



CURRICULUM VITAE

Prof. Ruby Hanson, PhD

PERSONAL DATA

| | |
|------------------|---|
| Profile UEW | https://uew.edu.gh/dce/staff/rhanson |
| Publications-UEW | https://uew.edu.gh/dce/staff/profile/rhanson/publications |
| LinkedIn | https://www.linkedin.com/in/ruby-hanson-aaa13552 |
| Instagram | https://www.instagram.com/maamerubyhanson |
| Google Scholar | https://scholar.google.com/citations?user=4ygnj5sAAAAJ&hl=en |
| Academia | https://independent.academia.edu/RubyHanson |
| ResearchGate | https://www.researchgate.net/profile/Ruby-Hanson-3 |
| Emails | maameruby@yahoo.com , rhanson@uew.edu.gh or maameruby@gmail.com |

EDUCATIONAL HISTORY

November 2014

PhD, University of Education, Winneba, Ghana

May 2003

M.Phil, University of Cape Coast, Ghana

May 1997

BEd, University of Education, Winneba, Ghana

2015

Certificate in Designing and Facilitating E-Learning, Open Polytechnic of New Zealand

August 2008; June 2007

Certificates in Development and Research in Mathematics and Science Education for Curriculum, University of Utrecht, and the Vrije Universiteit, The Netherlands

NATIONAL POSITIONS HELD

February 2018– March 2020

Lead National Science Education Four-Year B.Ed. Course Manual Developer for Colleges of Education (Under a Government of Ghana, Master Card Foundation, UK Aid and Transforming Teaching Education & Learning Grant

September 2019 - November 2019

Acting Pro-Vice Chancellor, University of Education, Winneba, Ghana

August 2018 - March 2022

Dean, University of Education, Winneba, Ghana

August 2017 - July 2018

Vice Dean, University of Education, Winneba, Ghana

August 2015 - July 2017

Head of Department, University of Education, Winneba, Ghana

Professional and Academic Qualification(s)

| <i>Rank/Equivalent Role</i> | <i>Supporting evidence</i> | <i>Period</i> |
|--|---|---------------|
| Full Academic Professor | Promotion Letter from the Vice Chancellor, University of Education, Winneba, on behalf of the Governing Council Chair | 2020 |
| Acting Pro-Vice Chancellor | Asabere Ameyaw Block, North Campus, UEW, | 2019 |
| Lead Writer for Open, Distance and e-learning Modules | Appointment letter and Certificate of Participation | 2019 |
| Lead Writer & Curriculum designer for T-Tel Science Team | Letters of Appointments/Invitations from T-Tel | 2018 |
| Associate Professor | Promotion Letter from the Vice Chancellor, University of Education, Winneba, Ghana | 2016-2020 |
| Designing & Facilitating E-Learning | Certificate from Open Polytechnic of New Zealand | 2014-2015 |
| Ph.D. (Chemistry Education) | Certificate from University of Education, University of Education, Winneba | 2010-2014 |
| Development and Research in Science and Mathematics Education Courses for Teachers | Certificates from Vrije University and University of Utrecht, The Netherlands | 2006-2008 |
| M.Phil. Chemistry | Certificate from University of Cape Coast, Cape Coast, Ghana | 1999-2003 |
| B.Ed. (Chemistry & Int. Science) | Certificate from University of Education, Winneba, Ghana (First Class) | 1994-1997 |
| Diploma (Chemistry & Int. Science) | Certificate from University of Education, Winneba, Ghana | 1988-1991 |
| Three –Year Post-Secondary (Science & Mathematics) | Certificate ‘A’ (with Distinction), Wesley College, Kumasi, Ghana | 1982-1985 |

Professional Responsibilities

| <i>Position</i> | <i>Office/Location</i> | <i>Period</i> |
|----------------------------|--|--|
| Acting Pro-Vice Chancellor | Main Administration Block, North Campus, UEW, Ghana | 6 th September, 2019 - 6 th December, 2019 |
| Dean | Faculty of Science Education, UEW, Winneba, Ghana | 1 st August, 2018 to 3 rd March, 2022 |
| Vice Dean | Faculty of Science Education, University of Education, Winneba | 1 st August, 2017-31 st July, 2018 |
| Head of Department | Department of Chemistry Education, UEW, Winneba, Ghana | 1 st August, 2016-31 st July 2017 |
| Head of Department | Department of Chemistry Education, UEW, Winneba, Ghana | 1 st August, 2015-31 st July, 2016 |
| Examination Officer | Department of Chemistry Education, UEW, Ghana | 1 st August, 2013-31 st July, 2015 |
| Academic Counsellor | Department of Chemistry Education, UEW, Ghana | 1 st August, 1999-31 st July, 2016 |
| E-Course Developer | Department of Chemistry Education, UEW, Ghana | 7 th January, 2012 to date |
| PLAN Ghana Facilitator | Sector Workshops by PLAN Ghana, Winneba | February 1998-June 2003 |

Education

| <i>Qualification/Certificate obtained</i> | <i>Name of Institution Attended</i> | <i>Date</i> |
|--|---|------------------------------|
| Designing and Facilitating E-Learning (Level 5) | Open Polytechnic of New Zealand, New Zealand | 2015 |
| Ph.D. (Chemistry Education) | University of Education, Winneba | 2014 |
| Development in Research and Thesis Writing Skills (Participatory certificate) | University of Utrecht, Utrecht, The Netherlands | 15 th August 2008 |
| Development and Research in Science and Mathematics Education Courses for Teachers | Vrije University, Amsterdam, The Netherlands | June 2006 & June 2007 |
| M. Phil. (Chemistry) | University of Cape Coast, Ghana | 2003 |
| B.Ed. (Chemistry & Int. Science), 1st Class Honours | University of Education, Winneba, Ghana | 1997 |

| | | |
|--|---|-----------|
| Diploma (Chemistry & Int. Science), 2nd Class Upper Division | University of Education, Winneba, Ghana | 1991 |
| Three-Year Post-Secondary “Certificate A” (Science & Education) Distinction | Wesley College, Kumasi, Ghana | 1985 |
| GCE (Ordinary & Advanced Level) Science | St. Louis Secondary School, Kumasi | 1973-1980 |

1. Receipt of lesser nationally or internationally recognized prizes or awards for excellence in the field of endeavor

- a. Best District Teacher Award
- b. Best 3-Year Post-Secondary Teacher (Distinction)
- c. Best Conference Full Paper (CICE-2018) Award
- d. Carnegie Award for Doctoral Studies (2011-2013)
- e. Systems thinking in chemistry for sustainability: toward 2030 and beyond (STCS 2030+), Project number: 2020-014-3-050 (Member) Division Name: Committee on Chemistry Education Division
- f. International Teacher Survey on Green and Sustainable Chemistry (GSC) Practical Activities (Ghana Survey Coordinator) <https://iupac.org/project/2023-002-2-050> (Country Project Member)
- g. Invited Chapter Contributor for Green Chemistry in Sub-Saharan Africa IUPAC Project No. 2021-005-1-041, <https://iupac.org/project/2021-005-1-041>
- h. ACS 2022 Chemistry Festival Grant Application with Reference number: 16024556, University of Education, Winneba, Ghana
- i. ACS 2021 Chemistry Festival Grant Application with Reference number: 15339404, University of Education, Winneba, Ghana
- j. ACS 2020 Chemistry Festival Grant Application with Reference number: 13933127, University of Education, Winneba, Ghana
- k. RTIA Project Grant: Regional Teachers Initiative in Africa Finnish National Agency for Education (EDUFI) (*Implementation of Professional Learning Communities in Selected African Countries: Implications for Policy and Practice*) Grant 5: SAIDE, South-Africa-642 334 (Partner member fund of €106,037.00 out of €575,000.00 from May 2025 to November 2026)
- l. TeProD Project No. 101177880; ERASMUS-EDU-2024-CBHE (Capacity building in higher education Strand 2) funded with €799,990.69 <https://www.teprod.eu>
- m. GOT Project Grant GOT Project; Capacity Building in the Field of Higher Education, ERASMUS-EDU-2022-CBHE-STRAND 2 GRANT No: 101082794, from January 2022 to December 2025, funded with €798,906.00

Membership in associations in the field for which classification is sought the require outstanding achievement of their members, as judged by recognized national or international experts in their discipline or fields

- a. Ghana Science Association
- b. Ghana Association of Science Teachers
- c. American Chemical Society
- d. African Deans of Education Forum
- e. Ghana Chemical Society
- f. International Union of Pure and Applied Chemistry
- g. Graduate Women International
- h. University Teachers Association of Ghana
- i. Organisation for Women in Science for the Developing World
- j. International Network of Women in Engineering and Science
- k. International Network of Women in Engineering and Science – African Regional Network

Published material about the person in professional or major trade publications or other major media relating to the person’s work in the field for which classification is sought. Such evidence must include the title, date and author of the material, and any necessary translation

| S/N | Title | Date | Author |
|-----|--|----------------------------------|--|
| a | Prof. (Mrs) Ruby Hanson Appointed as Acting Pro-Vice-Chancellor | 10 th September, 2019 | University of Education, Winneba |
| b | UEW Female Faculty Members Lead Historic African Conference for Women in STEM | 4 th November, 2024 | University of Education, Winneba |
| c | UEW Hosts 2025 STEM and AI Summit | 29 th August, 2025 | University of Education, Winneba |
| d | IERIS-UEW Hosts International Conference on Innovation and Teacher Education | 23 rd October, 2025 | University of Education, Winneba |
| e | UEW Hosts Co-Creation Workshop on Digitalisation and Green Transition | 15 th May, 2025 | University of Education, Winneba |
| f | UEW Scholars Champion Regional Development Through ASAF Project | 10 th July, 2025 | University of Education, Winneba |
| g | DCE-UEW Inspires 100 Learners Through Chemistry Festival at Kojo Beedu | 13 th October, 2025 | University of Education, Winneba |
| h | UEW Launches American Chemical Society Student Chapter | 12 th August, 2025 | University of Education, Winneba |
| i | UEW Hosts Co-Creation Workshop on Digitalisation and Green Transition | 15 th May, 2025 | University of Education, Winneba |
| j | UEW Champions Green and Digital Futures in Africa Through Erasmus+ TeProD Project | 6 th May, 2025 | University of Education, Winneba |
| k | Prof. Ruby Hanson with Partners Awarded European Grant for Teacher Education in Africa | 16 th June, 2025 | University of Education, Winneba |
| l | UEW Researchers Train Facilitators to Strengthen PLCs in Schools | 14 th May, 2026 | University of Education, Winneba |
| m | UEW Strengthens Global Partnerships and Innovation Capacity at Erasmus+ TeProD in Slovakia | 12 th June, 2026 | University of Education, Winneba |
| n | UEW Hosts TeProD Workshop on Strengthening Professional Development for Sub-Saharan Africa's Twin Transition | 10 th December, 2025 | University of Education, Winneba |
| o | Corporate Strategic Plan (2025-2030) - Committee Member | 25 th August, 2025 | University of Education, Winneba |
| p | Keynote speaker: Curriculum Reforms in a Technology Driven World | 22 nd October, 2024 | Nasarawa State University, Keffi, Nigeria LMS |
| q | International Teacher Survey on Green and Sustainable Chemistry (GSC) Practical Activities | | IUPAC |
| r | UEW Strengthens Partnership with Agona West Education Directorate Under RTIA Project | 29 th October, 2025 | Agona West Municipal Education Directorate |
| | Plenary speaker at the IUPAC-ICCE 2022 Conference in Cape Town, South Africa | 18 th July, 2022 | iupac.org |

