

## MONICA A. OMULO

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### EDUCATION

- Master of Philosophy in Environmental Science of Lancaster University, UK. 1992.
- Master of Science in Environmental Science of Lancaster University, UK. 1989
- Bachelor of Science (geology major) – University of Nairobi, 1981

### RESEARCH EXPERIENCE

- Report on the “International Mineralogical Association Commission on Ore Mineralogy on Short Course on Modern Approaches to Ore and Environmental Mineralogy and MINSA Mini-symposium” to – UNESCO. 1999
- An Integrated Artisan Gold Mining Management in the Migori District, Kenya ” to the Donor – Royal Netherlands Embassy, Nairobi. 1999
- Report on Inventory of Greenhouse Gases from Landuse Change and Forestry: UNDP/GEF Capacity Building in Sub-Saharan Africa to Respond to the United nations Framework Convention on Climate Change. 1998.
- "Traditional dietary staples: key to food security in Africa" in Climate Network Africa publication, **IMPACT** No. 20, pp7, 8 & 10. 1996
- "Activities Implemented Jointly under the United Nations Framework Convention on Climate Change - Workshop report: "in Climate Network Africa publication, **IMPACT** No. 22, pp7, 11, 12 and 13. 1998
- "Update on desertification talks" in Climate Network Africa publication, **IMPACT** No. 18, pp17 & 19. 1996
- "Report on the Commission on Sustainable Development" in Climate Network Africa publication, **IMPACT** No. 19, pp13-15. 1996
- "Joint Implementation: A step back in Northern Commitments to the UNFCCC" in Climate Network Africa publication, **IMPACT** No. 15, back page 1995.
- "Update on Desertification Convention: Conference of the Parties Pushed to 1997" in Climate Network Africa publication, **IMPACT** No. 16, pp11 & 15. 1995
- "The ozone hole or food security. A question of putting the cart before the horse? in Climate Network Africa publication, **IMPACT** No. 17, pp13 & 17. 1995

### TEACHING EXPERIENCE

- **Lecturer** (2000 to date ), Department of Environmental Science, School and Environment and Earth Sciences

- **Guest Lecturer** (2000), Tropical Institute for Community Health and Development (TICH) Currently Great Lakes University.

## **HONORS AND AWARDS**

- AAWG Award: Received the Best Association of the year award 2018 by the African Associations Award, October 2018 in Pretoria, South Africa
- Research counterpart: Sexual maturation: A case study of the Luo community, 2002 – 2003: Funded by Rockefeller Foundation
- Research counterpart: Study of the cultural practices that enhance natural resources conservation in the Lake Victoria region, Kenya, 2002. Funded by RELMA.

## **PROFESSIONAL MEMBERSHIP**

- Fellow of the Geological Society of Kenya
- Member of the Environment Institute of Kenya (EIK)
- Lead EIA/EA Expert Reg. No. 0150
- Member of the Council Geological Society of Africa (representing Eastern Africa) for the next four years (2008-2012).
- Member of the Geological Society of Africa, since 1999.
- Founder and President of the Association of the African Women Geoscientists (AAWG), 1995 – 2004
- Member of the Governing Council of the Association of the African Women Geoscientists (AAWG), 2004 to date; also representative of Eastern African Chapter.
- Life member of the Association of Geoscientists for International Development (AGID), with Headquarters in Sao Paulo, Brazil, since 1993.
- Professional Member of the Geological Society of Kenya (GSK) since 1982; Executive Member of the Geological Society of Kenya. 1997 – 1999; Assistant Treasurer of the GSK from 1986-1987 and 1994 -1995; Treasurer of the Geological Society of Kenya (GSK). 1995 -1997; Assistant Secretary of the Programs Committee of the GSK from 1986-1987.
- Graduate member of the Institute of Water and Environmental Management, United Kingdom 1989 - 1994.
- Research Associate with the African Centre for Technology Studies (ACTS), 1993-1995
- Member of the Kenya Professional Association of Women in Agriculture and Environment (KEPAWAE), since 1996 to date

## **SKILLS AND TRAINING**

- Geoconservation and Geoparks – Short-course, El Jadida, Morocco – 20 November 2011.
- Image Analysis and Remote Sensing Techniques ( three weeks 2002), Nairobi, Kenya
- Geo-medicine and Short Course on “Metals, Health and the Environment (one week 2001), School of Mines - University of Zambia, Lusaka, Zambia.
- Research and Innovation Management (two weeks 1992), Russian Academy of Sciences, Moscow, Russia.
- Soil Physics (three weeks 1989), International Centre for Theoretical Physics, Trieste, Italy.
- Collection, Presentation and Interpretation of Groundwater Data (three weeks 1987) Institute of Applied Geosciences of the Netherlands (TNO - DGU), Nairobi, Kenya
- Water and Air Protection and the Problems of Utilization of Wastes, (one week 1985) Ukrainian Academy of Sciences, Institute of Colloid and Water Chemistry, Kiev, USSR.
- Water Resources Engineering, (four months 1985), Institute for Water Resources Development, Belgrade, Yugoslavia.
- Remote Sensing for Water Resources Assessment (three weeks 1984), Regional Centre for Services in Surveying, Mapping and Remote Sensing, Nairobi, Kenya.

