

PERSONAL INFORMATION	Cohen Ang'u, PhD
	📍 P.O. Box 30197- 00100, Nairobi, Kenya
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	✉ cangu@uonbi.ac.ke
	Sex: Male Date of birth: 22/06/1992 Nationality: Kenyan

WORK EXPERIENCE

July 2023 – To Date	<p>Lecturer Department of Earth and Climate Sciences, Faculty of Science and Technology, University of Nairobi. Duties: Teaching undergraduate and postgraduate students; Supervision of postgraduate students</p>
July 2019 – June 2023	<p>Tutorial Fellow Department of Earth and Climate Sciences, Faculty of Science and Technology, UoN. Duties: Teaching undergraduate students and conducting tutorials in postgraduate courses; web Champion.</p>
January 2019 – June 2019	<p>Internship Wangari Maathai Institute for Peace & Environmental Studies, University of Nairobi. Duties: Spearheaded the inception and launch of the Journal of Sustainability, Environment and Peace (JSEP), Journal Manager of the JSEP and in charge of the day-to-day operations of the journal.</p>
22.01.2019 – 25.01.2019	<p>Consultancy East African Community (EAC) Part of a team of consultants for orientation of the editorial board of East African Journal of Science, Technology and Innovation</p>
June 2018 – August 2018	<p>Research internship Wangari Maathai Institute for Peace & Environmental Studies, University of Nairobi. Activities: Conducted research on master's thesis and participated in seminars, involved in the organisation of the National Symposiums and charity events</p>
January 2016 – September 2016	<p>Scientific Officer Intern Kenya Meteorological Society Duties: Technical editor of the Journal of Meteorology of and Related Sciences, web administration, organisation of events and programs, dissemination of research findings</p>

October – December 2015

Consultancy

World Meteorological Organization (WMO)

Duties: Developed databases for Climate and Weather service projects in Africa and for Agricultural meteorologists in Africa, facilitated updating the regional websites for East and Southern Africa and West Africa, provided technical support for staff members.

July 2015

Consultancy

United Nations Environment Program (UNEP)

Duties: Participated in a consultancy on *Integrating Human Health and Ecosystem Health into a Single Framework*; Contributed to the theme of *state and trends of Africa's natural capital (land, water, air, biota)*. This project was part of the Africa Regional Assessment initiative by the UNEP.

June – August 2015

Consultancy

African Union Commission

Duties: Participated in a consultancy on *The Current State of Environmental Governance in Africa*. Contributed to the following chapters: Environmental and Resource productivity, Natural asset base and Environmental assessment systems, Environmental monitoring and quality of life, Experiences and Success Stories of selected sectors, Environmental Governance functions, Human Development Context and Characteristics of Growth.

May – September
2015**Internship**

Kenya Meteorological Society

Duties: Tasked with updating the Kenya Meteorological Society's website and online publishing of articles in the Journal of Meteorology and Related Sciences, facilitated the registration of the Journal of Meteorology and Related Sciences on Online Platforms plus acquiring identification codes

May – July 2014

Industrial Attachment

Kenya Meteorological Department,

Activities: Public weather forecasting, observation of and recording of weather parameters using meteorological instruments, data extraction using the global telecommunication system, preparation of aviation products and shipping broadcast; maintenance of Meteorological instruments; Preparation of decadal Agro meteorological bulletins

October, 2010 – August,
2011**Untrained Teacher**

Chebunaywa Secondary School, Hamisi, Kenya

Duties: Taught high school science subjects (Mathematics, physics, Geography)

Data Handling and Analysis for different projects			
	Project /Owner	Data Type	Software used
2022/2023	Higher Education Institutions Generating Holistic & Transformative Solutions (HEIGHTS) (USAID & University of Notre Dame)	Qualitative	Dedoose

Dec 2021	Mad Dad Project - Effectiveness of climate information flow from production to the end-user farmer (<i>University of Nairobi and the University of Bristol (UK)</i>)	Qualitative	R, RQDA and NVIVO
Octo 2021 - Dec 2021	Honey Value Chain (<i>African Development Bank – Education for Sustainable Development Program - ESDA</i>)	Quantitative and qualitative	R and NVIVO
Dec 2020 – Jan 2021	TVET Mapping Study To Enhance Skills Linkage To The Productive Sectors In Africa (<i>African Development Bank</i>)	Quantitative and qualitative	R and RQDA
Oct – Dec, 2018	Situational Analysis of Climate Change Governance in Kenya (<i>Pan African Climate Justice Alliance</i>)	Quantitative and qualitative	R and RQDA