The person's participation, either individually or on a panel, as judge of the work of others in the same or an allied field of specification for which classification is sought

- a. International External Evaluator for the International Organisation for Chemical Sciences in Development (IOCD)'s global essay competitions run by the Royal Society of Chemistry (Titled: Young Voices in the Chemical Sciences for Sustainability) from 2023 to Date, individually.
- b. University of Pretoria - Reviewed doctoral proposals and thesis (Mr. G. P. Brits, 84026635) and assessed requests for funds for Chairs
- c. University of Witwatersrand - Reviewed doctoral thesis of Nonkanyiso Queen Vokwana, 0614709F and requests for funds for Chairs of higher levels
- d. University of Witwatersrand - Reviewed doctoral proposal report of Mpumelelo Faith Zondi (683962)
- e. University of Witwatersrand- Reviewer /referee for Colloquiums at the invitation of Emeritus Prof. Marissa Rollnick
- f. University of Cape Town- External Examiner for Thesis and Doctoral Proposals
- g. University of Lagos - Reviewed promotion documents of Dr. Rachael Olatoun Okunuga to the rank of associate professor
- h. Osun State University - External Examiner for the promotion of Dr. A. E. Okanlawon to the grade of Associate Professor
- i. University of Cape Coast- External Examiner for thesis and promotion documents
- j. University of Ghana College of Education- External Assessor for doctoral thesis and promotion documents
- k. Kwame Nkrumah University of Science and Technology- External Examiner for doctoral thesis
- l. University of Education- Serve as Supervisor, Internal Assessor for doctoral thesis and Internal Assessor for Academic Promotion documents
- m. C. K. Tendam University of Technology and Applied Sciences- External Examiner for promotions to the senior lecturer and associate professor levels
- n. Evaluation of conference abstracts-World Conference on Marine Biodiversity 2026
- o. Postal Reviewer: National Research Foundation, South Africa, South African Research Chairs Initiative (SARCHI) -5-Year Review Assessment, 2024 (Prof. Salim Valley)
- p. Reviewer for International Council of Associations for Science Education (Science Education International)
- q. Reviewer for IGI Global Scientific Publications
- r. Reviewer for African Journal of Chemical Education
- s. Reviewer for Journal of Chemical Education
- t. Reviewer for African Journal of Research in Mathematics, Science and Technology Education (RMSE-2018-0162)

The person's original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field

- a. Prof. Ruby Hanson-Google Scholar
- b. International Advisory Board Member, IUPAC-ACS Africa Regional Conference (2025) on Green and Sustainable Chemistry Lagos, Nigeria
- c. Workshop Organiser and Discussant at SRI 2025, Grand River Walk Chicago, Chicago, USA
- d. Workshop Organiser, discussant and Presenter at the African Conference for Women in Engineering and Science (ACWES 2024) on Mentorship and Managing Humanitarian Challenges Through Chemistry and Engineering Education, Kigali, Rwanda
- e. International Advisory Board Member; ACS Africa Regional Conference on Green and Sustainable Chemistry
- f. GOT Project (International Advisory Board)
- g. Lead Science Writer and Curriculum Designer for T-Tel Curriculum Writing Team
- h. Lead Curriculum Designer for Open, Distance and e-Learning Modules
- i. Development and Research in Science and Mathematics Courses for Teachers (Vrije University and University of Utrecht)

- j. ACS Chemistry Festival Grants for the improvement of Teacher Education and Rural Community Science Outreaches
- k. Resource Person for Training Data Scientist in STEM and Gender Issues in Kigali, Rwanda, under the auspices of African Institute of Mathematics and Sciences (AIMS), Kigali, Rwanda
- l. Resource Person for a training Workshop STEM and Gender Coordinator for MAMODAfrica Doctoral Training in Mbour, Senegal (under the auspices of Africa Institute for Mathematical Sciences (AIMS))
- m. Regional (Ghana) Coordinator for IUPAC International Teacher Survey on Green and Sustainable Chemistry (GSC) Practical Activities (IUPAC Project No.: 2023-002-2-050)

The person's authorship of scholarly articles in the field, in professional or major trade publications or other major media

- a. [Prof. Ruby Hanson - Google Scholar](#)
- b. [Ruby HANSON | Dean of Academic Faculty | Professor | University of Education, Winneba, Winneba | Chemistry Education | Research profile](#)
- c. Ruby Hanson UEW [Academia.edu](#)
- d. <https://www.uew.edu.gh/publications>
- e. [Ruby Hanson's publications](#)
- f. Prof. Ruby Hanson [ResearchGate Publications](#)
- g. <https://uew.edu.gh/announcements.prof-mrs-ruby-hanson>
- h. <https://www.uew.edu.gh/dce.news.prof-ruby-hanson>
- i. <https://www.uew.edu.gh/hall-fame.prof-ruby-hanson>
- j. <https://orcid.org>

Display of the person's work in the field at artistic exhibitions or showcases

Not Applicable

The person has performed in a leading or critical role for organisations or establishments that have a distinguished reputation

- a. Science Team Lead for the design and development of a new College of Education Curriculum (T-Tel) Sponsored by UK Aid/Ministry of Education (Government of Ghana): Successfully completed and curriculum currently in use by Colleges of Education in Ghana
- b. Lead writer for Professional Learning Community (PLC) Manuals for Secondary Schools and Colleges of Education (Sponsored by T-Tel/UK Aid and Ministry of Education, Ghana)
- c. Lead Curriculum Designer for Distance and e-Learning modules for the University of Education, Winneba: Successfully completed with Modules in use
- d. Lead Ghanaian Researcher for the EU sponsored Ghana African RTIA 2025-2026 EU Project (Window 3): Mid-term Review by expert EU assessor showed excellent performance
- e. Advisory Board Member for the Erasmus+ GOT Project: Project successfully completed and closed in December, 2025
- f. Convener and Coordinator at SRI-2025 in Chicago. Title of Session Discussion was: Pathways for sustainable mining in developing countries
- g. Keynote Speaker at the Nasarawa State University Education Conference in Keffi, Nigeria. Title of the presentation was: Curriculum reforms in a technology-driven world- Implications for education in developing economies (October 21-25, 2024)
- h. Plenary Speaker at the 26th IUPA/ICCE Conference in Cape Town, South Africa with title of presentation: The role of chemistry in humanitarian challenges (July 18-22, 2022)
- i. Plenary Speaker at the 43rd National Convention of the South African Chemical Institute CSIR-ICC, Pretoria, South Africa. Title of presentation was Constructivism in contemporary times (December 2-7, 2018)

- j. The first full female professor of Chemistry Education in the University of Education (2018), and, still one of the current three full female professors among an academic staff of 542.
- k. Over 100 scholarly peer reviewed articles, book chapters, book reviews and conference publications in high impact outlets
- l. Mentor for the Ghanaian Institute for the Future of Teaching and Education Women's Fellowship Programme- a partnership between UEW, Mujeres Por Africa, University of Minnesota and New York University, sponsored by Banco Santander

The person has commanded a high salary, or other significantly high remuneration for services, in relation to others in the field

Commercial successes in the performing arts, as shown by box office receipts or record, cassette, compact disk, or video sales

Professional Responsibilities

| <i>Position</i> | <i>Office/Location</i> | <i>Period</i> |
|----------------------------|--|--|
| Acting Pro-Vice Chancellor | Main Administration Block, North Campus, UEW, Ghana | 6 th September, 2019 - 6 th December, 2019 |
| Dean | Faculty of Science Education, UEW, Winneba, Ghana | 1 st August, 2018 to 3 rd March, 2022 |
| Vice Dean | Faculty of Science Education, University of Education, Winneba | 1 st August, 2017-31 st July, 2018 |
| Head of Department | Department of Chemistry Education, UEW, Winneba, Ghana | 1 st August, 2015-31 st July 2017 |
| Examination Officer | Department of Chemistry Education, UEW, Ghana | 1 st August, 2013-31 st July, 2015 |
| Academic Counsellor | Department of Chemistry Education, UEW, Ghana | 1 st August, 1999-31 st July, 2016 |
| E-Course Developer | Department of Chemistry Education, UEW, Ghana | 7 th January, 2012 to date |
| PLAN Ghana Facilitator | Sector Workshops by PLAN Ghana, Winneba | February 1998-June 2003 |

Education

| <i>Qualification/Certificate obtained</i> | <i>Name of Institution Attended</i> | <i>Date</i> |
|--|---|------------------------------|
| Designing and Facilitating E-Learning (Level 5) | Open Polytechnic of New Zealand, New Zealand | 2015 |
| Ph.D. (Chemistry Education) | University of Education, Winneba | 2014 |
| Development in Research and Thesis Writing Skills (Participatory certificate) | University of Utrecht, Utrecht, The Netherlands | 15 th August 2008 |
| Development and Research in Science and Mathematics Education Courses for Teachers | Vrije University, Amsterdam, The Netherlands | June 2006 & June 2007 |
| M. Phil. (Chemistry) | University of Cape Coast, Ghana | 2003 |
| B.Ed. (Chemistry & Int. Science), 1st Class Honours | University of Education, Winneba, Ghana | 1997 |
| Diploma (Chemistry & Int. Science), 2nd Class Upper Division | University of Education, Winneba, Ghana | 1991 |
| Three-Year Post-Secondary “Certificate A” (Science & Education) Distinction | Wesley College, Kumasi, Ghana | 1985 |
| GCE (Ordinary & Advanced Level) Science | St. Louis Secondary School, Kumasi | 1973-1980 |

