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**Professional Employment**

2004-Present: Professor of Quaternary Geology, University of Nairobi, Kenya.  
1997-2003: Associate Professor of Geology, University of Nairobi, Kenya.  
1993-1996: Senior Lecturer, Department of Geology, University of Nairobi  
1988-1992: Lecturer, Department of Geology, University of Nairobi.  
1980-1987: Chief Research Officer, Kenya Marine and Freshwater Research Institute  
(KMFRI), Mombasa, Kenya  
1973-1979: Chief Geologist, Geological Survey of Kenya.

**Education**

1982-1985 PhD Applied Geochemistry Imperial College, London University, U.K  
1971-1972: MSC Mineral Exploration Leoben Mining Institute Austria  
1965-1970: MSC Mining Geology, Gorny Institute, St. Petersburg, Russia.

**Research and Academic Interests:**

- Geomorphology, Climate and Human Evolution in East African Rift Valley.
- Equatorial Africa Atmospheric Deposition Monitoring Network (UNEP/World Bank/GEF Project).
- International Decade for the Study of E.A. Lakes (IDEAL) US NSF Project.
- Assessment of Vulnerability of Water Resources to Environmental Change in Africa (UNEP-DEWA/UNESCO Early Warning Assessment Project).
- Greenhouse Gas Studies Related to Carbon and Nitrogen Cycling in Lakes and Wetlands in Kenya (START/Fulbright Research Fellowship with Prof. Donald Adams, State University of New York).
- Climate Change Adaptation and Networking Project.
- Global International Waters Assessment (GIWA) of the East African Rift Valley Lakes (UNEP-GEF/GIWA Project).
- Investigations of Stable Isotope Composition of East African Lake Waters

(IAEA Research Programme in Lake Dynamics Investigations: As Archives of Climate History.

- Reconstruction of Palaeoclimatology and Palaenvironmental History of East Africa (IGBP-PAGES Project).

**Honors and Awards**

2011 Fellow of Kenya National Academy of Science

2010 Fellow of Geological Society of Kenya

2002 Fellow of World Academy of Sciences

**Languages:**

Fluent in English, Russian, German and Kiswahili.

**Membership in Professional Societies:**

World Academy of Art and Science, American Geophysical Union, Geological Society of Africa, Geological Society of Kenya, Kenya National Academy of Science, African Academy of Science

**University Service:**

2006-Present: Director , UNU Regional Centre for Integrated Water Resources Management , University of Nairobi, Kenya

2005-Present: Head of Marine Geology and Oceanography, School of Physical Sciences, University of Nairobi, Kenya

2004-Present: Regional Director, African Network of Earth System Science (AfricanNESS) – A network of global environmental change research and capacity building in Sub-Saharan Africa.

**Scientific Committees Service:**

2005-2009:	Scientific Committee Member of Global Water System Project (GWSP).
2004-Present:	Member of United Nations Secretary General’s Advisory Board on Water and Sanitation.

2002-2008:	Scientific Committee Member of the International Lake Environment Committee (ILEC), Japan.
1998-2002:	Member, Global Environmental Facility (GEF) Scientific and Technological Advisory Panel (STAP)
1997-2010:	Member, Committee for Scientific Planning and Review (CSPR) of ICSU
1994-Present:	Member, START Scientific Committee for Global Change Studies.
1994-1998:	Vice-Chair, International Geosphere-Biosphere Programme (IGBP): A Study of Global Change Scientific Committee.
1993-1996:	Member, IGBP Past Global Change (PAGES) Scientific Committee
1993-1996:	Scientific Liaison, European Union Network for Research in Global Change (EU-ENRICH).
1991-1994:	Chief Scientific Investigator, IAEA Co-ordinate Research Programme on Isotope Techniques in Lake Dynamics Investigations.
1990-2000:	Scientific Co-ordinator, International Decade for the East African Lake (IDEAL) Programme

### **Active Research Grants**

1. UNEP/GEF “Equatorial Atmospheric Deposition Network-EADN” Project
2. The East Africa Great Lakes Observatory (EAGLO) Management and Monitoring (U.K-DFID-ESPA Project)

### **Proposals**

1. Water Infrastructure Solutions from Ecosystem Services to Underpin Climate Resilient Policies and Programmes ('WISE-UP to Climate') IUCN Project.
2. A water Secure Future for Eastern Africa: Applying the ecosystem approach in transboundary river basin management USAID, IUCN Project.
3. Lake Turkana Climate change adaptation Program (Clinton Foundation Project)

## Teaching

Exploration Geochemistry, Environmental Geology, Geo-Limnology, Water Resources Management Paleo-environment.

