## **Curriculum Vitae**



Dr. (Mrs.) Charity Esenam Anor

Department of Integrated Science Education

University of Education, Winneba (UEW)

P. O. Box 25

Winneba, Ghana

+233 244 985 077 / +233 202098486

ceassey@uew.edu.gh / esenamanor @gmail.com Ghanaian

## **Areas of Expertise or Professional Skills:**

- Innovative
- Good communication skills
- Ability to take initiative
- Work independently and under pressure
- Good team player
- Science (Chemistry) Educator
- Course manual writing
- Volunteering
- Project coordination

Excellent computer skills in Microsoft Word, Microsoft Excel, PowerPoint, Statistical Package for Social Sciences (SPSS)

## **Professional Qualification(s)**

Rank	Supporting Evidence	Period
Ph.D. (Science Education)	Certificate from University of	2018-2022
	Education, University of	
	Education, Winneba	
M.Sc. Environmental Science	Certificate from Kwame	2012-2015
(With thesis)	Nkrumah University Science	
	and Technology	
B.Ed. Science (Chemistry and	Certificate from University of	2007-2011
Biology)	Education, Winneba	

Three –Year Post-Secondary	Certificate 'A' awarded by	2000-2003
	University of Cane Coast	

# **Professional Responsibilities**

<b>Position</b> Lecturer	Office/Location Dept of Integrated Science Educ, UEW	<b>Period</b> 08 / 2022 – date
Research Associate	SACOST	2023
Research Associate	EIRIS	2023
Internship Supervision	Volta Region	2023
Lead Writer; Distance learning	Dept of Integrated Science Educ, UEW	2023
Module - UEW (Chemistry Around		
Us)		
Internship Supervision	Volta Region	2022
Assistant Lecturer	Dept of Integrated Science Educ, UEW	07 / 2021 – 08 / 2022
Teacher	Swedru Senior High School	09 / 2011 – 06 / 2021
Internship	Ghana Water Company Limited	09 / 2008 -12 / 2008
Teacher	Kwanyako Methodist Primary	09 / 2006 – 09 / 2007
Teacher	Bedeku Basic School	09 / 2003 – 09 / 2006

# **Education**

Qualification/Certificate Obtained	Institution	Period
PhD. Science Education MSc. Environmental Science (With Thesis)	University of Education, Winneba Kwame Nkrumah University of Science and Technology	2018 – 2022 2012 – 2015
B.Ed Science	University of Education, Winneba	2007 – 2011
Cert 'A" 3-Year PostSec	St. Teresa's Teacher Training College	2000 – 2003
SSSCE Cert,	Mawuli Senior High School	1997 – 1999

# **Career History**

POSITION / Title Lecturer	Name of Institution University of education	Date July 2022 to Date	Responsibilities Teaching / Research
Assistant Lecturer	University of Education, Winneba	July 2021 to July 2022	Teaching / Research
Science Teacher Internship	Swedru SHS Ghana Water Company Limited	2011 – June 2021 2008 (Sept. to Dec.)	Teaching Laboratory Analysis
Teacher	Kwanyaku Meth. Primary	2006 – 2007	Teaching
Teacher	Bedeku Basic School	2003-2006	Teaching / SHEP
			Facilitator

# **Courses Taught**

Course	Level	Period
SCDB 522 - Advanced	Graduate (Med)	2021/2022; 2022/2023
Analytical Chemistry		Academic year
SCBD 521	Graduate (Med)	2021/2022; 2022/2023
Industrial Chemistry		Academic year
INS 231- Organic Chemistry	Undergraduate	2021/2022; 2022/2023
		Academic year
INS 121- Energy and Energy	Undergraduate	2021/2022; 2022/2023
Transformations		Academic year
INS 481- Radioactivity, Nuclear	Undergraduate	2022/2023 Academic
and Atomic Energy		year

# **Thesis Supervision**

Level	Number	Period
Graduate	5	2023-
Graduate	1	2022/2023
Undergraduate	17	2023 -
Undergraduate	16	2022/2023

#### **Thesis Examined**

Level	Number	Period
Graduate	6	2022 – 2023

#### **Publications**

#### A. Book

Anor C. E., Mbage, B., & Alhassan, M. (2023). Chemistry Around Us Chemistry for BEd