Career History

| <i>Position/Title</i> | <i>Name of Institution Department</i> | <i>Date/Period</i> | <i>Responsibilities</i> |
|--|---|---|--|
| Acting Dean & Full Academic Professor | Faculty of Science Education, UEW | 1 st August, 2021- 3 rd March, 2022 | <ul style="list-style-type: none"> • Plan, design and develop Course Outlines and Manuals. • Coordinate examinations. • Score and grade student’s assessment. |
| Acting Pro-Vice Chancellor & Full Academic Professor | University of Education, Winneba | September, 2019 to December, 2019 | <ul style="list-style-type: none"> • Supervise University academic Affairs • Chair Academic Board subcommittees |
| Dean/ Academic Professor | Faculty of Science Education, UEW | 2018 to 3 rd March, 2022 | <ul style="list-style-type: none"> • Plan, design, implement and manage classroom instruction • Teach and supervise Graduate classes and supervise. Thesis |
| Vice Dean & Associate Professor | Faculty of Science Education, UEW | 2016 | <ul style="list-style-type: none"> • Perform same duties as the Dean and deputise during absences |
| Senior Lecturer & Examination Officer | Dept. of Chemistry Education, UEW | 2012 | <ul style="list-style-type: none"> • Plan, design, and implement academic activities • Oversee conduct of examinations |

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|--------------------|---------------------------------------|------------|--|
| Lecturer | Erstwhile Dept. of Science Educ., UEW | 2004 | <ul style="list-style-type: none"> • Perform duties as for Senior Lecturer |
| Demonstrator | Dept. of Chemistry, Cape Coast | 2000- 2003 | <ul style="list-style-type: none"> • Assist with Lab activities • Organise tutorials |
| Teaching Assistant | Dept. of Science Education, UEW | 1999-2002 | <ul style="list-style-type: none"> • Assist with lab practice • Understudy lecturers |
| Graduate Teacher | St. Roses High School, Akwatia | 1997-1998 | <ul style="list-style-type: none"> • Teach students and perform supervisory duties |

Publications, Research/Projects Conducted or Undertaken, Creative Works/Productions

Grants/Projects

- 1. RTIA Project; Regional Teachers Initiative in Africa Finnish National Agency for Education (EDUFI) Grant (*Implementation of Professional Learning Communities in selected African Countries: Implications for Policy and Practice*); Grant 5: SAIDE, South Africa- 642 334 (Partner member. fund of €106,037.00, from May 2025 to November, 2026
- 2. TeProD Project No: 101177880; ERASMUS-EDU-2024-CBHE (Capacity building in higher education; Strand 2) funded with €799,990.69. <https://www.teprod.eu>
- 3. GOT Project; Capacity Building in the Field of Higher Education, ERASMUS-EDU-2022-CBHE-STRAND 2 GRANT No: 101082794, from January 2022 to December 2025, funded with 798,906.00 Euros
- 4. ACS 2022 Chemistry Festival Grant with Reference number: 16024556 (Awarded)
- 5. ACS 2021 Chemistry Festival Grant with Reference number: 15339404 (Awarded)
- 6. ACS 2020 Chemistry Festival Grant with Reference number: 13933127 (Awarded)
- 7. Systems thinking in chemistry for sustainability: Toward 2030 and beyond (STCS 2030+) (Awarded)
 - Project number: 2020-014-3-050 (Collaborator/Partner)
 - Division name: Committee on Chemistry Education
- 8. International teacher survey on green and sustainable chemistry (GSC) practical activities (Ghana Survey Coordinator)
 - <https://iupac.org/project/2023-002-2-050> (Country Project member)
- 9. Green Chemistry in Sub-Saharan Africa IUPAC Project 2021-005-1-041, <https://iupac.org/project/2021-005-1-041> (Chapter Contributed)
-

Books

- Hanson, R. & Ngman-Wara, E. I. (2021). Early Grade Science 1 Course Module for Distance Learners. CODEL, UEW.
- Contribution to Development of National Teacher Standards and design of National T-Tel Curriculum (Curriculum and Teaching Manuals) for New Educational Reforms
- Department of Chemistry Education (2013). Handbook for Undergraduate Chemistry Education Students, Department of Chemistry Education, Winneba
- Opong, E. K., & Hanson, R. (2012). *SCB 521 Industrial Chemistry for MEd Distance Learners, Units 1 and 2*. Winneba: IEDE.
- Hanson, R., Bobobee, L. H., & Samlafo, V. B. (2011). *SCB 502 Inorganic and Physical Chemistry 1 for M. Ed Distance Learners, Unit 1*. Winneba: IEDE. ISBN 9988-620-87-X.
- Hanson, R. (2006 to Date). Chemistry Education Course Manuals. Departmental Productions

Chapters in Edited Books

Hanson, R. & Anor, C. E. (2025). *Engaging pre-service teachers in an indigenous activity to investigate sustainability and green practices in palm oil production*. In Mammino, L. in conjunction with IUPAC (Eds) Green chemistry in Sub-Saharan Africa: 20 years of growth. De Gruyter Physical Sciences Review

Hanson, R. & Hanson, C. (2023). *A better world through the integration of sustainability and humanitarianism in chemistry education*. In C. A. Shoniregun, V. Argyropoulos, and M. A. Plummer (Eds). Inclusive education and lifelong learning. Vol. 1. (Chp 3, pp. 1-19). Infonomics Society

Hanson, R. & Hanson, C. (2022). *Catching learners early in humanitarianism and sustainable principles through chemistry*. In Y. Koumpouros, A. Georgoulas, and G. Kremmyda, (Eds). Modern Challenges and Approaches to Humanitarian Engineering. (Chp 12, pp. 213-233). IGI Global

Sakyi-Hagan, N., Quansah, R. E., & **Hanson, R.** (2019). *Microscale science equipment as a conceptual and attitudinal change tool towards sustainable development*. In J. A. Opara (Ed.). Outlook on human capacity building and development: A handbook of research in honour of Professor Ibrahim Njodi (pp. 222-231). Maiduguri, Nigeria: University of Maiduguri Press

Hanson, R. (2021). *Situating Hands-on and Minds-on Activities in Contemporary Times to Promote Chemistry Education and Conceptual Gain*. In U. A. Okon and R. Hanson (Eds). Sustainable innovations in STEM development: Challenges and way forward. INWES-Africa Regional Network E-Book of Readings. Vol 1. 2019 ARN Conference (Chapter 4 pp. 40-58)

Peer-Reviewed Journal Articles

Agjei, R. O., Ankudze, B., **Hanson, R.**, Shikalepo, E. E., Amuthenu, S. H., Sheepo, T. A., Likela, S., Ndeunyema, A., Shivolo, T., Urbancikova, N., Hudec, O., Lagstedt, A., Jani, S., Atarah, S. A., Edu, A. S., Owusu, A., Kolog, E. A. & Oklu, V. D. (2025). Bridging the skills gap in the era of twin transition: Perspectives from employers in sub-Saharan Africa. *Journal of Finnish Universities of Applied Sciences*. <https://uasjournal.fi/in-english/bridging-the-skills-gap-in-the-era-of-twin-transitions-perspectives-from-employer-in-sub-saharan-africa/>

Agjei, R. O., Ankudze, B., **Hanson, R.**, Shikalepo, E. E., Amuthenu, S. H., Sheepo, T. A., Likela, S., Ndeunyema, A., Shivolo, T., Urbancikova, N., Hudec, O., Lagstedt, A., Jani, S., Atarah, S. A., Edu,

- A. S., Owusu, A., Kolog, E. A. & Oklu, V. D. (2025). Ecosystem readiness for the twin transition in higher education: Lessons from a Ghanaian applied university case. *Journal of Finnish Universities of Applied Sciences*. <https://uasjournal.fi/4-2025/ecosystem-readiness-for-the-twin-transition-in-higher-education-lessons-from-a-ghanaian-applied-university-case>.
- Adoma, P. O., Amponsah, A. S., Ankrah, K. T., Acquah, F., Amu, H., Agjei, R. O., & **Hanson, R.** (2024). Health risk assessment of heavy metals in lettuce and spring onion on human health in Kumasi, Ghana. doi: *Environmental Health Insights*. 10.1177/11786302241285737
- Asiedu, G., Yaayin, B. & **Hanson, R.** (2024). Effect of computer animations on senior high school students' academic achievements in rates of reactions. *Open Access Library Journal* 11, e12276 1-12. <https://doi.org/10.4230/0alib.1112276>
- Stoffelsma, L., Antwi, V. & **Hanson, R.** (2024). Incidental vocabulary learning in a postcolonial English second language context. *Language Matters* 55(1-2), 92-113. Doi: <https://doi.org/10.1080/10228195.2024.2341010>
- Nartey, E., Koranteng, E., Oppong, E. K. & **Hanson, R.** (2024). Analysis of undergraduate chemistry students' responses to substitution reaction: A road to mastery. *Chemistry Teacher International* <https://doi.org/10.1515/cti-2023-0075>
- Nanor, E., **Hanson, R.** & Mahama, A. (2024). Effect of STAD Model of cooperative learning on students' learning outcome on nomenclature of hydrocarbons. *International Journal of Scientific Research and Management (IJSRM)* 12(03) 3264-3274. Doi: 10.1853/ijprm/v12i03.e103
- Adoma, P. O., Kumassah, S., Abubakari, Y., Baidoo, M. A., Agyemang, E. & **Hanson, R.** (2023). Assessing immunisation data quality in Sunyani West Municipality to inform sound healthcare decision-making. <https://doi.org/10.21203/rs.3.rs2669982/v1> <https://europepmc.org>
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Professional Development

Seminars and Workshops:

| <i>Paper/Course Title</i> | <i>Paper/Course Instructor(s)</i> | <i>Location</i> | <i>Period/Date</i> |
|---------------------------|-----------------------------------|-----------------|--------------------|
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| | <i>Speaker(s)</i> | | |
|--|--|--|--|
| Developing Grantsmanship Skills | DRID Directorate | North Campus Assembly Hall, Winneba | November, 2025 |
| RTIA Ghana PLC Capacity Building | Frank Awuah & Bawa Mbage | Winneba | 8-10 October, 2025 |
| ICERIS-2025 | IERIS | Winneba | 16-18 October, 2025 |
| GOT Project Closing Meeting | Jussi Okkonen | Tampere University | 15-17 September, 2025 |
| RTIA Project Inception Meeting | Tony Lelliot (SAIDE) | Johannesburg | 15-17 July, 2025 |
| TeProD Project Meeting | Jani Srila | Helsinki | March 2025 |
| Building bridges: Developing leadership skills | Ruby Hanson in conjunction with ASAF | Tyco City Hotel, Sunyani | 25 th -27 th June, 2025 |
| Workshop: Mentorship in STEM & Career Progression Strategies | Ruby Hanson & Gisele Morenike Sinasson | Kigali, Rwanda | 6 th November, 2024 |
| Data Science Training Workshop | Ruby Hanson & Simon Okumba Miruka | Kigali, Rwanda | 25 th -28 th March, 2024 |
| MAMOD AFRICA PhD Training School- Gender Issues | Ruby Hanson & Seema Singh | Mbour, Senegal | 24 th -25 th November, 2023 |
| Association of Students and Alumni Forum | Ruby Hanson (Resource Person) | Elmina Beach Resort | 4 th -6 th October, 2023 |
| Annual Geographers' Association Forum | Ruby Hanson (Chair) | JAMCC, North Campus, UEW | 26 th July, 2023 |
| Energy and Climate Change | Ruby Hanson (Chair) | Central Campus. UEW | 19 th July, 2023 |
| 10 th Anniversary Celebration of HEPSA | Ruby Hanson (Chair) | Central Campus, UEW | 22 nd June, 2023 |
| Females in STEM Workshop | Ruby Hanson (Chair) | Central Campus UEW | 15 th September, 2022 |
| Developing a career path | Ruby Hanson | Elmina Beach Resort | 8 th December, 2012 |
| Professional Development and Research practices | Ruby Hanson | Elmina Beach Resort | 26 th -29 th August, 202 |
| Women in Leadership: Overcoming biases and stereotypes | Ruby Hanson | JAM Conference Centre | 10 th March, 2021 |
| Professional Development: Navigating the Challenges | Ruby Hanson | School of Creative Arts Conference Room | 17 th December, 2020 |
| 16 Days of Activism to end gender-based violence in society | Gender Directorate | Virtual Platform | 25 th to 26 th November, 2020 |
| One-Day Chemistry Festival dubbed- The Indigenous Chemistry in our Environment | The American Chemical Society in Conjunction with The Dept. of Chemistry, UEW, Winneba | UNIPRA South Junior High School | 25 th November, 2020 |