Marine Geology, Coastal Geology, Oceanography, Mineral Resources Development and Policy.

## Editing and Reviews for International Scientific Journals:

- Lakes and Reservoirs: Research and Management (Editorial Board)
- New Aquatic Sciences – A Multidisciplinary Journal for Thematic and Applied Limnology, Fisheries Science and Water Technology (Editorial Board).
- Ambio International Journal of the Human Environment (Guest Editor)
- Global Change Research Series (Editorial Board)
- Reviewer for Various Global Environmental Change Research Journals.
- Reviewer for Research proposals for various funding agencies (GEF, World Bank, NSF, NORAD, DFID, etc).

## Recent Publications

1. **Odada E. O** (2010-2011) The role of isotope geology in the construction of the Cenozoic history of Kenya. Journal of Geology and Mining Research Vol 1(2) pp.042-047 April 2009. Academic Journal.
2. Olaka.L.A, **Odada. E. O**, Trauth.H.M (2011) The Sensitivity of Eastern African Lakes to Climate Fluctuations. Journal of Limnology 44: 629-644
3. C.Vera. M.Barage, O.P Dube, **Odada . E. O** (2010) Need Assessment for Climate Information on Decadal Timescales and Longer. Procedia Environmental Sciences (2010) 275-286 Published by Elsevier 2010.
4. **Odada. E.O** (2010) Integration of Coastal and Marine areas into sustainable development. A case study of Africa. Journal of Oceanography and Marine Sciences Vol 1 (3),pp. 40-52 October 2010.

5. Martin. H . Trauth, **Eric . O. Odada**, Daniel .O. Olago , Manfred. R Strecker (2010). Human evolution in a variable environment: the amplifier lakes of Eastern Africa. *Quaternary Science Reviews* 29(2010) 2981-2988.

### **Published Books:**

#### **A. Books**

1. **Odada, E.O.**, Olago, D.O, Ochola, W.O, Ntiba, M. Wandiga, S.O, Gichuki, N. Oyieke, H,2006. Proceedings of the 11th World Lakes Conference, 31 October 2005 (PASS Publication Vol I & II (2006). *P1022*.
2. **Odada, E.O.**, and Olago, D.O., (eds) 2002 The East African Great Lakes: Limnology,Paleolimnology and Biodiversity. *Kluwer Academic Publishers, The Netherlands.P586*
3. Tyson, P., Fuchs, R., Fu, C., Label, L., Mutra, A.P., **Odada E.O.**, Perry, J., Steffen, W., and Virji, H., (eds) 2002 Global-Regional Linkages in the Earth System. *Berlin, Springer – Verlag, 2002. 198p*
4. Johnson, T.C. and **Odada, E.O.** (eds.), 1996. The Limnology, Climatology and Paleoclimatology of the East African lakes. *Gordon and Breach, Amsterdam, The Netherlands, 664pp*
5. Braatz, B.B., Brown, S., Isichel, A.O., **Odada, E.O.** and Scholes, R.J. (eds) 1995. African Greenhouse Gas Emission Inventories and Mitigation Options: Forestry, Land-use Change and Agriculture. *Kluwer Academic Publishers Group, Environmental Monitoring and Assessment. Vol.38, Nos.2-3, 1995*

#### **B. Journal Articles and Book Chapters**

6. Olago, D.O. and **Odada, E.O.** (2007) Sediment impacts in Africa’s transboundary lake/river basins: case study of the East African Great Lakes. *Aquatic Ecosystem Health and Management*, 10(1):23-32.
7. Robert E. Hecky, Harvey A. Bootsma and **Eric O. Odada** (2006). African Lake Management Initiatives. The Global Connection. *Lakes & Reservoirs: Research and Management* 2006 11:203-213.
8. **Eric O. Odada**, Japheth O. Onyando and Peninah A. Obudho (2006). Lake Baringo: Addressing threatened biodiversity and livelihoods. *Lakes & Reservoirs:*