Distance Learners Unit 1, Course Introduction, Sections 4, 5 and 6, Unit 2 Sections 5 and 6, Unit 5 sections 1, 2 and 3. University of Education, Winneba: CODeL

#### C. Peer-Reviewed Journal Articles

Anor, C. E., Lundell, J., Hanson, R., & Oppong, E. (2022). Students' engagement in learning by indigenous knowledge-chemistry lesson. LUMAT, 10(1). <a href="https://jyx.jyu.fi/handle/123456789/84291">https://jyx.jyu.fi/handle/123456789/84291</a>

Anor, C. E., Apetorgbor, A. K., Hanson, R. & Oppong, E. (2022). Bacteriological Quality of

Water Produced at  $\,$  the Kwanyaku Water Treatment Plant in the Agona District of the Central Region Elixir Applied Chemistry 169 (2022) 56414 - 56416

https://www.elixirpublishers.com/articles/1649417922 ELIXIR2022016892.pdf

Anor, C. E., Apetorgbor, A. K., Hanson, R. & Oppong, E. (2022). Physicochemical Quality of Water Produced at Kwanyaku Water Treatment Plant in the Agona District of the Central Region of Ghana. *Elixir Appl. Chem.* 164 (2022), 56114-56119 <a href="https://www.elixirpublishers.com/articles/1662804640">https://www.elixirpublishers.com/articles/1662804640</a> <a href

#### **Conferences Proceedings/Articles**

Anor, C. E., Oppong, E., & Hanson, R. (2021, November 3-5). Using Indigenous Scientific Knowledge to Teach Chemistry Concepts [Conference presentation]. The 6<sup>th</sup> International Conference for Women in Science Without Borders, University of Embu, Kenya.

https://wiswbconference.embuni.ac.ke/images/PROCEEDINGS MAY 30.pdf#page=32.

### **Professional Development**

Name of Conference / workshop / seminar	Location	Presentations	Period
Ghana Career and Migration Fair	University of Professional Studies, Accra	Exploring global opportunities: The Role of Student Associations in Enhancing Cross-Border Educational Collaboration	29/11/2023
Erasmus+ Week in Sub-Saharan Africa	University of Johannesburg, South Africa (Virtual)	Participant	10 <sup>th</sup> – 12 <sup>th</sup> /10/2023
ASAF local project on volunteering and capacity building	Elmina, Ghana	Project Team member	$5^{th} - 6^{th} / 10/2023$
ICWES19	New Zealand (Virtual)	1. Promoting girls' engagement in STEM through a maiden science fair in a community in Ghana 2. Rural girls in STEM education: perceptions, participation and future career	4 <sup>th</sup> -6 <sup>th</sup> /09/2023
Gordon Research Pre-Conference workshop on Visualization in Science Education	Massachusetts Institute of Technology Cambridge, MA	Participant	14-16/07/2023
Gordon Research Conference workshop on Visualization in Science Education	Bates College, Lewiston, Maine.	1.Students' cognitive engagement through indigenous knowledge to learning about metals 2. Local gin production as an IK learning tool in the study of the concept of distillation	16-21/07/2023

Name of Conference / workshop / seminar International LUMAT Research Symposium	Location University of Eastern Finland (Virtual)	Presentations Out of the Classroom: Unmasking Science in Indigenous Practices	Period 16 /06/ 2023
DAAD Falling Walls Lab, Ghana	University of Ghana, Legon		26 / 05/ 2023
SACOST proposal writing workshop	UEW, IERIS Conference Room		7 – 9 /02 / 2023
Centre for Leadership and Diversity - 3rd Annual International Conference	Toronto, Canada (Virtual)	Assessing the Gender Disparity in the Performance of Pre- Service Teachers	14 -15 / 10 / 2022
LASU-ACEITSE — UEW-IERIS Joint Committee workshop on n Global Best Practices in the Teaching and Learning of STEM <a href="https://www.uew.edu.gh/news/uewhosts-workshop-global-bestpractices-teaching-stem">https://www.uew.edu.gh/news/uewhosts-workshop-global-bestpractices-teaching-stem</a>	University of Education Ghana	Global Best Practices in the Teaching and Learning of the Atom and Acids Bases and Salts	10 – 14 /10 / 2022
Educational Services in Finland			
	Finland (Virtual)		28 – 29 /10 /2023
Inter-University Conference for Doctoral Studies (IUCDS)	Jophus Anamuah- Mensah Conference Centre, UEW		17 - 19 / 2023

