
COURAGE MAHUVAVA

Lecturer — MSc Biomedical Physics | Coordinator — BSc Biomedical Technology

Department of Physics, The University of the West Indies, St. Augustine, Trinidad & Tobago

✉ mahuvavac@gmail.com | 🎓 [Google Scholar](#) | 🔗 [LinkedIn](#) | 🌐 [Academic e-Portfolio](#)

Registered medical physicist with expertise in establishing diagnostic reference levels (DRLs) to optimize radiation dose and improve patient safety in ionizing radiation-based diagnostic imaging, and strengthening medical physics education, training systems, and workforce development in low- and middle-income settings. Demonstrated leadership across teaching, research, and programme development, with contributions to national training initiatives and curriculum design.

1. QUALIFICATIONS

Degree	University/Institution	Date
PhD in Medical Physics	University of the Free State, Bloemfontein, South Africa	Oct 2020
M.Med.Sc in Medical Physics	University of the Free State, Bloemfontein South Africa	Dec 2016
BSc (Med) (Hons) in Medical Physics	University of Cape Town, Cape Town, South Africa	Dec 2013
BSc in Computational Physics (Summa Cum Laude)	University of KwaZulu-Natal, Pietermaritzburg, South Africa	Apr 2013

2. EXPERIENCE

Post	Where Held	Dates
Lecturer, MSc Biomedical Physics (BIPH)	University of the West Indies (UWI), St. Augustine, Trinidad	Jan 2023 – Present
Coordinator, BSc Biomedical Technology (BMET)	University of the West Indies (UWI), St. Augustine, Trinidad	Oct 2025 – Present
Lecturer / Coordinator, MSc Medical Physics	National University of Science & Technology (NUST), Zimbabwe	Feb 2021 – Jan 2023
Research Affiliate	X-ray Cancer Imaging and Therapy Experimental (XCITE) Lab, University of Victoria, British Columbia, Canada	Nov 2020 – Mar 2022

- a) Teaching in medical physics and general areas of the undergraduate Physics curriculum.
- b) Teaching and coordinating MSc programmes.
- c) Participating in curriculum development.
- d) Mentoring undergraduate and postgraduate research students and academic advising.
- e) Establishing independent research interests and maintaining research output and collaborations.
- f) Applying for grants and developing an externally-funded research programme.
- g) Providing Departmental, Faculty, University and professional services.
- h) Demonstrating good leadership skills, innovation, commitment and enthusiasm.
- i) Engaging collaboratively with departmental, university, and industry stakeholders.
- j) Marking assignments, coursework examinations, final examinations and performing all other examination-related duties.

Postgraduate (PG) Teaching	Undergraduate (UG) Teaching
Radiation Oncology (BIPH 6106)	Bioengineering (BMET 2001)
Biomedical Imaging (BIPH 6107)	Metrology & Reg. Standards (BMET 3004)
Medical Physics Lab I (BIPH 6109)	Biomedical Technology Project (BMET 3000)
Rad. Physics & Dosimetry (BIPH 6104)	Med. Physics & Bioengineering Lab (PHYS 3160)

- Served as First and Second Internal Examiner across postgraduate and undergraduate courses, contributing to examination setting, moderation, and quality assurance
- Prepared marksheets and examiner reports, and participated in Examiners' Meetings.

- Nyron J. *Comparative Evaluation of Image Quality Between Digital and Traditional X-rays for Intraoral Imaging* (MSc Thesis; UWI St. Augustine; August 2025).
- Dookhan S. *GEANT4 Analysis and Application of Lead-Free Materials as an Alternative to Lead Shielding* (MSc Thesis; UWI St. Augustine; Completed February 2024).
- Dominguez J.L. *Low-Cost 3D-Printed Bolus Technique Using Structure-from-Motion in Radiotherapy* (MSc Thesis; UWI St. Augustine; In progress).
- Ramdass N. *Dosimetric Evaluation of DIBH vs Free Breathing in Treatment of Left-Sided Breast Cancer: Trinidad & Tobago Context* (MSc Thesis; UWI St. Augustine; In progress).
- Deonanan C. *Assessment of Radiation Dose for Routine Adult Non-Contrast Head CT Examinations in Trinidad* (MSc Thesis; UWI St. Augustine; In progress).
- Mohammed J.A. *Establishing DRLs for Kidney, Ureter, and Bladder CT Examinations in Trinidad and Tobago* (MSc Thesis; UWI St. Augustine; In progress)

Date: 07-April-2026



(IV) UNDERGRADUATE RESEARCH SUPERVISION

- Academic supervision of BMET final-year projects (BMET 3000), including coordination with clinical/industry mentors.
- Academic supervision and assessment of Physics Major Research Project (PHYS 3153).