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| Research Seminar for Graduate students: Managing a working relationship with your supervisor | Institute for Educational Research and Innovation Studies | Virtual Platform | 27 th October, 2020 |
| Conducting excellent and innovative research despite the pandemic | OWSD-CSIR Ghana | Virtual Platform | 6 th , 13 th , 20, & 27 th October, 2020 |
| How drug repurposing can accelerate the search for new treatments | C & EN Webinars- Simon Pearce and Catherine Dold | Virtual Platform | 2 nd September, 2020 |
| Gendered Innovation in response to extreme events: Women at the forefront of climate change and COVID-19 responses | South African Women in Science Awards (SAWiSA) Webinar Series- Dept. of Science and Innovation/OWSD | Virtual Platform | 31 st August, 2020 |
| Lab of the future: Building a smart lab: The future of science | ACS (C & EN) | Virtual Platform | 26 th August, 2020 |
| C & EN's Future Festival | ACS | Virtual Platform | 25 th August, 2020 |
| Sustaining research during a pandemic | OWSD Ghana National Chapter | Virtual Platform | 11 th , 13 th , 18 th & 21 st August, 2020 |
| Keynote address on: Paving the way for a peaceful, free and fair elections. | Director, Centre for Conflict, human rights & Peace Studies. | Central Campus Auditorium | 20 th October, 2020 |
| 18 th International Conference of Women Engineers and Scientists | ICWES18 | Virtual Platform | 14 th September, 2020 |
| E-Workshops on teaching and assessment on the UEW LMS | ICT Directorate | University of Education, Winneba | March-April, 2020 |
| Inauguration of UEW Chapter & Symposium: UEW in the 21 st century: The role of Senior Staff in moving the University forward | Mrs. Christie Okai-Anti | Jophus Anamuah Mensah (JAM) Conference Centre, North Campus, UEW | 14 th February, 2020 |
| Functional Procurement Units: Key to sustainable public procurement system | Public Procurement Authority (PPA) | Academy of Arts & Sciences Auditorium | 11 th December, 2019 |
| International Human Rights Day- Stand up for Human Rights | Rt. Honourable Prof. Aaron Mike Oquaye, Speaker of Parliament | JAM Conference Centre, North Campus, UEW | 10 th December, 2019 |
| Mastercard Foundation & Ministry of Education | Mastercard Foundation | La Palm Royal Beach Resort, Labadi, Accra | 29 th -30 th November, 2019 |
| 2 nd UEW 25 th Anniversary Public Lecture: The role of science and technology in the provision of | Okyenhene Amoatia Oforipani | JAM Conference Centre, North Campus, UEW | 20 th November, 2019 |

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| quality education for sustainable national development | | | |
| African Universities Week 2019: Towards a peaceful & secure Africa through quality higher education | Institute for Educational Research and Innovation Studies | Institute for Educational Research and Innovation Studies, UEW | 13 th November, 2019 |
| African Universities Week 2019- Towards a Peaceful & Secure Africa Through Quality Higher Education | Ruby Hanson (Launching & Opening of exhibition) | Institute for Educational Research and Innovation Studies (IERIS) | 13 th November, 2019 |
| Offering Support in UEW's Professional Development Agenda | Ruby Hanson | JAM Conference Centre, North Campus, UEW | 6 th November, 2019 |
| Orientation for Deans, Directors, Deputy Registrars, and Heads of Departments (Place of HODs, Deans & Directors in University Management) | Rev. Fr. Prof. Anthony Afful-Broni, Ruby Hanson, & other Management of UEW | Golden Bean Hotel, Kumasi and Manna Heights Hotel, Mankessim | 7 th October, 2019, and 11 th October, 2019 |
| Seminar on New Educational Policy Reforms in Ghana | GES, NACCA, T-Tel Chief Executives & R. Hanson (Chairperson) | JAM Conference Centre | 8 th & 9 th October, 2019 |
| Curriculum and Course Manual Writing Workshops | T-Tel Personnel | Elmina Beach Resort, Koforidua Capital View, Aqua Safari | 2018 to 2019 |
| Facilitation of Professional Development Sessions on Course Manual | Ruby Hanson & Victor Antwi | Windy Lodge Hotel & St. Louis College of Education | August 2019 & 24 th -27 th September, 2019 |
| Member of T-Tel Science Strand Curriculum Writing Workshop | Prof. Jophus Anamuah-Mensah and Beatrice Noble-Rogers (UK Consultant) | Tomreik Hotel, East Legon; Elmina Beach Resort, Elmina Aqua Safari Hotel, Ada Sky Plus Hotel, Ho Capital View Hotel | 20 th -24 th November, 2017; 20 th -27 th January, 2018 February 2018 March, 2018 April, 2018 |
| Workshop for Heads of Faculties, Departments and Examination Officers | Prof. Anthony Afful-Broni | AVU, Faculty Block, North Campus, UEW, Winneba | 30 th August, 2017 |
| Orientation for Deans, Directors and Heads of Departments | Prof. Anthony Afful-Broni/ Mr. Raymond Boison and others | Manna Heights Hotel, Mankessim | 26 th -27 th of October, 2017 |
| IERIS-UEW World Teachers' Day Dissemination | Prof. Yaw Ameyaw and Dr. Tamanja | JAM) Conference Centre, North Campus, UEW | 5 th October, 2017 |

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| Gender Mainstreaming Directorate Workshop for Senior Members: 'Publishing in High Impact Journals' | Prof. Ama Degraft-Aikins, | JAM Conference Centre | 27 th -28 th September, 2017 |
| UEW Budget Implementation Workshop | Dr. Arkolie and Mr. Frank Boateng | JAM Conference Centre, North Campus | 18 th May, 2017 |
| APTIS Workshop | Presentation by the British Council | JAM Conference Centre, North Campus, UEW | 19 th March, 2017 |
| Sensitisation Drive on UEW Research Fund | Prof. Yaw Ameyaw | JAM Conference Centre, North Campus, UEW | 27 th February, 2017 |
| Public lecture on Conflicts, Human Rights and the need for Peace by Centre for Conflict, Human Rights and Peace Studies | Dr. Colm Thomas O. Cuanachain | Jophus Anamuah-Mensah (JAM) Conference Centre, North Campus, UEW | 19 th October, 2016 |
| Open, Distance and eLearning in Tertiary Institutions: Public Lecture by the President of Commonwealth of Learning | Professor Asia Singh Kamwer | JAM Conference Centre, UEW | 1 st August, 2016 |
| Current trends in Teacher Education in Ghana | IERIS and the National Teacher Education Unit | JAM Conference Centre, UEW | 14 th July, 2016 |
| International Women's Day Seminar | Joint Gender Directorate-National Union of Ghana Students | JAM Conference Centre, UEW | 11 th March, 2016 |
| UEW LMS Training Workshop for Lecturers | ICT Directorate | AVU, Faculty Block, North Campus, UEW | 3 rd March, 2016 |
| Empowerment in the knowledge and skills of the Student Internship Programme (SIP) | IEDE | ICT Laboratory, Osagyefo Library, South Campus, UEW | 18 th -19 th January, 2016 |
| IEDE-AVU Course Converters' Training | IEDE | AVU Centre, North Campus, UEW, Winneba | 15 th -17 th July, 2015 |
| Vice Chancellor's meeting with Deans, Directors and Heads of Academic Departments | Prof. Mawutor Avoke | City Escape Hotel, Prampram | 21 st -23 rd October, 2015 |
| UEW ICT Training Workshop on the use of official university email | ICT Department, UEW | AVU Centre, Faculty Block, North Campus, UEW, Winneba. | 29 th July, 2015 |

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| IEDE-AVU Course Converters' Sensitisation Seminar | Nicholas Donkor | AVU Centre, North Campus, UEW, Winneba | 6 th July, 2015 |
| 2 nd Trainer of Trainers' Workshop: Curricula transformation from a gender perspective | Prof. A. Apusiga (UDS)/ Gender Directorate | Council Chamber, North Campus, UEW, Winneba | 27 th -30 th April, 2015 |
| Quality Assurance Directorate presentation on: Quality Assurance at the Work Place | Prof. M. K. Amedeker | Lecture Hall 2, FSE Block, South Campus, University of Education, Winneba, | April 15 th , 2015 |
| Budget Implementation Workshop | Dr. T. S. Arkolie and Mr. Frank Boateng | UEW Council Chamber | 1 st April, 2015 |
| Workshop for Academic Counsellors: Our Responsibilities as Academic Counsellors | Department of Psychology and Education | J. N. Aryeetey Auditorium, South Campus | 17 th November, 2014 |
| Faculty Academic Retreat Topic: <i>Research Analysis</i> | Faculty of Science Education | SMAYAK Hotel, Apam, | 1 st -3 rd September, 2014 |
| Training Workshop on the use of multimedia tools for lecture delivery | Division of Human Resource, UEW, Winneba | Faculty Block, North Campus, University of Education, Winneba | August 19, 2014 |
| Training workshop on the use of multimedia tools for lecture delivery | Division of Human Resource, UEW, Winneba | Faculty Block, North Campus, | 4 th August, 2014 |
| ERNWACA Dissemination Seminar | Prof. D. K. Mereku/EFPO | J. N. Aryeetey Auditorium, South Campus, UEW | 19 th July, 2014 |
| Symposium on Dilemmas of Higher Education | IERIS/IEDE | J. N. Aryeetey Auditorium, South Campus, UEW | 9 th July, 2014 |
| Improving Grant Assessing and Management Capacity | Prof. Yaw Ameyaw & Prof. Yaw Sekyi-Baidoo | North Campus, UEW | June, 2014 |
| Empowering Young African Women in STEM; A STEMbees' Inaugural 2-day Launch | STEMbees Foundation | MEST Campus, East Legon, Accra. | 21 st -22 nd June, 2014 |
| Courseware Development Writing Workshop | Externally Funded Projects | UEW | June, 2014 |
| GES/SRC Phase 111: Training of Science Teachers & Technicians | Ghana Education Service/Science Resource Centre/ Philip Harris | Opoku Ware Secondary School and | May 4 th to 31 st , 2014, |