**Presentations** 

Period

Name of Conference /

workshop / seminar

Location

INWES AGM	Online	18 / 12/ 2022

Bridging the Gender Gap	Central Campus, UEW		15/09/ 2022
1st Annual International Decolonizing Education Conference	Kwame Nkrumah University, Zambia (Virtual)	Developing an Indigenous Knowledge- Chemistry Manual for the Teaching of Chemistry	11-12 / 08 / 2022
Lagoon Resilient Network	University of Education, Winneba	Circuisti y	6 / 07 / 2022
Reimagining a STEM Research Culture" project and to celebrate INWES 20th Anniversary	University of Warwick, UK.		20/ 07 / 2022
Conference on reflective teaching	North Assembly Hall, UFW		2022
Digitalisation and higher education – New opportunities and challenges for Africa and Europe. The OBREAL Global Team	Barcelona, Spain (Virtual)		22 / 06 2022

Name of Conference / workshop / seminar	Location	Presentations	Period
• •	Virtual		28 / 04 / 2022

Science Diplomacy Training, Organised by WISWB 1st regional Webinar INWES ARN Virtual on Reimagining a STEM Research			
Culture School Leadership Development & Preparation Within the African Context	Virtual OISE Toronto Canada (Virtual)		23/04/2022 30 / 03 / 2022
Lagoon Resilient Network,	University of Derby, UK (Virtual)		4 / 03 / 2022
Workshop on Grant Proposal Writing and funding	University of Education (DRID)		02 / 2022
LICE and WCSNE – 2021	London		22-24 / 11/2021
Hybrid Education (Erasmus Project)	University of Jyvaskyla- Finland		4 / 11 /2021
6th International Conference for Women in Science Without Borders	University of Embu, Kenya (Virtual)	Using Indigenous Scientific Knowledge to Teach Chemistry Concepts	3-5 / 11 /2021
Faculty of Science and Maths Seminar	University of Jyvaskyla	·	14 / 10 / 2021
UTAG Early Career Seminar	University of Education, Winneba		11 / 08 2021
5 <sup>th</sup> International Multidisciplinary Conference for Post graduate students	University of Education, Winneba		15/07/2021

# graduate students Curriculum Development

Course or instructional material Four-Year B.Ed. Course Manual (Chemistry	<b>Period</b> 11 / 2022 – 04 / 2023
Around Us) Year 4, Semester 2 UN International Day of Women and Girls in STEM (Team Member and Chairperson)	10 /02/ 2023

Mentorship Training for STEM Teachers on **Culturally Responsive Pedagogies** 

1 / 02 / 2023

**Training Workshop for STEM Teachers** Global Best Practices in the Teaching and Learning of the Atom (Lesson write-up) Global Best Practices in the Teaching and Learning of Acids Bases and Salts (Lesson writeup)

17/11/2022 10 - 14/ 10/ 2022

10 - 14 /10/ 2022

Talk on Encouraging Girls in the Effutu Municipality to pursue Science and related Career Girls at the UEW Female FSE Lecturers Maiden Science Fair for Girls (https://www.uew.edu.gh/news/uewfemalefselecturers-and-effutu-ges-hold-maidensciencefair)

 $5^{th}$  and  $9^{th}/08 / 2022$ 

## **Student Development**

Number of Students counseled Academic Counselor for level 300 Science Education Students	<b>Period</b> Feb – Jul, 2023	Length of Time 30 - 45 mins each meeting
Guiding AISES Executive write proposals and plan activities for their annual departmental week celebration	05/ 2023 – 09/2023	20 – 30 mins each meeting
Other individual students: 9	2022- June, 2033	20 – 30 mins each meeting

## **Membership of Professional Association**

Name of Association Position Period Globe Observer Programme Member 07/2023-

Women Advancing STEM in Ghana Network (WASGN) Organisation for Women in	Vice President/Secretary  Member	09/2023- 20/09/2022 -Date
Science for the developing world (OWSD) American Chemical Society	Member	06/07/2022-Date
(ACS) African Students and Alumni ASAF	Member	08/06/2022 –Date
Ghana Science Association University Teachers Association of Ghana (UTAG	Member Member	05/2022- Date 01/07/2021 – Date

