





Curriculum Vitae

PERSONAL INFORMATION

Name: Nancy Awuor Oduor (Ms.)
Organization Leibniz-Zentrum für Marine Tropenforschung (ZMT) GmbH
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 Nancy A. Oduor



EDUCATION AND TRAINING

October 2020 to Present **Doctoral Student**

- Doctoral thesis - Nutrients in Kenya's Coastal Waters: Analyzing Sources, Pathways, and Ecological implications
Institution and Country - Kiel University, Faculty of Mathematics and Natural Sciences
Completion date - Thesis handing in:
Supervisor - Prof. Dr. Nils Moosdorf & Prof. Cosmas Nzaka Munga (PhD)

Sep. 2013 –August 2015 **Erasmus Mundus Joint Master in Water and Coastal Management**

- Subject area - Water and Coastal Management
Institution and Country - Bologna University, Italy, University of Cadiz, Spain and University of Algarve, Portugal
Master's thesis - Nutrient stoichiometry as a tool for determining nutrient condition in coastal waters
Supervisors - Prof. Alice Newton & Dr. John Icely

Sep. 2006 to Dec. 2020 **BSc. Environmental Science**

- Subject area - Natural Resource Management (Water Pollution)
Institution and Country - Kenyatta University, Kenya
Bachelors Thesis -
Supervisor - Dr. Geoffrey Macharia

Training Courses

- January to April, 2015 - Disasters and Ecosystems: Resilience in a Changing Climate
Subject area - Innovation in disaster risk reduction through ecosystem-based approaches
Institution and Country - UNEP and Cologne University of Applied Sciences(CUAS)
Level - Leadership Track



WORK EXPERIENCE

October 2020 to Present **Doctoral researcher**

- Employer Leibniz-Zentrum für Marine Tropenforschung (ZMT) GmbH, Bremen, Germany
Main activities - Leading thesis on water quality in Mombasa, Kenya including Fundraising, performing field work, lab analysis, and data interpretation, Peer reviewed Scientific publications, student Supervision, Scientific communications (Data sharing and conference and workshop presentations)
Sector Research Institution
Place and Country Bremen, Germany

Mar. 2011 – Dec., 2019 **Associate Research Scientist**

Employer	Kenya Marine & Fisheries Research Institute, Mombasa, Kenya
Main activities	<ul style="list-style-type: none"> - Led water quality assessment and monitoring projects - Secured funding for a 3-year WIOMSA Marine and Coastal Science for Management (MASMA) project on micro-plastic pollution in East Africa - Conducted baseline survey of water quality under the Kenya Coastal Development Project (KCDP) - Developed policy briefs for water quality management in coastal Kenya - Initiated and managed the Kenya Marine Debris Volunteer Program (2015-2019)
Sector	Research Institution
Place and Country	Mombasa Kenya

TEACHING EXPERIENCE

Oct. 2015 to April, 2020	Tutorial Fellow
Employer	Pwani University and Technical University of Mombasa (TUM)
Main activities	<ul style="list-style-type: none"> - Developed curriculum for Bachelor of Science in Environmental Science at TUM - Taught courses on Natural Resource Management, Environmental Policy, and Conservation - Supervised and mentored over 10 BSc. students - Revived and led TUM's Environmental Club
Sector	Education
Place and Country	Kilifi and Mombasa, Kenya

GRANTS AND RESEARCH PROJECTS (PRINCIPAL INVESTIGATOR)