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| on Investigative Science Teaching | | Prempeh College, Kumasi | |
| Information Literacy Workshop for Faculty members | Mr. Viscount Buer | ICT Laboratory, South Campus, University of Education | January 20 th -21 st , 2014 |
| Drafting of 2014-2018 UEW Strategic Plan | Finance Section | J. N. Aryeetey Auditorium, South Campus, Winneba | Thursday 13 th February, 2014 |
| ODL & Technology Enabling Access, Quality & Inclusion in Higher Education | IEDE Public lecture, | J. N. Aryeetey Auditorium, South Campus, UEW | Monday, 9 th December 2013 |
| Grant Proposal Writing Workshop | UEW EPFO | J. N. Aryeetey Auditorium, South Campus, Winneba | 12 th November, 2013 |
| Training in Using Research Professional Africa Platform | IEDE | IEDE, University of Education, Winneba | 10 th July, 2013 |
| Presentation at a Gender Mainstreaming Dissemination Conference | Gender Directorate (Presentations by Mentees) | Central Campus, Winneba | 29 th August, 2012 |
| Retreat Writing Workshop for UEW Senior Members | Gender Directorate | Elmina Beach Resort, Elmina | 18 th -21 st August, 2012 |
| PHEA-ETI Workshop on the Introduction of e-learning and Moodle Writing in Higher Institutions | Mr. J. Williams and Mr. Andrew Moore (Consultant SAIDE) | COLTEK Conference Room, University of Education, Kumasi Campus | 25 th -5 th February, 2012 |
| IEDE/CDE Workshop on Techniques of Courseware Development | IEDE | Pecku Block Conference Hall, UEW, Winneba, | 11 th January, 2012 |
| Data Analysis Workshop | Consultants for Gender Directorate | Pecku Building, North Campus, Winneba | 26 th - 30 th September, 2011 |
| INASP/ CARLIGH Author-Aid Workshop | INASP – Ghana | INSTI(CSIR) Headquarters, Accra | 14 th -15 th September, 2011 |
| PHEA-ETI Workshop on e-learning and Moodle Writing | Consultant from SAIDE | ICT Block, University of Education, Winneba | 14 th -17 th March, 2011 |
| PHEA-ETI Workshop on the introduction of e-learning | Project Leads | ICT Block, University of Education, Winneba | 21 st -21 nd September, 2011 |
| NUFFIC/PRACTICAL Project Session on Thesis Writing | Project Leads | University of Utrecht, The Netherlands | 15 th June-16 th August, 2008 |

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| NUFFIC/PRACTICAL Project Workshop: Designing Course Manuals | Project Leads | Manna Height, Mankessim | April, 2008 |
| NUFFIC/PRACTICAL Project on Writing of Course Manuals | Prof. E. C. Quaye | Sasakawa Conference Hall, University of Cape Coast | April – May, 2007 |
| IEDE Book Writing Workshop for M.Ed Distance Education | Carnegie Foundation Support for Expanding Distance Delivery | La Sab Hotel, Kwadaso, Kumasi | 15 th -21 st July, 2007 |
| PRACTICAL Project National Stakeholders' Conference | PRACTICAL Project coordinators | Elmina Beach Resort, Elmina | March, 2007 December, 2006 |
| Development and Research in Science & Mathematics Education | Vrije University Partners | Vrije University, Amsterdam, Netherlands | 28 th May-20 th June, 2006 |
| Facilitator for PLAN International Workshops for teachers | PLAN International | Windy Lodge Hotel, Winneba | February 2001 to July, 2003 |

Conference(s)

| <i>Name of Conference</i> | <i>Location</i> | <i>Presentations (if any)</i> | <i>Period</i> |
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| ACS-Conference on Green Chemistry | JAMCC, Winneba | Plenary Note Presented Mentorship | 13 th February, 2026 |
| Inter-University Doctoral Conference | JAMCC, Winneba | Paper Presented Developing an understanding of Research Designs | 22 nd January, 2026 |
| PCF 11 | Gaborone, Botswana | Paper Presented The state of Distance Education Learning in UEW | 9-12 September, 2025 |
| African Deans of Education Forum | Mauritius | None. Billed for Closing Remarks | 24 th June, 2025 |
| SRI-2025 | Sheraton Grand Chicago River Walk, Chicago | Paper Presented Pathways to sustainable mining in developing countries: balancing growth with environmental stewardship | 16 th – 19 th June, 2025 |
| ACS Spring 2025 | San Diego, USA | Paper Presented Exploring the systems thinking approach for teaching and learning green chemistry | 23 rd -27 th March, 2025 |
| Africa Conference of Women Engineers and Scientists | Kigali, Rwanda | Paper Presented | 4 th – 8 th November, 2024 |

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| | | Managing humanitarian challenges through chemical and engineering education | |
| Nasarawa State University Faculty of Education International Conference | Nasarawa State University, Keffi | Keynote Speech Curriculum reforms in a technology-driven world: implications for education in developing economies | 21 st – 25 th October, 2024 |
| SRI Africa Satellite Event | Durban, South Africa | Paper Presented Green Transitions in the global South- Perspectives from an educator | 21 st -24 th May, 2024 |
| IUPAC-ACS Conference in Green Chemistry | Lagos, Nigeria | Paper Presented Exploring the systems thinking approach for teaching and learning green chemistry” | 5 th -8 th May, 2024 |
| 19 th International Conference of Women Engineers and Scientists ICWES 19 | Auckland, New Zealand | Paper Presented Re-orienting preservice chemistry teachers towards sustainability for environmental restoration | 3 rd -6 th September, 2023 |
| Gordon Research Conference-Chemistry Education, Research, and Practice | Bates College, Lewiston, MA, USA | Poster Presented Re-orienting preservice chemistry teachers towards sustainability and its integration | 9 th -14 th July, 2023 |
| Canada International Conference on Education (CICE-2023) with World Congress on Education (WCE-2023) | Mississauga, Canada | Paper Presented Chemistry in the midst of humanitarian challenges | 26 th -29 th June, 2023 |
| 27 th Annual Green Chemistry & Engineering Conference | Long Beach, California, USA | Paper Presented Integrating green chemistry into curricula | 12-15 th June, 2023 |
| Sustainability Research + Innovation 2023 | Panama | Invited Participant | 26 th -30 th June, 2023 |
| Advancing Sustainability Science and Innovation | Virtual Participation | Invited Participant | 4 th -6 th June, 2023 |
| 26 th IUPAC/ICCE Conference | Cape Town, South Africa | Invited Plenary Speaker The role of chemistry in humanitarian challenges | 18 th -22 nd July, 2022 |
| 26 th Annual Green Chemistry & Engineering Conference | Reston, Virginia, USA | Paper Presented Assessing preservice teachers’ knowledge about green chemistry, sustainability and systems thinking | 6 th -8 th June, 2022 |
| Ireland International Conference on Education (IICE-2022) | Dun Laoghaire, Ireland | Paper presented Integrating the natural and social sciences- an initial idea | 26 th to 28 th April, 2022 |

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| INWES Seminar Series: Reimagining a STEM research culture | University of Warwick | Paper Presented Students' perspectives about STEM | 23 rd April, 2022 |
| London International Conference on Education with World Congress on Special Needs Education-2021 | London, UK | Special Invited participant | 22 nd to 24 th November, 2021 |
| Ireland International Conference on Education with World Congress on Education- 2021 | Dublin, Ireland | Special Guest | 26 th to 28 th October, 2021 |
| 18 th International Conference of Women Engineers and Scientists ICWES 18 | Warwick University, Warwick, Coventry, UK | Paper Presented Managing humanitarian challenges through sustainable micro science activities | 1 st to 3 rd September, 2021 |
| Canada International Conference on Education (CICE-2021) with World Congress on Education (WCE-2021) | Mississauga, Canada | Paper Presented Generation of chemical waste in school laboratories and their implications | 22 nd -24 th June, 2021 |
| 1st International Conference on Arts and Science- The Arts in the Sciences and the Sciences in the Arts | Virtual (Hosted from SCA, University of Education, Winneba) | Organising Member Convener and MC on Day 2 of conference | 26th to 27th January, 2021 |
| 4 th International Conference on Global Food Security | Virtual (Hosted from South Africa- University of Witwatersrand) | Chairperson for Symposium 3: Wicked Approaches to Wicked Problems- Reinforcing food systems in era of extreme events | 7 th to 9 th December, 2020 |
| Gender Mainstreaming Mentoring Programme: The role of mentoring in enhancing the career development of Senior Members | JAM Conference Centre, Winneba | Motivational Speech <i>My journey to becoming a Professor</i> | 4 th November, 2020 |
| CLUTE International Academic Conferences | New York, New York, USA | Paper presented <i>Hanson, R. & Sakyi-Hagan, N., The microscale science equipment as a conceptual change and cost-saving tool towards sustainable development</i> 5 th August, 2019 | 4 th to 8 th August, 2019 |
| 50 th General Assembly & 47 th IUPAC World Chemistry Congress | Paris, France | Virtual Participant 6 th August, 2019 | 5 th to 12 th July, 2019 |

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| Canada International Conference on Education (CICE-2019) | University of Toronto, Mississauga, Ontario, Canada | Paper presented Hanson, R., <i>An illuminative evaluation of the impact of two-tier diagnostic instruments on undergraduate chemistry teacher trainees' alternative concepts</i> 24 th June, 2019 | 24 th to 27 th June, 2019 |
| Gordon Research Conference-Chemistry Education, Research, and Practice | Bates College, Lewiston, MA, USA | Poster presentation Hanson, R., <i>Situating hands-on and minds-on activities in contemporary times to enhance conceptual gains in chemistry education</i> , 19 th June, 2019 | 17 th to 21 st June, 2019 |
| 43 rd National Convention of the South African Chemical Institute | CSIR-ICC, Pretoria, South Africa | Keynote Lecture Constructivism in contemporary times 4 th December, 2018 | 2 nd to 7 th December, 2018 |
| 25 th IUPAC International Conference for Chemistry Educators (ICCE 2018) | University of Sydney, Australia | Paper presented virtually Hanson, R., <i>Unearthing pre-tertiary students' reasoning patterns about elements, mixtures and compounds</i> 13 th July, 2018 | July 10 to 14, 2018 |
| Canada International Conference on Education (CICE-2018) | University of Toronto, Mississauga, Toronto, Ontario, Canada | Paper presented virtually Hanson, R., <i>An investigation into teacher trainees' understanding of chemical stability and its implications</i> , 28 th June, 2018 | June 25 to 28, 2018 |
| International Teacher Education Conference (ITEC 2017) | Harvard University, Boston, Massachusetts, USA | Paper presented <i>Hanson, R., Using activity worksheets to unearth 10th grade students' perceptions about word chemical equations,</i> 17 th August, 2017 | August 16-19, 2017, |
| Canada International Conference on Education (CICE-2017) | University of Toronto, Mississauga, Toronto, Ontario, Canada | Paper presented Hanson, R., <i>Assessing the potential of worksheets as a tool for unearthing teacher trainees' conceptions about chemical bonds</i> , Canada International Conference on Education (CICE-2017). | June 26-29, 2017, |