(V) EXTERNAL EXAM MODERATION

- Harare Institute of Technology. Appointed External Examiner, Dept. of Biomedical Engineering (Feb 2022 – Dec 2022); moderation and review of exam papers and scripts (Biophysics and Anatomy & Physiology), and submission of examiner reports.

5. THESIS EXAMINATION

(I) PHD EXAMINATION

- Ramkhelawan S. *Prevalence of Risk Factors in Cardiovascular Patients in a Caribbean Country: Age and Sex Differences* (PhD Thesis; Internal Examiner; UWI St. Augustine; May 2026).
- Hunte S. *Design of an Anthropomorphic 3D-Printed Left Breast Phantom for End-to-End Quality Assurance of Advanced Radiotherapy Techniques in Small Island Developing States* (PhD Seminar; Internal Examiner; UWI St. Augustine; May 2026).

(II) MSc EXAMINATION

- Kalloo L. *Comparative Analysis of DNA Damage Detection Methods: Effects of Low-Dose X-ray Exposure* (MSc Thesis; Internal Examiner; UWI St. Augustine; January 2026).
 - Makunyane B. *Radiation Distribution in a Hybrid Operating Room Using Multiple X-ray Imaging Systems* (MSc Thesis; External Examiner; Sefako Makgatho Health Sciences University, South Africa; November 2025).
 - Pragsingh S. *Estimating Total Radiation Exposure in Image-Guided Radiation Therapy* (MSc Thesis; Internal Examiner; UWI St. Augustine; August 2025).
 - Mashinini S. *Diagnostic Reference Levels for Intraoral Radiography and Assessment of Radiation Protection Knowledge Among Dental Professionals* (MSc Thesis; External Examiner; Sefako Makgatho Health Sciences University, South Africa; May 2025).
 - Tshilidzi N. *Establishment of Adult Chest CT Dose Reference Levels for Gauteng Provincial Hospitals* (MSc Thesis; External Examiner; Sefako Makgatho Health Sciences University, South Africa; April 2025).
-

6. LIST OF PUBLICATIONS

(I) ARTICLES PUBLISHED IN REFEREED JOURNALS

- a) **Mahuvava C**, Esplen NM, Poirier Y, et al. *Dose calculations for preclinical radiobiology experiments conducted with single-field cabinet irradiators*. *Medical Physics*, 49(3): 1911–1923, 2022. Impact Factor: 3.2 | Google Scholar Citations: 10.
- b) **Mahuvava C**, Du Plessis FCP. *Dosimetry effects caused by unilateral and bilateral hip prostheses: A Monte Carlo case study in megavoltage photon radiotherapy for CT data without metal artefacts*. *Journal of Medical Physics*, 43(4): 236–246, 2018. Impact Factor: 0.7 | Google Scholar Citations: 9.
- c) **Mahuvava C**, Du Plessis FCP. *IQM® signal correction factors for small fields to predict larger irregular segment output signals*. *Medical Physics*, 46(12): 5848–5860, 2019. Impact Factor: 3.2 | Google Scholar Citations: 4.
- d) **Mahuvava C**, Du Plessis FCP. *External beam patient dose verification based on the IQM® output signals*. *Biomedical Physics & Engineering Express*, 6(3): 035014, 2020. Impact Factor: 1.6 | Google Scholar Citations: 2.
- e) **Mahuvava C**, Du Plessis FCP. *X-ray beam segment size and entrance location effects on the IQM® signal and its usefulness in predicting complex segment output signals*. *Journal of Biomedical Physics & Engineering*, 10(4): 395–410, 2020. Impact Factor: 1.7 | Google Scholar Citations: 1.

(II) MANUSCRIPTS IN PREPARATION

- a) **Mahuvava C**, Joseph A, Zyuzikov N, et al. *Medical Physics Capacity in Trinidad and Tobago: Workforce, Training, and Regulatory Gaps in an Expanding Radiation Medicine System*. National data collection completed; manuscript under revision.
- b) **Mahuvava C**, Joseph A, Zyuzikov N, et al. *Establishing a Clinical Residency Program for Radiation Oncology Physics in Trinidad and Tobago*. Programme curriculum and proposal completed; undergoing institutional review. Manuscript in preparation.
- c) **Mahuvava C**, Maxime R, Gajadhar A, et al. *Local Diagnostic Reference Levels for Routine Adult CT Examinations in Trinidad and Tobago*. Institutional data collection in progress.
- d) Mutsata S, **Mahuvava C**. *A Phantom-Based Comparative Study of Direct and Indirect Entrance Surface Dose Measurements in Common Radiographic Examinations Using OSL Dosimetry*. Data collection completed; pre-submission final manuscript revision.
- e) **Mahuvava C**, Moyo D, Chemugarira DK, et al. *Medical Physics Education and Training Capacity in Zimbabwe: Institutional Structures, Geographic Distribution, and Workforce Alignment*. Data collection completed; data analysis and manuscript revision in progress.
- f) **Mahuvava C**, Moyo D, Chemugarira DK, et al. *Clinical Medical Physics Workforce Capacity and Distribution in Zimbabwe: Registration Status, Practice Patterns, and Service Coverage*. Data collection completed; data analysis and manuscript revision in progress.