EDUCATION AND TRAINING

- Sept 2019 – Feb 2023 **Doctor of Philosophy Degree in Environmental Governance and Management**
Department of Earth and Climate Sciences, Faculty of Science and Technology, UoN.
Thesis Title: *Analysis of Clean Energy Technologies' Effects on Energy Poverty: Household Air Pollution and Human Health.*
- August/September 2019 **Integrated Environmental Impact Assessment and Environmental Audit**
Wangari Maathai Institute for Peace and Environmental Studies, University of Nairobi
NEMA License No. 12602
- 26.09.2016 – 01.10.2018 **Master of Science in Energy (Policy Option)**
Jointly Awarded between the Pan African university and University of Tlemcen, Algeria
Thesis title: *Assessment of the Impact of Fast Variables on Resilience of Electrical Energy in view of Climate Change and Energy Security in Kenya.*
- 26.09.2011 – 04.09.2015 **Bachelor of Science (in Meteorology)** (First class honours)
University of Nairobi (Kenya)
Core units; Atmospheric pollution, Dynamic Meteorology, Hydrology, Agrometeorology, Synoptic and Tropical Meteorology, Quantitative methods, programming methodology, Statistics, Calculus. Mathematics and Physics done.
- 03.07.2017 – 12.07.2017 **Summer School on Renewable Energy**
Institute for Technology and Resources Management in the Tropics and Subtropics (ITT), TH Koln, Germany.
Activities: Practicals on solar and wind Energy, lessons on biomass and coal power generation.

PERSONAL SKILLS

Mother tongue(s)	Luhya				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Kiswahili	C2	C2	C2	C2	C2
French	A2	A2	A2	A2	A2
<i>Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user</i>					

- Organisational/managerial skills**
- Tasked with the leadership of various committees at the Wangari Maathai Institute (webometrics, Seminars, Journal Secretariat)
 - Been in charge of data handling and analysis for various projects
 - Currently the Vice Secretary to the Kenya Meteorological Society

- Job-related skills**
- Good command of various software in computer applications
 - Demonstrated excellent research skills in academic and workplaces
 - Dynamic and flexible in learning, mastering and applying new concepts

Digital competence	SELF-ASSESSMENT				
	Information processing	Communication	Content creation	Safety	Problem-solving
	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
<i>Levels: Basic user - Independent user - Proficient user</i>					
	Good command of the following: <ul style="list-style-type: none"> ▪ Programming Languages: PHP, Visual Basic, JavaScript, R ▪ Databases: MySQL, MS SQL Server, Ms. Access ▪ Microsoft office (excel, word, power point, publisher), ▪ Statistical software; R, SPSS, RQDA, NVIVO, CLIMSOFT, Grid Analysis and Display System (Grads), Systat, WRPLOT view ▪ Web: HTML, CSS, Javascript 				
Membership of Professional Bodies & Societies	Member and Vice Secretary to the Kenya Meteorological Society				
PUBLICATIONS & CONFERENCES					
Journal Articles					