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| | | Mississauga, Toronto, Canada, 28 th June, 2017 | |
| 2 nd International Conference on Education Research for Development in Africa (ICERDA) | Alisa Hotel, Accra, | Paper presented Hanson, R., <i>Innovative laboratory practices towards sustainable development,</i> 4 th October, 2016 | 3 rd to 5 th October, 2016 |
| 24 th IUPAC International Conference on Chemistry Education (ICCE 2016) | Borneo Convention Centre Centre, Kuching, Sarawak, Malaysia | Paper presented Hanson, R., <i>A practical procedure to conceptualise some terms and factors associated with chemical equilibrium among undergraduates in a Ghanaian university</i> 17 th August, 2016 | 15 th to 20 th August, 2016 |
| Canada International Conference on Education (CICE-2016). | University of Toronto, Mississauga, Toronto, Canada | Paper presented Hanson, R., <i>Enhancing Undergraduate Pre-service Teachers' Conceptions about Introductory Chemical Equilibrium,</i> 27 th June, 2016 | 27 th to 30 th June, 2016, |
| Global Education Conference | Marriott Hotel, Las Vegas, USA | Paper presented Hanson, R., <i>Designing micro chemistry activities for teacher trainees in a university.</i> August 7-9, 2015 | 7 th to 9 th August 2015, |
| Ghana Science Association 14 th Biennial Conference | Auditorium, University of Cape Coast, Cape Coast | Participant | August 7, 2014. |
| Canada International Conference on Education (CICE-2014). | University of Breton, Sydney, Nova Scotia, Halifax, Canada | Paper presented Hanson, R., <i>Teaching with innovation: Enhancing concept understanding through the use of Microscience equipment in a hybrid online course.</i> 17 th June, 2014 | 17 th to 21 st June, 2014 |

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| International Conference on Computational and Mathematical Methods in Science and Engineering, (ICCMSE-VUT 2013) | VAAL University, Vanderbijlpark, South Africa | Paper presented Hanson, R. & Nsiah Asante, J., <i>An exploration of experiences in using the hybrid Moodle approach in the delivery and learning situations at the University of Education, Winneba, Ghana, September 25-27, 2013</i> | 25 th to 27 th September, 2013 |
| Conference on article publications, Gender Mainstreaming Directorate Conference | University of Education, Winneba | Power point presentation (Article published from research presentation) | 29 th August, 2012 |
| Open Access Africa 2011 Conference | KNUST, Kumasi | Participant | 25 th to 26 th October, 2011 |
| NUFFIC/PRACTICAL PROJECT session on thesis writing | University of Utrecht, Utrecht, The Netherlands, | Paper presented Hanson, R., <i>Teaching chemistry with innovation at the University of Education and University of Cape Coast: The use of course manuals</i> , Presented at a NUFFIC-PRACTICAL Project workshop, | June 15 th to August 16 th , 2008 |
| PRACTICAL PROJECT National Stakeholders' Conference | Elmina Beach Resort, Elmina | NUFFIC/PRACTICAL PROJECT Workshop on Writing and Finalization of Course Manuals for the 2007/2008 Academic year. Vrije University, Amsterdam, The Netherlands | December 2007 |
| NUFFIC/PRACTICAL PROJECT Workshop on Writing and Finalization of Course Manuals for the 2007/2008 Academic year | Vrije University, Amsterdam, The Netherlands | Paper presented Hanson, R. & Essumang, D. K. <i>The current state of Chemistry Education at the University of Education</i> . Paper presented at a NUFFIC-PRACTICAL Project workshop, The Netherlands, July, 2007 | J2 nd June to 20 th July, 2007 |
| Ghana Chemical Society's 16 th Annual National Conference, Theme: Chemistry, Energy and Nation Building | Sasakawa Conference Centre, University of Cape Coast, Cape Coast | Paper presented Hanson, R., <i>Toxicity and Uptake studies: The effect of pesticides on Freshwater fish</i> at the Ghana Chemical Society National Conference | 21 st to 24 th March, 2007 |

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| NUFFIC/PRACTICAL Project Workshop on Needs Assessment of Teacher Training Institutions and Familiarisation Tour | Vrije Universiteit, Amsterdam, The Netherlands | Paper Presented Hanson, R., <i>The state of Chemistry Education at the University of Cape Coast and University of Education.</i> Paper presented at a NUFFIC-PRACTICAL Project Seminar | June, 2006 |
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Virtual Conference(s)

| <i>Name of Conference</i> | <i>Location</i> | <i>Presentations (if any)</i> | <i>Period</i> |
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| Canada International Conference on Education (CICE-2023) with World Congress on Education (WCE-2023) | Mississauga, Toronto, Canada | Paper Presented Chemistry in the midst of humanitarian challenges | 26 th – 29 th June, 2023 |
| London International Conference on Education with World Conference on Special Needs Education | London | Special Invited Participant | 22 nd to 24 th November, 2021 |
| Ireland International Conference on Education in with World Congress on Education | Ireland (Dublin) | Invited Guest | 26 th to 28 th October, 2021 |
| 18 th International Conference of Women Engineers and Scientists ICWES 18 | Warwick University, Coventry, UK | Paper presented Managing humanitarian challenges through sustainable micro science activities | 1 st to 3 rd September, 2021 |
| Canada International Conference on Education and World Congress on Education | Mississauga, Canada | Paper presented Generation of chemical waste in school laboratories and their implications | 22 nd -24 th June, 2021 |
| 1 st International Conference on Art and Science | Winneba, Ghana | Organiser, Convener & MC | 26 th to 27 th January, 2021 |
| 4 th International Conference on Global Food Security (Elsevier Conference) | Virtual, University of Witwatersrand, SA (Originally to be held in France) | Chairperson/Moderator 4 th December, 2020 | 4 th & 7 th to 9 th December, 2020 |
| Maintaining a healthy working relationship with your academic supervisor | Kumasi, Ghana | Virtual Presenter 27 th October, 2020 | 27 th October, 2020 |

PAPERS PRESENTED AT OTHER LOCAL SEMINARS AND CONFERENCES

- Hanson, R. *Professional Development Agenda 1* (Mentee) Elmina Beach Resort. Elmina. Wednesday, 5th October, 2023

2. Hanson, R. *Professional Development Agenda 2* (Mentor) Elmina Beach Resort. Elmina. Wednesday, 6th October, 2023
3. PVC's speeches
4. Hanson, R. *Developing a career path*. Elmina Beach Resort. Elmina. Wednesday, 8th December, 2021
5. Hanson, R. *The importance of academic retreats towards professional development*. Elmina Beach Resort. Elmina. August, 2021
6. Hanson, R. Women in Leadership: Overcoming biases and stereotypes. Jophus Anamuah Mensah (JAM) Conference centre, UEW, Winneba. 10th March, 2021
7. Hanson, R. *Study of course manual. CPD needs and development of activities to address them*. Volta Hotel, Akosombo. Monday, 4th to 7th January, 2021
8. Hanson, R. *Professional development: Navigating the challenges*. SCA Conference Room, UEW, Winneba. Thursday, December 17, 2020
9. Hanson, R. *The role of mentoring in enhancing the career development of senior members in UEW: My journey to becoming a professor*, JAM Conference Centre, Wednesday, November 4, 2020.
10. Hanson, R. *Paving the way for a peaceful, free and fair elections: The role of state and non-state actors*. Central Campus Auditorium, UEW, Tuesday, October 20, 2020.
11. Hanson, R. *Employing gender-friendly constructivist approaches to enhance STEM skills*. Lecture Hall II, Faculty of Science Education (FSE) Seminar Series, South Campus, UEW, Winneba February, 26 2020.
12. Hanson, R. *Assertiveness*. Women in Leadership Conference 2020, Central Campus Auditorium, Friday, February 14, 2020.
13. Hanson, R. Opening speech and launch of exhibition by IERIS on the Association of African Universities' Day. November 12, 2019
14. Hanson, R. *Institutional support for professional development*, JAM Conference, UEW, November 6, 2019
15. Hanson, R. *The place of Heads of Departments, Deans and Directors in University Management*. Manna Heights Conference Room. University-Wide Orientation for new Heads, Deans, Deputy Registrars and Directors. Friday, October 11, 2019.
16. Hanson, R. *The place of Heads of Departments, Deans and Directors in University Management*. Golden Bean Hotel Conference Room. University-Wide Orientation for new Heads, Deans, Deputy Registrars and Directors. Monday, October 7, 2019.
17. Hanson, R. *A reflective evaluation of the application of two-tier diagnostic assessments in undergraduate chemistry classes*. Lecture Hall II, FSE Seminar Series, South Campus, UEW, Winneba February, 2019
18. Hanson, R. *The microscale science equipment as a cost-saving tool towards sustainable development*. Lecture Hall II, FSE Seminar Series, South Campus, UEW, Winneba, January, 2019
19. Hanson, R., *Using worksheets to unearth students' conceptions on word equations* Lecture Hall II, FSE, South Campus, UEW, Winneba, March 15, 2017
20. Hanson, R., *Assessing the potential of worksheets to improve students' performance*. Lecture Hall II, FSE, South Campus, UEW, Winneba, March, 01, 2017
21. Hanson, R., *Enhancing undergraduate pre-service teachers' conceptions about introductory chemical equilibrium*. Lecture Hall II, FSE, South Campus, UEW, Winneba, May 4, 2016
22. Hanson, R., *Using micro chemistry equipment to enhance the understanding of the nature of acids among undergraduate teacher trainees*. Lecture Hall II, FSE, South Campus, UEW, Winneba, April 29, 2015
23. Hanson, R., *Teaching with innovation: Enhancing conceptual understanding through the use of micro science equipment*, FSE Seminar, Seminar Room 2, April 9, 2014