Date: 07-April-2026

- g) **Mahuvava C**, Moyo D, Matika W, et al. *Local Diagnostic Reference Levels for Adult Non-Contrast Head, Chest, and Abdomen CT Examinations at a Private Hospital in Zimbabwe*. Data analysis and manuscript revision in progress.
- h) **Mahuvava C**, Ndlovu B, Sibanda N. *Monte Carlo Codes in Radiotherapy, Diagnostic Imaging, and Radiobiology: A Review Trilogy*. Lit. review; manuscript in preparation.
- i) **Mahuvava C**, Shepherd Mutsata. *Limited Establishment of Paediatric CT Diagnostic Reference Levels in Low- and Middle-Income Countries: A Systematic Review*. Literature review; manuscript in preparation.

(III) CONFERENCE ABSTRACTS (PUBLISHED)

- a) **Mahuvava C**, Esplen N, Kry S, Bazalova-Carter M. *Monte Carlo Dose Calculations for Radiobiology Studies*. *Medical Physics*, 48(6), 2021. Google Scholar Citations: 0
- b) **Mahuvava C**. *Dosimetry effects caused by bilateral and unilateral hip prostheses: A Monte Carlo study in megavoltage photon radiotherapy*. *Physica Medica*, 32: 143, 2016. Google Scholar Citations: 1
- c) **Mahuvava C**, Du Plessis FCP. *Monte Carlo evaluation of the dose perturbation effect of hip prostheses for megavoltage photon radiotherapy*. *Physica Medica*, 31(S1): S7, 2015. Google Scholar Citations: 9

(IV) CONFERENCE ABSTRACTS (ACCEPTED)

- a) **Mahuvava C**, Moyo D, Chemugarira DK, et al. *Medical Physics Education and Training Capacity in Zimbabwe: Institutional Structures, Geographic Distribution, and Workforce Alignment*. Accepted for presentation at the AAPM–COMP Joint Annual Meeting & Exhibition, April 2026; accepted for publication in *Medical Physics*.
- b) **Mahuvava C**, Moyo D, Chemugarira DK, et al. *Clinical Medical Physics Workforce Capacity and Distribution in Zimbabwe: Registration Status, Practice Patterns, and Service Coverage*. Accepted for presentation at the AAPM–COMP Joint Annual Meeting & Exhibition, April 2026; accepted for publication in *Medical Physics*.

(V) OTHER PAPERS

- a) **Mahuvava C**. *Relationship between the integral quality monitor (IQM®) output signal and dose*. University of the Free State (PhD Doctoral Thesis), 2020. Total 116 pages.
- b) **Mahuvava C**. *Monte Carlo evaluation of the dose perturbation effect of various hip prostheses during pelvic megavoltage photon radiotherapy*. University of the Free State (MSc Dissertation), 2016. | Google Scholar Citations: 9. Total 176 pages.

7. RESEARCH ACTIVITIES

- Leading national research on radiation medicine systems in Trinidad and Tobago, including workforce capacity, infrastructure distribution, and service delivery, based on primary data collection across Regional Health Authorities (RHAs) and benchmarked against IAEA standards.
- Analysis of MSc Biomedical Physics programme data, including capacity, enrolment trends, and student/alumni outcomes, to evaluate training pathways and workforce development in medical physics.
- Establishment of Local Diagnostic Reference Levels (LDRLs) for computed tomography in Trinidad and Tobago using multicentre clinical datasets, in collaboration with clinical medical physicists and imaging specialists, to support national radiation dose optimisation.
- Systematic review of paediatric diagnostic reference levels (DRLs) in low- and middle-income countries (LMICs), highlighting limited DRL establishment, associated dose optimisation deficiencies, and gaps in implementation and standardisation.
- Development of a Clinical Medical Physics Residency Programme in Radiation Oncology, including competency-based curriculum design and implementation strategy aligned with IAEA, AAPM, and CAMPEP frameworks, to address national and regional workforce shortages.
- Experimental radiation dosimetry research, involving controlled phantom-based studies and OSLD measurements, with validation of analytical dose models for clinical optimisation, conducted in collaboration with international research partners.
- Development of a computational medical physics framework using EGSnrc Monte Carlo methods to support radiation dosimetry, virtual experimentation, and postgraduate training in resource-constrained settings, with a planned Monte Carlo Dosimetry Laboratory at The University of the West Indies incorporating open-source treatment planning capabilities.