# **Institutional Service**

Name of Committee(s) and/or Board(s)	Position or Role	Period
Proposal Writing (Centre of School and Community Science and Technology Studies (SACOST)	Research / Grant Proposal writing/ Planning of Community Services	7-9/02/2023
Consultancy Centre (Institute of Educational Research and Innovative Studies (IERIS)	Research/ Grant Proposal writing/ Planning of Community Services	12/2022
Grant Proposal writing committee	Grant Proposal Writing	10/2022

Community Service
Name of Institution/Organisation

ACS Chemistry festival	Project Coordinator	Training of Basic school teachers in using everyday indigenous practices to improve the	
ACS Chemistry Festival	ACS Chemistry Festival, Project Consultant	teaching of science Advice on Planning and implementation of ACS Chemistry festival titled: ChemyTrip	24/10/2023
ACS Chemistry Festival	ACS Chemistry Festival, Project Consultant	Advice on Planning and implementation of ACS Chemistry festival titled: Chemistry in the Kitchen	21/09/2023
ACS Chemistry Festival	ACS Chemistry Festival, Project Consultant	Advice on Planning and implementation of ACS Chemistry festival titled: From classroom to the community, water treatment and sustainability	4/06/23
UN International Day of Women and Girls in STEM	Team Member and Chairperson	Developing STEM skills of rural girls through indigenous based practices	10 / 02 / 2023
Mentorship for Girls in Rural basic schools Gyahadze Basic School	Mentor	Developing STEM skills of rural girls through indigenous based practices	7 / 02 / 2023
Name of Institution/Organisation	Position(s) held (if applicable)	Nature of service rendered	Period

Training and Mentorship for teachers in STEM Atteitu Basic School	Trainer / Mentor	Training and Mentorship for teachers in STEM Atteitu Basic School Developing STEM skills of rural girls through indigenous based practices	1 / 02/ 2023
ACS Chemistry Festival	ACS Chemistry Festival Project Coordinator	Engagement with the community to unmask the chemistry in indigenous Activities	24/ 1/2022
ACS Chemistry Festival	ACS Chemistry Festival Project Coordinator	Training for STEM teachers in 4 rural schools in the Effutu Municipality	17 / 11 / 2022
ACS chemistry Festival	ACS chemistry Festival Project Coordinator	An interview at Radio Windy Bay to educate the public on the chemistry in indigenous activities	16 / 11 / 2022
UEW Female FSE Lecturers Maiden Science Fair for Girls (https://www.uew.edu.gh/news/uewfemale- fse-lecturers-and-effutu-geshold-maiden science-fair	Mentor / Judge	Delivered a talk on Encouraging Girls in the to pursue Science and related careers / Judged pupils scientific work at the fair	05 / 08/ 2022

# Awards/Grants

Name/Type of Award / Grant	Awarding Institution	Period
	Organisation	
Chemistry Festival Grant	American Chemical Society	05/2024

Laissez-Passer of the Erasmus Generation contest. https://www.uew.edu.gh/fse/news/uewscholars-triumph-global-innovation-contest	GaragERASMUS foundation	16/11/2023
GOT Project mobility	UEW Dept. of ICT	23/10/23
Beneficiary	(GOT Project Team)	
ASAF LOCAL PROJECT	European Union Erasmus+	9 / 08 / 2023
DAAD Falling Walls Lab Ghana	DAAD, Ghana Office	26/ 05/ 2023
Chemistry Festival Grant	American Chemical Society	05/2023
Chemistry Festival Grant	American Chemical Society	08 / 2022
PhD Fellowship at Jyvaskyla	Erasmus <sup>+</sup> Global (European	09 / 2021 – 12 / 2021
Carnegie Scholarship	Union) New York	2007-2010

#### Referees

Prof. Ruby Hanson
Department of Chemistry
Education
University of Education,
Winneba
P.O. Box 25
Winneba, Ghana
+233 0208126299
Email: rhanson@uew.edu.gh

Dr. Charles Kwesi Koomson
Department of Integrated
Science Education
University of Education,
Winneba
P.O. Box 25
Winneba, Ghana
+233 244729714 Email:
ckkoomson@uew.edu.gh

Professor Jan Lundell Department of Chemistry University of Jyvaskyla P.O. Box 35 (Survontie 9B) FI-40014 University of Jyvaskyla Phone: +358-40-744 5270 Email: jan.c.lundell@jyu.f