24. Hanson, R., *Investigating first year undergraduate chemistry teacher trainees' understanding of laboratory safety rules and symbols*, FSE Seminar, Seminar Room 2, March 26, 2014
25. Hanson, R. & Nsiah Asante, J. *An exploration of experiences in using the hybrid Moodle approach in the delivery and learning situations at the University of Education, Winneba, Ghana*, Faculty of Educational Studies, North Campus, UEW, Winneba, September, 2013
26. Hanson, R., *Students' ideas of basic chemical bonding – A case study at the University of Education, Winneba*. Paper presented at a Gender Mainstreaming Dissemination Conference on August 29, 2012, Central Campus, Winneba.
27. Hanson, R., *Preparation and benefits of online teaching in a university situation- personal experiences* at a FSE seminar, Winneba, February 2012
28. Hanson, R., *The Importance of e-learning in higher institutions: A case study at the Department of Chemistry Education* at a FSE Seminar at the University of Education, Winneba, October 12, 2011

PEDAGOGICAL INNOVATIONS

1. The integration of sustainability principles into existing higher education chemistry curricula
2. Learning to teach Chemistry
This is a new designed pedagogical course that provides young inexperienced prospective chemistry teachers with basic pedagogical and reflective skills in teaching chemistry in their first year.
3. Individual and Group Teaching
This session allows students to apply their theoretical philosophies and frameworks to real problems faced by chemistry teachers
4. Computer-based (hybrid) Teaching
This affords learners the opportunity to communicate with their teacher online at designated periods and provides them with varied tasks that are often inquiry-based.
5. Micro Science Teaching/Activities
The use of Micro Science equipment is a main core topic in GDSc 516 (MESc 516, GDSc 717) where trainees learn to use the micro equipment to design their activities.
6. Development of Tiered Diagnostic Assessments for unearthing misconceptions in chemical studies

STUDENT DEVELOPMENT

Undergraduate (Bachelor) Theses Supervision

| Year | Number of Projects (Science) |
|--------------|------------------------------|
| 2003 to 2020 | 183 |

a) Undergraduate Training in Research

There has been a consistent turn out of supervised undergraduate essays (Project Work). So far, 183 essays have been supervised. This translates into about 10 students per year for a period of 18 years of supervising undergraduate essays. About a year is spent on an undergraduate supervision.

b) Postgraduate Training (M. Phil.) in Science Education

Fifty-eight supervised students have so far been certificated.

Five completed theses have been forwarded examination, while six are at various stages of completion.

c) Postgraduate Training (Ph.D) in Science Education

So far, 14 doctoral candidates have been certificated with 13 at various stages of development.

d) International Engagements

Candidates (students) from Southern Africa Universities and Nigerian Universities have been mentored

PHD STUDENTS CURRENTLY BEING SUPERVISED (AS PRINCIPAL SUPERVISOR)

| S/N | NAME | TOPIC | YEAR OF COMPLETION |
|-----|----------------------|--|--------------------|
| 1 | Claudia Quayson | Students' conceptual understanding on structural elucidation: The use of the model of educational reconstruction | 2026 |
| 2 | Justice Kobina Asmah | Assessment of computer-assisted instructional approach and its outcomes: The case of Colleges of Education in the Northern Zone of Ghana | 2026 |

d) Internally & Externally Examined Thesis for the Award of M.Phil and Ph.D in Science Education

Fifty-four M.Phil theses and sixteen Ph.D theses from national and foreign institutions have been assessed.

Mentorship

| <i>Area(s) of Development/training</i> | <i>Number of Staff</i> |
|---|------------------------|
| Senior lecturer at NWU, Faculty of Natural and Agricultural Sciences, Mafikeng Campus, Mmabatho, South Africa on thesis supervision | 1 |
| Lecturers on the use of microchemistry equipment | 2 |
| Lecturers on how to teach Chemistry Education at the University level | 2 |
| Post Graduate Coordinators for Science Education | 2 |
| Examination officers for the Departments of Chemistry and Physics Education | 3 |
| Guide Senior Members on how to write articles for publication in journals | 6 |

Membership of Professional Association(s)

| <i>Name of Association</i> | <i>Position held</i> | <i>Period</i> |
|---|----------------------|---------------|
| International Union of Pure and Applied Chemistry (IUPAC) | Member | 2023 to Date |

| | | |
|--|--------------------------|--------------|
| Ghana Chemical Society | Member | 1999 to Date |
| Ghana Science Association | Member | 2020 to Date |
| American Chemical Society (ACS) | Member | 2019 to Date |
| Graduate Women International (GWI) | Member | 2019 to Date |
| Ghana Association of Science Teachers (GAST) | Member | 1997 to 2005 |
| University Teachers' Association of Ghana (UTAG) | Member | 2003 to 2019 |
| Organisation for Women in Science for the Developing World (OWSD) | Member | 2019 to Date |
| International Network of Women in Engineering and Science – African Regional Network (INWES-ARN) | Interim Executive Member | 2018 – 2020 |
| Ghana Chemical Society (UEW Students' Branch) | Patron | 2015 |
| Association of Science Education Students | Patron | 2013 to 2015 |
| Ghana National Association of Teachers (GNAT) | Member | 1985 to 1999 |

Institutional Service

| <i>Name of Committee(s) and/or Board(s)</i> | <i>Position or role</i> | <i>Period</i> |
|---|-------------------------|----------------------|
| Committee on setting cap for chronic medical expenses | Chair | June to July, 2024 |
| UEW 2025-2030 Strategic Plan Committee | Member | January to June 2024 |
| UEW Estate Management Committee | Chairperson | June, 2020, |
| ACS-Chemistry Fair | Lead Coordinator | 2020 20212022 |
| UEW LMS Monitoring and Evaluation Committee | Member | 2020 to Date |
| Committee for Launching of 2019-2023 Strategic Plan | Member | 2019 |
| Committee on Publication of History of UEW | Member | 2019 |
| Committee on Missing Cattle | Member | 2019 |
| Review of sexual harassment policy | Chair | 2019 |
| UEW Affiliated-Institutions Monitoring Team (Southern Sector) | Chair | 2017 to Date |
| UEW Executive Academic Board | Member | 2017 to Date |

| | | |
|---|---------------|--------------|
| UEW Academic Board | Member | 2015 to Date |
| Faculty of Science Education Academic Board | Member | 2013 to Date |
| Department of Chemistry Education Academic Board | Chair/ Member | 2015 to Date |
| Department of Integrated Science Academic Board | Member | 2013 to 2018 |
| Timetable Committee | Member | 2013 to 2015 |
| Faculty of Science Education Journal (JOSER) | Member | 2013 to Date |
| Departmental Graduate Board for Thesis Supervision | Member | 2011 to Date |
| Library, Bookshop and Educational Resources Board | Member | 2004 to Date |
| Awards Selections Committee for Indigenous Students | Member | 2015 to Date |

UEW Adhoc Professional Committee and Board Memberships

| Type | Committee | Period |
|---------------|---|---------------------|
| Chair | Investigative Committee- Sexual Harassment against a female student | 2026, 2020, 2019 |
| Chair | Medical Expenses Committee | 2024 |
| Chair | Investigation into Gross Misconduct by Security Personnel | 2024 |
| Member | Institutional Strategic Plan Committee | 2024 |
| Member | Committee on rationalisation of SCA & FHE Textile and clothing course | 2020 |
| Chair | Investigative Committee (Examination Malpractice) at Ajumako Campus | 2020 |
| In Attendance | UEW Governing Council | 2019 |
| Chair | Review of Sexual Harassment Policy Document | 2019 |
| Member | Review of Junior Staff Promotion Criteria | 2019 |
| Member | Investigative Committee on Missing Cattle | 2019 |
| Member | Plagiarism Investigative Committee | 2018 |
| Member | Disciplinary Committee (Examination Malpractice) | 2015, 2017, 1999 |
| Member | ISC Rebranding Retreat Committee | 2015 |
| Member | FSE Retreat Planning | 2014 |
| Chair | Department of Science Education Exhibition | 1999 |

Community Service

| <i>Name of Institution/Organisation</i> | <i>Position(s) held</i> | <i>Period</i> |
|--|-------------------------|----------------------------|
| Development of PLC Manual for SHS Tutors | Lead | March to September, 2023 |
| Review of 2022 New SHS Curriculum | Reviewer | September to December 2022 |
| Review of UEW 2009 Gender Policy document | Chair | September, 2021 |
| College of Distance Education and E-Learning | External Reviewer | August, 2021 to Date |

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|---|----------------------------------|-----------------------------|
| CKT-Tendam University | External Assessor | January, 2021 to Date |
| University of Cape Coast | External Assessor | November, 2020 to Date |
| University of Ghana (College of Education) | External Assessor | November, 2020 to Date |
| ITECPD Item Writing Workshop | Facilitator | March, 2021 |
| Basic-Early Childhood Educ. Course Manual Workshop | Facilitator | January, 2021 |
| Faculty of Foreign Languages Education and Communication | Lead Fishbowl discussant | December, 2020 |
| American Chemical Society and Dept. of Chemistry Education Chemistry Festival Team | Lead Coordinator | November, 2020 |
| Development of Accreditation document for the creation of the Department of Indigenous Science Education | Dean and Chairperson | November, 2020 |
| Development of Accreditation document for the creation of the Department of Indigenous Science Education | Dean and Chairperson | November, 2020 |
| Faculty of Science Education Split in two (2) Faculties | Chairperson | July, 2020 |
| Inauguration of the 8 th Assembly of the Effutu Municipal Assembly | Vice Chancellor's Representative | January 23, 2020 |
| Public Procurement Authority Public Lecture | Vice Chancellor's Representative | December 11, 2019 |
| Office of the Vice Chancellor- Representative at the 70 th Anniversary of Winneba Secondary School | Vice Chancellor's Representative | November 16, 2019 |
| Office of the vice Chancellor- Representative for opening ceremony at African Universities Week 2019, IERIS, UEW | Vice Chancellor's Representative | November 13, 2019 |
| Office of the Pro-Vice Chancellor | Acting Position | September 2019 |
| UCC 4 th Research Awards and Grants Ceremony- SMS Auditorium | Vice Chancellor's Representative | September, 2019 |
| Mathematics Summer Camp; Faculty of Science Educ. | Overseer | August 2019 |
| Office of the Vice Chancellor - Vice Chancellor's Representative at the Perez University College's 7 th Congregation | Vice Chancellor's Representative | April 6, 2019 |
| Office of the Vice Chancellor - Representative at the BlueCrest College's 7 th Congregation | Vice Chancellor's representative | December, 2018 |
| Mathematics Summer Camp | Overseer | August 2018 |
| Review of Policy on Gender | Chairperson | July, 2018 |
| Office of the Dean, Faculty of Science Education, University of Education (during the sitting Dean's absence from Office) | Acting Dean | September 2017 to June 2018 |
| Department of Home Economics | Internal Assessor | April, 2018 |
| Office of the Vice Chancellor – Vice Chancellor's Representative at the University College of Management Studies' 11 th Matriculation and 7 th Congregation | Vice Chancellor's Representative | March 10, 2018 |
| Registry- Investigative Committee to ascertain a Security Officer's absence from his duty post | Chair | May, 2018 |