Date	Title	Amount	Funder
Jun. 2023 to May 2024	Intergenerational knowledge transfer of cultural conservation practices to curb climate change and improve livelihoods through Enhanced Mangrove Conservation in Mtwapa Kenya	USD 7500	PADI Foundation project
2022-2023	Neti ni pesa program: A community initiative to recover, up-cycle, recycle, and prevent the generation of ghost gears from artisanal fisheries in selected sites along the Kenyan coast	USD 20000	Joanna Toole GloLitter Partnerships Grant
2021-2022	Sources and impacts of anthropogenic nutrients in sea turtle foraging sites: Association between dietary changes, arginine contamination, and disease vulnerability in Kenya coastal waters	USD 10000	Western Indian Ocean Marine Science Association (WIOMSA)
2020-2021	RSG2-Community-based Marine Litter Management for Restoration of Endangered Turtle Habitats along the Kenyan Coast	GBP 6000	The Rufford Small Grants (RSG) for Nature Conservation
Oct. 2020 to Dec. 2024	DAAD Kenyan-German Postgraduate Scholarship Grant	EUR 85000	The German Academic Exchange Service (DAAD)
2020-2022	The impacts of coastal development on beach geomorphology and its influence on sea turtle nesting and reproduction success in Lamu, Kenya	GBP 8000	British Ecological Society (BES)
2019 – 2022 (Co PI)	Assessment of the Ecological Aspects of MICROplastic Pollution in Dar Es Salaam, Zanzibar and Mombasa Coastal MARine Environments (MICROMARE)	USD 250000	WIOMSA-MASMA Grants

2018-2019	RSG1- Community-based Marine Litter Management for Restoration of Endangered Turtle Habitats along the Kenyan Coast	GBP5000	The Rufford Small Grants (RSG) for Nature Conservation
2017 -2018 (Co-PI)	<i>Adaptive management to Coral Reef Systems in Kenya: Addressing Pollution Problems</i>	USD 25000	<i>National Geography Society</i>

PUBLICATIONS

1. **Oduor, N.A. et al.** (2024) ‘Potentially Harmful Algal Bloom (HAB) Causing Species in Kenya’s Coastal Waters: Diversity, Distribution and Effect Implication’. Preprints of the previous version available at: <https://doi.org/http://dx.doi.org/10.2139/ssrn.4869883>
2. **Oduor, N. A.,** Imbayi, K. L., Mulusa, V. O., Odhiambo, M., & Nyanjong’, E. (2024). Domoic acid (DA), Paralytic Shellfish Toxins (PST), the abundance of potential DA and PST microalgae causative agents and environmental data in Kenya’s coastal waters in July 2022. *PANGAEA Data Publisher for Earth & Environmental Science*. <https://doi.org/https://doi.pangaea.de/10.1594/PANGAEA.964978>
3. **Oduor, Nancy A.,** Munga, C., Kiteresi, L., Botwe, P. K., Nyanjong’, E., Muthama, C., Agesa, N., & Moosdorf, N. (2024). Anthropogenic nutrients and phytoplankton diversity in Kenya’s coastal waters: An ecological health assessment of sea turtle foraging sites. *Journal of Environmental Management*, 199(October 2023), 1–38. <https://doi.org/10.1016/j.marpolbul.2023.115897>.
4. **Oduor, N.A.,** Cristina, S.C. and Costa, P. (2023) ‘Sources of anthropogenic nutrients and their implications on nutrient chemistry and ecological conditions of Ria Formosa lagoon, Portugal’, *Regional Studies in Marine Science*, 61, p. 102843. Available at: <https://doi.org/10.1016/j.rsma.2023.102843> .
5. **Oduor, Nancy A,** Munga, C. N., Ong’anda, H. O., Botwe, P. K., & Moosdorf, N. (2023). A review of nutrients and harmful algal blooms in Kenya’s coastal and marine waters. *Ocean & Coastal Management*, 233 (December 2022), 106454. <https://doi.org/10.1016/j.ocecoaman.2022.106454>
6. Okello, C., **Oduor, N.,** Owato, G., Mutiso, J., Owuor, M., & Tuda, A. (2022). Assessment of land-based pollution problems in Kenyan marine environments to facilitate adaptive management of coral reef systems. *Western Indian Ocean Journal of Marine Science*, 1/2022, 75–90. <https://doi.org/10.4314/WIOJMS.SI2022.1.6>
7. Nchimbi, A. A., Kosore, C. M., **Oduor, N.,** Shilla, D. J., Shashoua, Y., Khan, F. R., & Shilla, D. A. (2022). Microplastics in Marine Nearshore Surface Waters of Dar es Salaam and Zanzibar, East Africa. *Bulletin of Environmental Contamination and Toxicology*, 109(6), 1037–1042. <https://doi.org/10.1007/s00128-022-03620-5>
8. **Book Chapter** - García, O. G. Z., Ana Carolina Esteves Dias, R. A. S., **Oduor, N.,** Woltrich, A. E., M., N., Grilli6, A. A.-F., Zamora García, O. G., Carolina, A., Dias, E., Santos, R. A., Oduor, N., Woltrich, A. E., Grilli, N. M., & Aranda-Fragoso, A. (2022). *Chapter 3: Transdisciplinarity for the Oceans: integrating science for solving social-environmental conflicts*. In *Challenges in Ocean Governance in the Views of Early Career Scientists* (pp. 59–81).
9. Ochieng Okuku, E., Linet Imbayi, K., Gilbert Omondi, O., Veronica Ogolla Wayayi, W., Catherine Sezi, M., Mokeira Maureen, K., Mwangi, S., & **Oduor, N. A.** (2019). Decadal Pollution Assessment and Monitoring along the Kenya Coast. In *Monitoring of Marine Pollution: Vol. i* (Issue IntechOpen, p. 13). IntechOpen. <https://doi.org/10.5772/intechopen.82606>
10. J., Hollander, Linden O, Gudka M., Duncan M. I., Obura D., James N., Bhagooli R., Nyanapah J., Onyango C., Duvane J., Louis Y., Ngotho D., Mvungi E., Mamboya F., George R., Hamad H., Issa Hamisi M., Adeleke B., Ngoa E., Harlay J., **N. Oduor,** Fondo E., Wambiji N., Raharinaivo L., Winkler A., Okemwa G., Karisa J., Madi Bamdou M., Mtaki K., Randrianandrasana J., and *. 2020. “Marine Organisms Response to Climate Change Effects in the Western Indian Ocean.” *Journal of Indian Ocean Rim Studies* 3(1):33–59.
11. Owuor, M. A., Icely, J., Newton, A., Nyunja, J., Otieno, P., Tuda, A. O., & **Oduor, N.** (2017). Mapping of ecosystem services flows in Mida Creek, Kenya. *Ocean and Coastal Management*, 140, 11–21. <https://doi.org/10.1016/j.ocecoaman.2017.02.013>
12. Fragoso, B.D.D., Icely, J.D., **Oduor N.,** Moore, G., Neto, J.M., Danchenko, S., Newton, A., (2016) in PeerJ Preprints. *Monitoring approaches for supporting offshore aquaculture management and EU Directives at Sagres, Portugal*.