- Research and Management 2006 11:287-299.
9. Olago and **E. Odada** (2006). The Pan African PAGES Workshop on African Palaeoperspectives: Linking the past to the present and the future. 19-20 July 2004, Nairobi, Kenya. *Quaternary International* 148 (2006) 1-2.
  10. **E.O. Odada** and D.O. Olago (2006). Challenges of an Ecosystem approach to water monitoring and management of the African Great Lakes. *Aquatic Ecosystem Health and Management*, 9 (4); 433-446, 2006.
  11. **Odada, E. O.** and Olago, D. O., 2005. Holocene Climatic, Hydrological and Environmental Oscillation in the Tropics with Special Reference to Africa: in *Climate Change and Africa*. Chapter 1; Cambridge University Press (pp 1-36)
  12. **E. O. Odada** (2004). Basic research on the World's Lakes lags behind similar research on the Oceans. *Lakes & Reservoirs: Research and Management* 2004 9:161-162.
  13. **Odada, E. O.**, Olago, D.O., Kulindwa, K., Ntiba M., and Wandiga, S., 2004. Mitigation of Environmental Problems in Lake Victoria, East Africa: Causal Chain and Policy Options Analyses: *Ambio* Vol. 33 No.1, Feb 2004 (617-627)
  14. **Odada E.O.**, Olago, D.O., Bugenyi, F., Kulindwa, K., Karimumuryango, J., West, K., Ntiba, M., Wandiga, S., Aloo-Obudho, P., and Achola, P., 2003. Environmental Assessment of the East African Rift Valley Lakes. *Aquatic Sciences* 65 (2003) 254- 271.
  15. Olago, D.O., Street-Perrott, F.A., Perrott, R.A. and **Odada, E.O.** 2003, Late Holocene Sedimentology and Paleoenvironment of Kiluli Swamp, Mt. Kenya. *AJST*. Vol.4 No.2: Dec.2003. pp 12-23.
  16. Ogege, J., **Odada, E.O.**, and Olago, D.O. 2003. Geological Controls on Groundwater Chemistry in Butala area, Busia District, Kenya. *African Journal of Earth Science and Engineering Series* Vol..3, No.2, pp 24-33. (2003)
  17. Baker, O., Talbot, M.R., Street-Perrot, F.A., Marret, F., **Odada, E.O.** and Scourse, I.D. 2003. Novel proxies of the late Quaternary Climatic Variability in Intertropical Africa; in R. Batterbee, F. Gasse and C. Stictley (Eds.) *Past Climate Variability through Europe and Africa. Springer, The Netherlands. P638*
  18. Karlen, W., **Odada, E.O.**, and Svanered, O., (2002) Organic Content and X-Ray Density of Lacustrine Sediments from Hausberg Tarn, Mount Kenya. In **E. O. Odada** and D.O Olago (eds). *The East African Great Lakes: Limnology, Paleolimnology and Biodiversity*, 525-533. *Kluwer Academic Publishers, The*