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|---|---------------------|--------------------------------|
| Registry - Investigative Committee on academic plagiarism | Member | May, 2018 |
| Faculty of Science Education, University of Education, Winneba | Vice Dean | July 2017 to June, 2018 |
| Faculty of Science Education Journal (JOSER) | Editor-in-Chief | 2017 to Date |
| Investigative Committee on alleged examination irregularity in the second semester of the 2016/17 Academic Year Course | Member | May 2017 |
| Investigative Committee on alleged virtual disrespect against UEW Council Members by Faculty member | Member | November, 2017 |
| Executive Committee of the University Academic Board | Member | August, 2017 |
| Faculty of Science Education Team to defend MPhil Chemistry Programme (NCTE, Accra) | Leader | March, 2017 |
| Office of the Pro-VC – Disciplinary Committee to ascertain Alleged Political Science Examination Fraud | Member | 2015/16 Semester 1 Examination |
| Mentor for Mentees from the Gender Mainstreaming Directorate of the University of Education, Winneba | Mentor | 2016/17 Academic Year |
| Preparation of M.Phil Chemistry Education and B.Sc Chemistry Accreditation documents | HOD | 2015 - 2016 |
| Head of Department of Chemistry Education, Faculty of Science Education, University of Education, Winneba, | Head | August 2015 to July 2017 |
| Mathematics, Science and Technology Scholarship Scheme Selection Committee, UEW, Winneba | Member | September, 2015 |
| Department of Integrated Science Planning Committee for proposed Workshop | Member | 15th May, 2015 |
| Chemical Society of Ghana, UEW Branch, University of Education, Winneba | Patron | August, 2015 |
| Female teachers of the Ghanaian Institute for the Future of Teaching and Education Women's Fellowship Programme- a partnership between UEW, Mujeres Por Africa, University of Minnesota and New York University, sponsored by Banco Santander | Mentor | September, 2014 - August, 2015 |
| Trainer of trainers for integrating gender into UEW's curriculum from Faculty of Science | Prof. Apusiga (UDS) | 2014 |
| Faculty of Science Education Journal Committee | Member | 2014 – 2016 |

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|--|-----------------|--|
| University Representative on G.E.S Phase 3 (ITEC 4) Workshop | Representative | 4 th May – 26 th May, 2014 |
| Departments of Chemistry & Physics Exam Officer | Member | 2013 – 2015 |
| Moderator for Distance M.Ed Science Programme | Moderator | 2011/12 – 2014/15 |
| Monitoring team for water hygiene and purification at Atekyedo village (in conjunction with University of Grand Valley, USA) | Member | 2012 – 2016 |
| Hybrid Moodle Facilitator for undergraduate and post-graduate chemistry programmes | Facilitator | 2012 – 2016 |
| E-Moodle Courseware Developer for undergraduate and post-graduate Chemistry courses | Member | 2011 – 2016 |
| Development of Course Manuals for Chemistry Education, UEW at Sasakawa Centre, University of Cape Coast | Member | April 2007, June, 2007 and August, 2008 |
| Author for IEDE MEd Chemistry Modules | Member | 2003 – 2012 |
| Academic Counsellor | Counsellor | 1999 – 2014 |
| Faculty of Science Education Representative on the Library, Bookshop and Educational Resource Board | Representative | 2005 – 2018 |
| PLAN International | Resource Person | 2001 – 2003 |

Certificates obtained for Professional Contributions on Local and International Fronts

1. ACS (2024) Africa Regional Conference on green and sustainable chemistry, Presentation, Lagos, Nigeria
2. IUPAC/ICCE (2022): Plenary Speaker Presentation, Cape Town, South Africa
3. LICE-WCSNE (2021): Participation in a LICE in cooperation with WCSNE conference, London
4. IICE-WCE (2021): IICE in cooperation with WCE Autumn conference, Dun Laoghaire, Ireland
5. IICE-WCE (2021): Professional development (17 credits) in IICE in cooperation with WCE Autumn conference, Dun Laoghaire, Ireland
6. CICE-WCE (2021): Participation in CICE-WCE conference, University of Toronto, Mississauga, Canada
7. CICE-WCE (2021): Oral presentation in a CICE in cooperation with WCE conference, University of Toronto, Mississauga, Canada
8. CICE-WCE (2021): Professional development (15 credits) in a CICE in cooperation with WCE conference, University of Toronto, Mississauga, Canada
9. CLUTE Institute (2019): Oral Presentation for enhanced Science teaching and learning, James NoMad Hotel, New York
10. CLUTE Institute (2019): Best Session presentation in the Science Track, James NoMad Hotel, New York
11. CLUTE Institute (2019): Session Chair towards enhanced Science teaching and learning, James NoMad Hotel, New York
12. IUPAC/ICCE (2019): Certificate for Presentation (Skype), France
13. CICE (2019): Oral presentation and contributions to an Education Conference in University of Toronto, Mississauga, Canada

14. GRC/CERP (2019) Recognition for Poster Presentation, Bates College, Lewiston, MA, USA
15. INWES (2019): Participation and Oral Presentation towards STEM, Nigeria
16. SACI (2018): Keynote/plenary speaker, Pretoria, South Africa
17. CICE (2018): Oral presentation and contributions made towards an Education Conference in University of Toronto, Mississauga, Canada
18. ITEC (2017): Oral presentation made towards an International Teachers' Education Conference, Harvard University, Cambridge, Boston, Massachusetts, USA
19. ITEC (2017): Session Chair for plenary session, Harvard University, Cambridge, Boston, Massachusetts, USA
20. CICE (2017): Oral presentation and contributions made towards an Education Conference in University of Toronto, Mississauga, Canada
21. CICE (2017): Session Chair for an Education Conference in the University of Toronto, Mississauga, Canada
22. ICERDA (2016): Oral presentation and contributions to an International Conference on Education, Alisa Hotel, Accra, Ghana
23. 24th IUPAC/ICCE (2016): Oral presentation and contributions towards an IUPAC/ICCE International Conference on Chemistry Education in Kuching, Sarawak, Malaysia
24. UOR (2015) Oral presentation and contributions towards an International Conference on Education in Las Vegas, USA
25. CICE (2014): Contributions made towards an Education Conference in Nova Scotia, Canada
26. CICE (2014) Certificate for serving as a session Chair, University of Breton, Nova Scotia, Canada
27. ISEC (2014) Certificate of participation in a month-long Workshop on the use of Modern Lab Ware
28. IEDE Certificate for participation in the Development of E-Learning Courseware (2013)
29. Best 3rd Teacher Award in the Kwaebibirem District, Kade, Eastern Region (1998)
30. GAST Certificate of Participation at its Zonal Conference, Asamankese, (1998)

International Professional Experience

Workshop organiser and discussant at SRI 2025, Grand River Walk Chicago, Chicago, USA

Advisory Board Member, IUPAC-ACS Green Chemistry Conference -2025, Lagos, Nigeria

Workshop organiser at African Conference for Women in Engineering and Science (ACWES 2024) on Mentorship

Speaker at the SRI Africa Satellite Event 2024, Durban, South Africa

Member, ACS Africa Regional Conference on green and sustainable chemistry, Conference Organising Committee (International Advisory Board)

Training Workshop for PhD students of Africa Institute for Mathematical Sciences (AIMS) in Mbour, Senegal and Kigali, Rwanda

Ghana Co-coordinator for IUPAC International Teacher Survey on Green and Sustainable Chemistry (GSC) Practical Activities (IUPAC Project No.:2023-002-2-050)

Member of IUPAC-Systems Thinking in Chemistry for Sustainability International Working Group (STCS 2030+, Project No. 2020-014-3-050)

Speaker at IUPAC-ICCE 2022 Conference, Cape Town, South Africa

Speaker at University of Warwick's International Symposium on the topic: The role of chemistry in building sustainable cities (C-19 Postponement)

External Assessor for Graduate (Ph.D) Thesis, University of Pretoria, South Africa

External Assessor (Reader) for Ph.D. Proposal, University of Witwatersrand, Johannesburg, South Africa

External Assessor for Graduate (PhD) Theses, University of Witwatersrand, Johannesburg, South Africa

Guidance in Thesis Supervision for Lecturer in the North-Western University, South Africa, 2019

Reviewer for Journal of Educational Research and Reviews 2019

Reviewer for African Journal of Research in Mathematics and Science Education, 2019

Reviewer for Science Education International, 2019

Keynote Speaker at 43rd SACI National Convention in Pretoria, South Africa, 2nd to 7th December, 2018

Assistant Chemistry Examiner for West African Examinations Council 1997-2013

Member of a joint Ghana-Netherlands Project (PRACTICAL) to enhance teaching and learning of science and mathematics (2006-2010)

Member of a Ghanaian-Finish HEC ICI Project Planning Committee (2016)

Leadership Experiences

| | |
|-------------|--|
| 2021: | Vice Chancellor's representative at the National Academy of Students' Achievement Awards Ghana (NASAAG) for honorary award for 'Industrious Vice Chancellor of the year' |
| 2020 | Vice Chancellor's representative at Centre for Conflict, Human Rights and Peace Studies Seminar |
| 2019: | Vice Chancellor's representative at the 9 th Annual Public Procurement Forum, Academy of Arts & Sciences Auditorium; for conferment of degrees at the 13 th Graduation Ceremony, Regent University College of Science & Technology |
| 2019: | Chair for Committees under Academic Board |
| 2019: | The Vice Chancellor's Representative at a Research Awards Conference, UCC and at Perez University |
| 2018-2021: | Chairperson for development of new programmes in Faculty of Science Education |
| 2018: | The Vice Chancellor's Representative for conferment of degrees at Blue Crest College Congregation and conferment of degrees at UCOMS Congregation |
| 2018 -2020 | Leader for T-Tel Science Curriculum Writing Group |
| 2018-2022 | Dean, Faculty of Science Education |
| 2017- 2018: | Acting Dean, Faculty of Science Education (during the Dean's absence) |
| 2017- 2018: | Vice Dean, Faculty of Science Education |
| 2015-2017: | Head of the Department of Chemistry Education |
| 2014-2015: | Trainer of trainers for UEW's integration of gender issues into the teaching |
| 1998-1999: | Assistant Head of the Science Resource Centre, St. Rose's, Akwatia |
| 1997-1998: | Class tutor, St. Rose's Secondary School, Akwatia |

Referees

1. Prof. Stephen Jobson Mitchual
Vice Chancellor,
University of Education, Winneba,
Winneba
Mobile: 0203809967

2. Prof. Esther Danso Wiredu
Pro-Vice Chancellor,
University of Education, Winneba
Winneba
Mobile: 0246657364

3. Prof. Victor Antwi,
Former Pro-Vice Chancellor
University of Education, Winneba,
Winneba
Mobile: 0509800342

Prof. Ruby Hanson



30th November, 2025

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