Publications Submitted

Oduor, N. A., O., O. G., Mbugua, J., Bwanamkuu, H. M., Munga, C. N., & David, O. (Under Review). Coastal development influences beach geomorphology and its influence on sea turtle nesting and reproductive success in Lamu, Kenya. *Journal of Coastal Conservation*.

Conference Abstracts:

Vienna, Austria & Online | 23–28 April 2023 -Oduor, N. A. and Nils, M.: Coastal ecosystems' health assessment in Kenya: Use of anthropogenic nutrients and phytoplankton diversity metrics, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-11947, <https://doi.org/10.5194/egusphere-egu23-11947> , 2023.

CONFERENCE AND WORKSHOP CONTRIBUTIONS

Conferences Oral Presentation

1. Oral presentation at the 12th WIOMSA Scientific Symposium at the Boardwalk Convention Centre in Nelson Mandela Bay, South Africa on 10th – 15th October 2022, South Africa.
2. Oral presentation in a regional workshop organized by WIOMSA and Lund University entitles ‘Marine Organisms Response to Climate Change Effects – Adaptation or Extinction?’ on 8-10th October 2018 in Mombasa, Kenya.
3. Oral Presentation at the 1st KCDP (Kenya Coastal Development Program) Conference, Kenya on 21st to 23rd March, 2016 entitled ‘Coastal Resources and People’ on “Nutrient stoichiometry as a tool for determining nutrient condition in coastal systems”.