<p>Ang'u C., Muthama N. J., Mutuku M. A., & M'IKiugu, M. H. (2023). Analysis of energy poverty in Kenya and its implications for human health. <i>Energy Policy</i>, 176, 113506. https://doi.org/10.1016/j.enpol.2023.113506.</p>
<p>Ang'u C., Muthama N. J., Mutuku M. A., & M'IKiugu, M. H. (2023). Determinants of the sustained use of household clean fuels and technologies: Lessons from Vihiga county, Kenya. <i>Energy Reports</i>, 9, 1990–2001. https://doi.org/10.1016/j.egyr.2023.01.026</p>
<p>Ang'u C., Muthama N. J., Mutuku M. A. and Mutembei H. M. (2022). Household air pollution and its impact on human health: the case of Vihiga County, Kenya. <i>Air Qual Atmos Health</i> 15, 2255–2268. https://doi.org/10.1007/s11869-022-01249-1</p>
<p>Ang'u C., Muthama N. J., Mwanthi A. M., Mutembei H. M. (2022). Carbon monoxide and nitrogen dioxide patterns associated with changes in energy use during the COVID-19 pandemic in Kenya. <i>AIMS Environmental Science</i>, 9(3): 244-259. https://doi.org/10.3934/environsci.2022017</p>
<p>Kathambi E. B, Muthama J. N., & Ang'u C. (2021). Essence of Water Governance for SMEs for Sustainable Consumption in Nairobi, Kenya. <i>East African Journal of Science, Technology and Innovation. Vol. 2</i></p>
<p>Ang'u C., Muthama N. J., Oludhe C. & Chitedze I. (2020). The role of diversity, reserve margin and system structure on retail electricity tariffs in Kenya. <i>Heliyon</i> 6(8):1-11. https://doi.org/10.1016/j.heliyon.2020.e04626</p>
<p>Chitedze, I., Nwedeh C. C., & Ang'u, C. (2020). Financial Modelling of Feed-In Tariff for Increasing Solar Photovoltaic Energy Portfolio in Malawi. <i>Journal of Energy and Natural Resources</i>. 9(1):14-27</p>
<p>Okech, C., Ndolo, J., Nyandega, I., & Ang'u, C. (2019). Impact of rainfall variability on surface water resources in Homa Bay county, Kenya. <i>Journal of Sustainability, Environment and Peace</i>, 1(3), 84-90.</p>
<p>Ang'u, C., Muthama, N. J., Oludhe, C., & Kong'ani, L. N. S. (2019). Effects of civil conflicts on global oil prices and their impact on the energy sector. <i>Journal of Sustainability, Environment and Peace</i>, 1(1), 12-18.</p>
<p>Kong'ani, L. N. S., Ang'u, C., & Muthama, N. J. (2019). Adoption of improved cookstoves in the peri-urban areas of Nairobi: Case of Magina area, Kiambu County, Kenya. <i>Journal of Sustainability, Environment and Peace</i>, 1(1), 19-24.</p>
<p>Ang'u C., Muthama N. J., Mutai B. K., (2016). Aerosol optical depth patterns associated with urbanisation and weather in Nairobi and Lamu. <i>J. Meteorol. Related. Sci. vol 8 pg26-40</i>. http://dx.doi.org/10.20987/jmrs.2016.02.803</p>
<p>Books</p>
<p>Ang'u C., Muthama N. J. and Mutai B. K. (2017). <i>The Interconnection among Aerosols, Urbanization and Weather</i>, 2017. LAMBERT Academic Publishing. ISBN-10: 3330026537</p>
<p>Reviewed Conference Presentations</p>
<p>Ang'u Cohen (2023, July 28). State of Academic Research on Renewable Energy Solutions for Welfare Improvement. <i>Dissemination Workshop on Pay-as-You-Go Solar Solutions. Royal Tulip Canaan-Nairobi</i>.</p>
<p>Ang'u Cohen (2022, October 24 – 28). Analysis of Energy Poverty in Kenya an its Impact on Human Health [Paper presentation]. <i>5th Annual Conference of the Faculty of Science and Technology. Faculty of Science and Technology, University of Nairobi under the auspices of University of Nairobi Research Week 2022 held between 24 - 28 October 2022</i></p>

<p>Ang'u Cohen (2021, November 22 – 26). Drivers of the Sustained use of Household Clean Fuels and Technologies: Lessons from Vihiga County, Kenya [Paper presentation]. <i>KCSAP Scientific Conference: Climate Smart Research for Sustainable Agriculture and Livelihoods. Lake Naivasha Resort</i></p>
<p>Ang'u Cohen (2021, May 24 - 28). Air Quality Patterns Associated with Changes in Energy Use during the COVID-19 Pandemic in Kenya [Paper presentation]. <i>NOAA GML Global Monitoring Annual Conference 2021</i></p>
<p>Ang'u Cohen (2021, March 25 - 26). A Resilience-based Approach to Modelling Electricity Tariffs for Cost-effective Power in Kenya [Paper presentation]. <i>The 15th JKUAT Scientific, Technological and Industrialisation Conference: Refocusing Research, Innovation and Entrepreneurship for Excellence in Higher Education in the Era of COVID-19, Jomo Kenyatta University of Agriculture and Technology</i></p>
<p>Kong'ani L.N.S, Ang'u C. and Muthama N. J., (2021, February 24 - 25). Adoption of improved cookstoves in the peri-urban areas of Nairobi: Case of Magina area, Kiambu County, Kenya [Paper presentation]. <i>African Virtual Symposium on Higher Education: Strengthening the Role of Universities to Produce Homegrown Solutions to Africa's Development Challenges, University of Nairobi</i></p>
<p>Muthama J. N. and Ang'u C., (2021, February 24 - 25). Towards Developing Sustainability Metrics for Urban Areas [Keynote Address]. <i>African Virtual Symposium on Higher Education: Strengthening the Role of Universities to Produce Homegrown Solutions to Africa's Development Challenges, University of Nairobi</i></p>
<p>Ang'u Cohen (2020, October 21 - 23). The Role of Energy Sources on Retail Electricity Tariffs in Kenya [Paper presentation]. <i>The 14th Kenya Meteorological Society International Conference on Climate Risk Reduction, Society and Sustainable Development, Naivasha, Kenya</i></p>
<p>Kathambi B., Ang'u C. and Muthama N. J., (2020, October 5 - 7). Water Governance for SMEs for Sustainable Consumption in Nairobi, Kenya [Paper presentation]. <i>E-Conference on Promoting Sustainable Production and Consumption Practices while seizing green economy opportunities in the Horticultural Processing Sector, University of Nairobi and the European Union.</i></p>
<p>Ang'u Cohen (2020, August 4 - 6). Carbon Monoxide Exacerbation Associated with Increased Household Energy Use During the Covid-19 Pandemic [Poster session]: <i>Climatological, Meteorological and Environmental Factors in the COVID-19 Pandemic. Virtual Conference by the American Geophysical Union & World Meteorological Organization</i></p>
<p>Muthama J. N., Nzioka I. M., Kong'ani L. N. S. and Ang'u C (2019, October 23 - 25). Women Empowerment and Environmental Sustainability [Paper presentation]. <i>2nd Annual Conference on the Status of African Women, University of Nairobi</i></p>
<p>Abisagi N. K., Ang'u C. and Muthama J. N. (2019, February 8). Towards a Readiness and Maturity Model for Assessing Industry 4.0 [Paper presentation]. <i>The Case of Sustainable Manufacturing in Kenya. 3rd Annual Innovation Research Symposium, University of Nairobi</i></p>
<p>Ang'u Cohen (2018, October 23 - 25). Towards Replacing Kerosene with Bioethanol in Developing Countries [Paper presentation]. <i>Conference on the Status of African Women, University of Nairobi.</i></p>
<p>Ang'u Cohen (2018, September 21). Identification and Characterisation of Global Oil Price Shocks Instigated by Political Instability and Civil Wars and their Implications on Kenya's Electricity Sector [Paper presentation]. <i>The National Symposium on Environment and Peace, Wangari Maathai Institute, University of Nairobi.</i></p>
<p>Ang'u Cohen (2015, November 11 - 13). The Spatial-Temporal Characteristics of Particulate Air Pollutants and its</p>