- Use of Computers in Water Resources Planning and Development, (three weeks, 1983, UN Department of Technical Co-operation for Development, Lake Basin Development Authority, Kisumu, Kenya.

### LEADERSHIP EXPERIENCE

- **Coordinator** (2012 to date ), Nyanza Regional Center of Expertise (RCE) on Education for Sustainable Development
- **Coordinator** (2012 to date) Education for Sustainable Development, Maseno University
- **Coordinator** (2000 - 2004) Timetable and Examinations, Department of Environmental Science
- **Research and Programmes Officer** (1998 – 2000), Climate, Environment and Development Action Network (CEDAN-K), a local NGO in Kenya
- **Research and Programmes Coordinator** (1995 – 1998), Climate Network Africa (CNA), a non-governmental organization
- **Senior Research Officer** (1988 – 1995), Ministry of Research, Science and Technology, Kenya
- **Geologist/Hydro-geologist** (1981-1988), Groundwater Division, Ministry of Water Development

### CONFERENCES AND WORKSHOPS

- **Omulo, M.A. 2018** - Women, Climate Change and Development in Africa at the First International Congress on Geosciences / Joint Congress /of CAAWG9/ AIC2/ ICGAME3, 20-24 March 2018, El Jadida - Morocco
- **Omulo, M.A. 2016** Women, Climate Change and Development in Africa: The Case of Kenya. Keynote address at the 8th AAWG Conference organized for the first time out of the African continent. Theme: *Building bridges between Earth Scientists Worldwide: A Way for Promoting Peace and Strengthening Integration* Sibiu, Romania, 1-7 October 2016.
- **Omulo, M.A. 2014** Potential Geo-parks sites in Kenya. A paper presented at the 7th Conference of the African Association of Women in Geosciences (AAWG 7) Windhoek, Namibia, held from 3rd – 9th November 2014 in Windhoek, Namibia
- **M.A. Omulo 2013:** Geoheritage and geosites in Kenya. Potential for geoconservation, geoparks development and geotourism, Nairobi, Kenya
- Ezzoua Errami, Béatrice Tandia, **Monica Omulo**, and Tea Juliette (2014). Geoheritage and Geoparks in Africa and the Middle-East: challenges and perspectives. A paper presented at 7th Conference of the African Association of Women in Geoscience (CAAWG7) held from 3rd – 9th November 2014 in Windhoek, Namibia
- **Omulo M.A. 2012.** Potential for Geoparks in Kenya. A paper presented at the 6th AAWG Conference (CAAWG), held from the 23rd - 27th April 2012 in Yaoundé, Cameroon.
- World Heritage Regional Workshop for Anglophone Africa - for cultural and natural heritage professionals under the World Heritage Capacity Building Project, financed by the Swiss Government, held at the Centre for Heritage Development in Africa (CHDA) in Mombasa, Kenya, from 19th to 24th September 2011
- IGCP in Africa Workshop on skills development in preparing project applications 26-28 July 2011, UN Complex, Gigiri, Nairobi Kenya, Supported by: UNESCO and the Swedish International Development Agency (SIDA)
- Ogola, J.S. and **Omulo, M.A. 2010.** Impacts of Climate Change in Kenya. A Paper presented at the 5th Conference of the African Association of Women in Geosciences (CAAWG5) “Women and Geosciences for Peace” 11 – 17 April 2010, Grand Bassam, Côte d’Ivoire
- **Omulo M.A 2008.** Lake Victoria Water Levels Variations: What are the Causes and Impacts? A paper presented at the 4th International Conference of the Association of African Women Geoscientists (AAWG) Cairo, Egypt, 14 – 16 April 2008. Theme: “Women and the International Year of Planet Earth”