Poster Presentations

1. Oduor, Nancy. A. & Nils, Moosdorf (January 2024). Harmful algal blooming microalgae in the Kenya's Coastal Waters. In The fifth Leibniz Centre for Tropical Marine Research (ZMT) Annual ZAC Conference, Bremen, Germany.
2. Oduor, Nancy. A. & Nils, Moosdorf (May 2023). Anthropogenic nutrients and phytoplankton diversity metrics to assess water quality in turtle foraging sites in Kenya. In The Internationaler Wissenschaftlicher Beirat (IWB)-International Advisory board Meeting at Leibniz Centre for Tropical Marine Research (ZMT), Bremen, Germany.
3. Oduor, Nancy. A. & Nils, Moosdorf (January 2023). Anthropogenic nutrients and phytoplankton diversity metrics to assess water quality in turtle foraging sites in Kenya. In The 4th Leibniz Centre for Tropical Marine Research (ZMT) Annual ZAC Conference, Bremen, Germany. Abstract ID: 128.
4. Awuor Oduor, N., & Nils, M. (May 2023). Coastal ecosystems' health assessment in Kenya: Use of anthropogenic nutrients and phytoplankton diversity metrics. In EGU, General Assembly, Vienna, Austria Conference Abstracts (pp. EGU-11947).
5. Oduor, N. A., Nils M., Munga C. N, Ong'anda H. (October 2022). Status of anthropogenic nutrients (Nitrogen and Phosphorus) and harmful algal blooms along the coast of Kenya: A Review. In the 12th Western Indian Ocean Marine Science Association (WIOMSA) Scientific Symposium, Port Elizabeth, South Africa.
6. Oduor, Nancy. A. & Nils, Moosdorf (January 2022). Nutrients in Coastal waters of Mombasa, Kenya: Sources, pathways and Implications on HABs. In The 3rd Leibniz Centre for Tropical Marine Research (ZMT) Annual ZAC Conference, Bremen, Germany.
7. Poster presentation in an international workshop at Sao Paulo School of Advanced Science on Ocean Interdisciplinary Research and Governance held from 13 -25, August, 2018 at University of SAO Paolo, Brazil.
8. Poster presentation at the 10TH Western Indian Ocean Marine Science Association (WIOMSA) Scientific Symposium, October 2017 at Dar es Salaam, Tanzania on "Nutrient stoichiometry as a tool for determining nutrient condition in coastal systems".
9. Poster Presentation at the MARES conference 1st 5 February 2016 at Olhão Portugal dubbed ‘Marine Ecosystems Health and Conservation’ on “Nutrient stoichiometry as a tool for determining nutrient condition in coastal systems”.
10. Presented a poster at the 7Th EUROLAG (European Coastal Lagoons Symposium) Conference at the University of Murcia, Spain (1st to 4th March, 2016) dubbed ‘Vindicating the biological and socio-economic importance of transitional waters’ on “Nutrient stoichiometry as a tool for determining nutrient condition in coastal lagoons”

PROFFESIONALL MEMBERSHIP GROUPS

- Member of Western Indian Ocean Marine Association (WIOMSA)
- Member of Society of Ecological Restoration (SER)
- Member of British Ecological Society (BES)
- Member of BUND Germany.

PERSONAL SKILLS

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| Communication skills | - Good communication skills gained through education and work experience in the academic and non-academic sectors. |
| Organizational /managerial skills | - Interpersonal skills, ability to work as part of a team, and interact effectively with individuals from wide backgrounds. |
| Job-related skills | - Project management and fundraising, Environmental quality assessment, Data analysis and interpretation, Scientific writing and presentation |
| Computer skills | - Conversant with all Microsoft Office applications.
- Good command of data analysis software SigmaPlot and Ocean Data View and a basic user of R and QGIS., GIS and Remote Sensing and R-Programming |
| Language Skills | - Proficient in English, Kiswahili and Dholuo, basic knowledge of German and Spanish and Interested in learning French. |

REFEREES

Prof. Dr. Nils Moosdorf

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