Association with Rainfall and Wind Variation in a Tropical Urban Setting: A Case Study of Nairobi City and the Upcoming Lamu City [Poster session]. *The 12th Kenya Meteorological Society International Conference, Kisumu, Kenya.*

Selected Conferences & Workshops Attended

Index-Based Livestock Insurance Conference. 2023, January 25-26, University of Nairobi.

The 1st EIK National Environmental Conference. 2022, November 24-25, The Panari Hotel, Nairobi.

Renewable Energy Summit, Middle East and Africa (MEA). 2021, March 9-10

National Conference on Energy, Air Quality and Health Nexus. 2020, September 10-11 (Virtual event)

African Symposium on Sustainability Science 2019. March, 4 2019, University of Nairobi

ESDA-SUD Workshop on Sustainable Urban Development: Theory and methods. 2018, April 19, University of Nairobi

International Symposium on Development of Climate Change Adaptation Strategies for Human Health Impacts in East Africa. Research and collaboration between Kenya and Japan. 2018, December 5-6, University of Nairobi

RECOGNITIONS & AWARDS

November 26, 2021	Awarded a Trophy and Certificate for 1 st Runner up in Oral Presentations (PhD Category) during the Kenya Climate Smart Agriculture Project (KCSAP) Scientific Conference held between 22 nd - 26 th November, 2021.
August 2019	Awarded a Ph.D scholarship by the Government of Kenya and World Bank under the Kenya Climate Smart Agriculture Project
August 2016	Awarded a scholarship to pursue Masters degree in Energy at the Pan African University & University of Tlemcen in Algeria by the African Union
April 27, 2018	Awarded the Kenya Meteorological Society Student Excellence Award for the best final year student in Bachelor of Science in Meteorology, School of Physical Sciences in the 2014/2015 academic year
April 27, 2018	Awarded Prof. Godwin O. Patrick Obasi Award for the best overall student in the Department of Meteorology in the 2014/2015 academic year
April 27, 2018	Awarded Dr. Joseph R. Mukabana, MBS Award for the best overall student in Dynamic Meteorology, Department of Meteorology in the 2014/2015 academic year
April 27, 2018	Awarded Dr. Joseph R. Mukabana, MBS Award for producing the best overall research project on " <i>The Influence of Urbanization on Urban Winds and Air Pollution: A Case Study of Nairobi City and the Upcoming Lamu City</i> " in the department of Meteorology in the 2014/2015 academic year

REFEREES

Prof. Nzioka J. Muthama - Department of Earth and Climate Sciences, University of Nairobi
P. O. Box 30197-00100, Nairobi.
Email: jmuthama@uonbi.ac.ke

Prof. Mutembei H. M'IKiungu, Vice Chancellor, Chuka University
P. O. Box 109-60400, Chuka.
Email: hmutembei@uonbi.ac.ke

Prof. Christopher Oludhe - Department of Earth and Climate Sciences, University of Nairobi
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