- **Omulo M. A. 2008:** Medical Geology - Why the Study is Important. A paper presented at the 4th Conference of the Association of African Women Geoscientists "Women, Geosciences & Development" Cairo, Egypt, 14th – 16th April 2008
- **Omulo M. A. 2006:** Recent Water Level Fluctuations of Lake Victoria and its Impact on the Livelihoods. Poster presented at the 3rd Conference of the Association of African Women Geoscientists "Women, Geosciences & Development" 4 - 13 May 2006 El Jadida, Morocco
- **Omulo M.A. 2006.** "Women in Geosciences" - Keynote Address on the occasion of the 3RD Conference of the Association of African Women Geoscientists held from 4-13 May 2006 in El Jadida, Morocco
- Abuodha P. , B.H.O. Okall and **M.A. Omulo 2006:** Modern Mega Flooding In Western Kenya, Lake Victoria Basin: Budalangi and Nyando Case studies. Paper presented at the workshop on how to identify Mega-Floods in Paleo-records: The Impact of Mega Flood Events, Bobole, Mozambique. Bulletin of the National Directorate of Geology.
- International Workshop on Geo-indicators (two days 2001), School of Mines - University of Zambia, Lusaka, Zambia.
- **Omulo M. A. 2004.** Overview of AAWG - Keynote Address on the Occasion of the 2nd Biennial Conference of the Association of African Women Geoscientists held in Kampala, Uganda, 25th – 27th October 2004 as the President of the Association of African Women Geoscientists. Conference theme: "Enhancement of Geosciences for Environment Awareness, Poverty Alleviation and Sustainable Development".
- **Omulo M.A. 2004:** Impacts of Floods in the Nyando District of the Lake Victoria Basin, Kenya. A paper presented at the 2nd biannual conference of the Association of African Women Geoscientist held in Kampala Uganda.
- **Omulo M.A. 2003.** Natural Disaster and Early Warning: The Role of NGOs. In the Natural Disaster Warning Systems. J. Zschau and Andreas Koppers (Eds) International IDNDR – Conference on Early Warning Systems for the Reduction of Natural Disasters (19'98 Potsdam, Germany), Chapter 1.5 pp 33-36.
- **Omulo M.A 2002.** Keynote speech- Women Geoscientists: Past Achievements and Future Challenges. On the occasion of the First Open Conference of the Association of African Women Geoscientists held from 22 – 24 October 2002 in Cape Town South Africa as the president of the Association of African Women Geoscientists.
- **Omulo, M.A. 2001:** Heavy Metals and Human Health (a poster). Conference on Geomedicine and Short Course on "Metals, Health and the Environment" at the School of Mines - University of Zambia, Lusaka, Zambia..
- **Omulo M.A. 1999.** Environment and health Effects of Artisan Gold Mining in the Migori District, Kenya. A Poster presented at the 11th International Conference of the Geological Society of Africa – Earth Resources for Africa, Cape Town, South Africa.
- **Omulo M.A. 1997:** (Editor the proceedings for Climate Network Africa): Political and Practical Constraints to the Acceptability of Joint Implementation under the UNFCCC in Kenya" Nairobi, Kenya.
- **Omulo, M.A. 1996.** Status of women geoscientists in Kenya: The role of education and training in Geoscience Education and Training in schools and universities, for industry and public awareness. AGID Special Publication Series, No. 19, pp775 - 781.

#### **PUBLICATIONS**

- □ Mitullah, W.V., Ogola J.S. and **M.A. Omulo**, 2003: "The Socio-economic Aspects of Artisanal Gold Mining in the Migori District, Kenya" in The Socio-economic Impact of Small-Scale Mining in Developing Countries. Edited by Gavin M. Hilson, Imperial College Science, Chapter 16.
- Ogola, J.S. and **M.A. Omulo** 1997. Energy resources: In Potential Impacts of Climate Change in Kenya. in the Impact of Climate Change in Kenya. Edited by J.S. Ogola et al. Published by Climate Network Africa, Nairobi, Kenya Chapter 3.
- Awange, J.L., L. Ogalo, B. Kwang-Ho 1P. Were, and P. Omondi, P. Omute, **M.A. Omulo**, (2008). Falling Lake Victoria Water Levels: Is Climate a Contributing Factor? Springer DOI 10.1007/s10584-008-9409-x, pp 1-20.

- Awange, J.L., L. Ogalo, **M.A. Omulo**, P. Were, and P. Omondi (2007) Falling Lake Victoria Water Levels: Are Droughts a Contribution Factor? Journal of Climate
- Awange, JL, Sharifi MA, **Omulo M.A.**, and Grafarend E. (2006): The Falling Lake Victoria Water levels: A GRACE Satellite Analysis of the Lake Basin. Water Resources Management 0000:001-9, Pp 1-9
- Ogola J.S., W.V. Mitullah and **M.A. Omulo** 2002. Impact of Gold Mining on Environment and Human Health. A case study in the Migori Gold belt, Kenya. Journal of Environmental Geochemistry and Health, 24: 141-158, Kluwer Academic Publishers, Netherlands.
- Ogola J.S. and **Omulo, M.A.** 1998. Energy Use in Kenya: Advancement of Alternative Energy Sources to Mitigate Climate Change Through Activities Implemented Jointly. In GreenHouse Gas Mitigation: Technologies for Activities Implemented Jointly (Edited by P.W.F. Riemer, A.Y. Smith and K.V. Thambimuthu), pp. 103 – 108, Pergamon.
- **Omulo M.A.** 1998. Potential Areas for AIJ Projects in Kenya. In GreenHouse Gas Mitigation: Technologies for Activities Implemented Jointly (Edited by P.W.F. Riemer, A.Y. Smith and K.V. Thambimuthu), pp. 725 – 731, Pergamon.
- Ogola, J.S. and **M.A. Omulo**, 1993. The geology and marine resources of the coastal region of Kenya. Workshop paper: Urban and regional Planning of Mombasa and the Coastal Region, Kenya. Published in African Urban Quarterly.