*Netherlands.*

19. Tyson, P., **Odada, E.O.**, Schulze, R., and Vogel, C., (2002). Regional-Global Change Linkages: Southern Africa. In Tyson et. al. (eds) Global-Regional Linkages in the Earth System. *Berlin, Springer – Verlag, 2002, (3-73)*
20. Tyson, P. D., **Odada E. O.** and Partridge T. C. 2001. Late Quaternary Environmental Change in Southern Africa. *South African Journal of Science 97, March/April 2001. Vol. 97 No.3/4 (139-150)*
21. Wandiga, S.O., and **Odada E. O.** (2001). Science and Society: Africa's Perspective In: our Fragile World: Challenges and Opportunities for Sustainable Development Forerunner of Encyclopaedia of Life Support System (EOLSS). Theme 14.0: Regional Perspectives on Sustainable Development Futures. ER. M.K., Tolba *UNESCO Publication (in CD only)*
22. **Odada, E. O.** and Wandiga, S., (2001). The effect of Global Warming on Rangelands In: EOLSS “Encyclopaedia of Life Support Systems”. Theme 1.4.2.3 Natural Resource System Challenge II: Climate Change, Human Systems and Policy. *UNESCO Publication (in CD only)*
23. Johnson, T. C., Kelts, K. and **Odada, E. O.** 2000. Holocene History of Lake Victoria. *Ambio Vol. XXIX Number 1, February 2000, pp2-11.*
24. Olago, D. O., Street-Perrott, F. A., Perrott, R. A., Ivanovich, M., Harkness, D. D. and **Odada, E.O.**, 2000. Long-term temporal characteristics of palaeomonsoon dynamics in equatorial Africa. *Global and Planetary Change 26 (2000) 159-171*
25. Olago, D. O., and **Odada, E. O.**, 2000. An Inter-Basinal Comparison of the Sedimentology of Late Holocene to recent sediments in the Rift Valley, Lake Turkana, Kenya. *Journal of Africa Earth Sciences (Vol.31 No.2 pp237-252, 2000)*
26. Karlen, W., Fastook, J. L., Holmgren, K. Malmstrom, M., Mathews, J. A., **Odada, E.O.** Risberg, J., Rosqvist, G., Sandgren, P., Shemesh, A. and Westerberg, L. O. 1999. Glacier Fluctuations on Mount Kenya since 6000 cal. Years BP. Implications for Holocene Climatic change in Africa. *Ambio Vol.28 No.5, August 1999. pp409-418.*
27. **Odada, E. O.** 1997. African Coastal Areas and their Management for Sustainable Development In: B.U. Haq et. al. (eds), Coastal Zone Management Imperative for Maritime Development Nations. *Kluwer Academic Publishers, The Netherlands. P.303-317 (1997)*
28. **Odada, E. O.**, 1996. Geological evolution of coastal Kenya as inferred from

- sedimentary sequences and marine terraces. *Africa Geoscience Review*, Vol.3 No3, pp.1 18, 1996.
29. Olago, D. O. and **Odada, E.O.** 1996. Some aspects of the physical and chemical dynamics of a large rift lake: The Lake Turkana north basin, Northwest Kenya. In *The Limnology, Climatology and Palaeoclimatology of the East African Lakes (T. C. Johnson and E. O. Odada eds.)*. Gordon and Breach Publ. Amsterdam, p413-430
  30. **Odada, E. O.**, 1995. Coastal Erosion and Flooding in East Africa and the Western Indian Ocean, P.85-99. In O. Linden (ed). Workshop and Policy Conference on integrated Coastal Zone Management in East Africa including the Island States. *Coastal Management Center (CMC) Conference Proceedings 1, 371p. Metro Manila, Phillipine (p85-89)*
  31. **Odada, E.O.** 1995. Partition geochemistry of sediments from the Romanche Fracture Zone, Equatorial Atlantic. *KJS Series A (1995) 10 (1&2), 12-30 (1995)*
  32. **Odada, E.O.** 1995. Regional geochemistry of sediments from the Equatorial Atlantic. *AJST Series B Vol.7 No.1 Jan. 1995, 101-111 (1995)*
  33. **Odada, E.O.** 1992. Growth rates of ferromanganese encrustation on rocks from the Romanche Fracture Zone, Equatorial Atlantic. *Deep-sea Research Vol.39 No.2, 235- 244 (1992)*
  34. **Odada, E.O.** 1992. Lithology, colour and mineralogy of pelagic sediments from the Romanche Fracture Zone. *JAES 14(1), 13-23 (1992)*.
  35. **Odada, E.O.** 1992. Metal accumulation rates in sediments and ferromanganese oxide crusts from the Romanche Fracture Zone. *JAES 14 (4), 579-588 (1992)*
  36. **Odada, E.O.** 1992. Status of Oceanographic Research in East Africa. In *Ocean Frontiers:Exploration by Oceanographers on Five Continents. Elizabeth Mann Borgese (ed), Harris N. Abrahams Inc. Publishers, New York (228p): 259-273 (1992)*
  37. **Odada, E.O.** 1990. Geochemistry of sediments from the Romanche Fracture Zone (RZF) Equatorial Atlantic. *Marine Geology Vo.92 (1990), 291-312 (1990)*
  38. **Odada, E.O.** 1990. Geochemistry of ferromanganese oxide crusts from Romanche Fracture Zone, Equatorial Atlantic. *Disc. And Innov. Vol.2 No.2, 53-61 (1990)*
  39. **Odada, E.O.** 1989. Some thoughts on the slow progress in exploration of ocean minerals. *Disc and Innov. Acad. Sci. Publ. Vol.1 No.4, 39-43 (1989)*



