- Vice Chairman, Nigerian Association of Hydrological Sciences, 2003 to 2010.
- Executive Committee Member, Nigerian Committee on Large Dams (NICOLD), 2004 to 2008.
- Consultant, Implementation of the UNDP-supported Development of Environment-Poverty and Environmental Sustainability Indicators and Training of Policy Makers on Mainstreaming Environment Into National Development, for and on behalf of the Dept of Planning, Research and Statistics, Federal Ministry of Environment.
- External Examiner, Department of Agricultural & Biosystems Engineering, University of Ilorin, Ilorin; 2005/2006, 2010/2011 and 2012/2013 sessions.
- External Examiner, Department of Agricultural and Environmental Engineering, University of Agriculture, Makurdi; 2005/2006 to 2007/2008 sessions.
- Member, Project Technical Committee, Guidelines for Best Practices in Integrated Watershed Management for Erosion and Flood Control, Federal Ministry of Environment, Abuja, 2006 to 2007.

- Member, Project Technical Committee, Nigerian Soil Erosion and Watershed Degradation Intervention Project, FAO/World Bank Office, Abuja, 2011.
- Member, Sub-Committee on Hydrology, Climate Change and Flood Management, National Technical Committee on Water Resources, Federal Ministry of Water Resources, Abuja, 2007 to date.
- Member, Committee on Trans-Disciplinary Climate Change Adaptation Capacity at the University of Nigeria, 2011 to 2013.
- Chairman/President, Nigerian Association of Hydrological Sciences (NAHS), 2010 to date.
- Nigeria Country Rep., International Association of Hydrological Sciences (IAHS), 2010 to date.

Administrative and Public/Social Responsibilities:

- Member, Publications Committee, Nigerian Society of Agricultural Engineers, 1992-1995.
- Staff Adviser, Agricultural Engineering Students' Association, University of Nigeria, Nsukka 1993 - 1999.
- Chairman, Faculty of Engineering Research Grant Committee and Member, Senate Research Grant Committee, University of Nigeria, Nsukka, 1995 - 1996.
- Secretary, Nsukka Camp, The Gideons International, 1995-1996.
- Financial Secretary, Senior Staff Club, University of Nigeria, Nsukka, 1995 - 1996.
- Assistant Secretary, Nigerian Society of Agricultural Engineers, 1996-1997
- Chairman, Faculty of Engineering Conferences and Seminars Committee, University of Nigeria, Nsukka, 1997 - 1999.
- Ordained Deacon, The Redeemed Christian Church of God, August 1998.
- Post-graduate Studies Coordinator, Dept. of Agricultural & Bioresources Engineering, University of Nigeria, Nsukka, 2001 to 2015
- Head, Department of Agricultural & Bioresources Engineering, University of Nigeria, Nsukka, 2003 - 2005; 2016
- Chairman, Faculty of Engineering Curriculum Committee, University of Nigeria, Nsukka, 2005 - 2006; 2014 - 2016.
- Member, Senate of the University of Nigeria, Nsukka, 2003 to date.
- Chairman, Post-graduate Studies Committee, Faculty of Engineering, UNN, 2007 to 2012.
- Member, Board of the School of Post-graduate Studies, University of Nigeria, 2007 to 2012.
- Associate Dean, Faculty of Engineering, University of Nigeria, Nsukka, 2009 to 2012.
- Member, Senate Curriculum Committee, University of Nigeria, Nsukka, 2012 to 2016.
- Coordinator, Eco-Hydrological Systems Research Group/Unit (EHSRU) in Agricultural & Bioresources Engineering; September 2001 to date.

Extra-Curricular Interests:

General reading, music, physical exercise, and Christian socio-cultural activities

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