### C. Research Monographs and Technical Reports

1. **E.Odada**, Olago D. Kulindwa, K.A.A, Bugenyi, F. West K. Ntiba M. Wandiga, S. and Karimumuryango J. 2006. African Rift Lakes, GIWA Regional Assessment 47.
2. **Odada E.O.**, Olago, D.O and Ochola W. 2006. Lake Victoria Basin Environment Outlook: Environment and Development. UNEP 2006.
3. Beekman H.E., Abu Zeid K. Afuoda A. Highes S. Kane A. Kulindwa K.A. **Odada E.O.** Opere A. Oyebande and Saayman I.C, (2005). Facing the facts: Assessing the vulnerability of Africa's water resources to environmental change. Early Warning Assessment Report Series. UNEP-DEWA, Nairobi, Kenya.
4. Hecky, R., Bootsma, H., and **Odada, E.O.**, 2004. African Lake Management Initiatives: The Global Connection. Proceedings of the Workshop on World Lake Management. 1-3 November 2003, Nairobi, Kenya (World Lakes Initiative 2004).
5. Olago, D.O., and **Odada, E.O.**, (2000). Physico-Chemical Processes in the Saline-alkaline Lakes of Kenya. In: Ogola, J.S., and Behr, H.J, (eds). Proceedings of the workshop on Saline Alkaline Lakes of Eastern and Southern Africa pp47-52.
6. **Odada, E.O.** (2002). The Impacts of human activities on Africa's coastal and marine areas and the implications for sustainable development. LOICZ Report and Studies No.25, 71-80, LOICZ, Texel, The Netherlands.
7. Arthur, R.S., H.H.Kremer., **E Odada.**, W Solomons and J.I. Marshall Crossland (2002) African Basins: LOICZ Global Change Assessment and Synthesis of River Catchment, Coastal Sea Interaction and Human Dimensions. LOICZ Reports and Studies No.25: II = 344 pages. LOICZ, Texel, The Netherlands.
8. Olago, D.O., and **Odada, E.O.**, (2001) Palaeoecology of Eastern Africa Mountains. PAGES News Vol.9 No.3 pp19-21 December 2001.
9. **Odada, E.O.**, (2001) Stable Isotopic Composition of East African Lake Waters. In Use of Isotope Techniques in Lake Dynamics Investigations. IAEA TECDOC – 1206, March 2001 (43-48)
10. Gash, J. H., **Odada, E. O.**, Oyebande, L. and Schulze, R.E (eds) 2001. Freshwater Resources in Africa. *Proceedings of a workshop, Nairobi, Kenya, October 1999, 146p*

11. **Odada, E. O.**, Smith, M., Ingram, J., Totolo, O. 1996. Global Change and Subsistence Rangelands in Southern Africa: The impacts of climatic Variability and Resource Access on Rural Livelihoods. *GCTE Report No.20, Canberra, Australia, 99p.*
12. **Odada, E.O.** 1995. Coastal Change: Implications for Eastern Africa. In: Bordomer Coastal Change 95. Egbert K. Duursma (ed). Conf. Proc. Vol.4, 450p. Bordeaux, France: p346-365 (1995)
13. Johnson, T.C. and **Odada, E.O.** 1993. Sedimentary processes and signals of past climatic change in the large lakes of the East African Rift Valley. *The International Symposium on the Limnology, Climatology and Palaeoclimatology of the East African Lakes. IDEAL Symposium Abstracts, Feb. 1993*
14. **Odada, E.O.** 1993. History of past climatic records in the large lakes of East Africa. *INQUA-PAGES Joint Workshop on Palaeomonsoons in Africa and Surrounding Oceans: The last 2000 Years, Mombasa, Kenya, December 1993*
15. **Odada, E.O.** 1991. Eroding Kenyan Shoreline: The need for scientific inputs into shoreline management and planning. *UNESCO Workshop on causes and consequences of sea-level changes on the Western Indian Ocean coasts and Islands. Proc Conf. (1991) 45p.*
16. **Odada, E.O.** 1990. Recent advances in geochemical exploration for marine mineral deposits. *Proceedings of the 4th Annual General Conference of the Kenya National Association of Physicist (KNAP) 39-44 (1990)*