8. CONTRIBUTION TO UNIVERSITY LIFE

- *Industry Engagement, Aventa Technologies (Apr 2026)* — secured sponsorship from industry partner for Best BMET 3000 Oral Presentation Award at the upcoming (2025-26) FST Prizes & Awards Ceremony.
- *PG Outreach Event (Apr 2026)* — Delivered presentation to final year undergraduate students, promoting PG Medical Physics programmes in the department, and encouraging progression through alignment with national workforce needs.
- *FST Prizes & Awards Ceremony (Oct 2025)* — Presented academic award sponsored by AA Laquis (BMET internship partner) to student with the highest overall mark in BMET 3000.
- *Coordinator, BMET Programme (Aug 2025–Present)* — Oversee academic advising and student progression, including audit of programme grids and graduating lists for Board of Examiners, and representation at Faculty Board
- *Student–Staff Liaison (2025–Present)* — Engaged in structured dialogue with student representatives to enhance academic quality and student experience.



Date: 07-April-2026

- *Timetable Coordinator (July 2024–2025)* — coordination and optimisation of course and laboratory scheduling.
 - *Health, Safety & Environment Committee (July 2024–2025)* — Contributed to the revision of the Departmental Emergency Response Plan, strengthening laboratory safety, risk mitigation, and emergency preparedness protocols.
 - *QA Manual Updates Committee (2024–2025)* — revision of departmental QA documentation and SOPs, strengthening alignment with Faculty and University standards.
 - *FST Research Highlights Initiative (2023–2024)* — designed & developed the FST Research Highlights Poster, in collaboration with Life Sciences, Chemistry, and DCIT.
-

9. PUBLIC, PROFESSIONAL & SCHOLARLY SERVICE

(I) JOURNAL PEER REVIEW & EDITORIAL SERVICE

Reviewer Training & Certification

- **IOP Publishing — Peer Review Excellence Programme**
Training & Certification (Stage 1), completed January 29, 2026

Invited Peer Review (Selected)

- *Physics in Medicine and Biology* IF 3.4 (IOP Publishing; IF 3.4)
Bashiri A., Anderson C., Posar J., et al. *Skin Dosimetry in Megavoltage Radiotherapy Using Hydrogenated Amorphous Silicon on a Tissue-Equivalent Flexible Substrate*.
(Invited Reviewer; under review)
- *Cureus Journal of Medical Science* (Springer Nature; IF 1.3) — Invited Reviewer for multiple manuscripts (2026), including:
 - Recurrent Radiation-Induced Angiosarcoma of the Breast Without Distant Metastasis
 - Efficient X-Ray Source Probe Adjustment of the Intra-beam Intraoperative Radiotherapy System
 - Remote Classroom Approaches to Contouring Training for Pelvic Malignancies in Low- and Middle-Income Settings
 - Patterns of Care and Survival Outcomes of Hepatocellular Carcinoma in a Canadian Provincial Cancer Program
 - Evaluation of Setup Uncertainties and Margin Optimization Using Deep Inspiration Breath-Hold vs Free-Breathing Techniques in Breast Carcinoma
 - Intrahepatic Biliary Stricture Following Carbon-Ion Radiotherapy: A Narrative Review

(II) INVITED SCHOLARLY CONTRIBUTIONS & RECOGNITION

- **AAPM / Medical Physics for World Benefit (MPWB)**
Invited Featured Contributor — AAPM Newsletter (Forthcoming, May 2026)
 - Invited by the AAPM Global Early Career Research Subcommittee following receipt of the AAPM Early Career Research Access Award.
 - Contributed to a multi-author feature highlighting research impact, professional development, and global engagement in medical physics.

(III) PUBLIC, PROFESSIONAL & NATIONAL SERVICE

- **Ministry of Health, Trinidad and Tobago**
 - Led development of a UWI-based Clinical Medical Physics Residency (Radiation Oncology), in consultation with the Ministry of Health, addressing national workforce needs with in-principle support for programme funding and trainee sponsorship.
 - **Trinidad and Tobago Organisation of Medical Physicists (TTOMP)**
Contributor — National Relaunch Initiative (in pipeline)
 - Discussions on the current state of medical physics in Trinidad and Tobago and standardization of professional practice
 - **Industry Engagement — Western Scientific TT (2026/2027 Academic Year)**
 - Engaged with industry partner to support biomedical technology training and structured student placement opportunities
 - **Clinical & Industry Internship Coordination (BMET Programme)**
 - Coordinated placement of undergraduate students within public healthcare institutions and private biomedical companies
-

10. ACADEMIC LEADERSHIP & PROGRAMME DEVELOPMENT

- **Acting Head of Department (Designated)**, Department of Physics, The University of the West Indies, St. Augustine (July–Aug 2026) — during the Head's official leave.
 - **Programme Coordinator (BMET)**, UWI, St. Augustine (Oct 2025–Present)
 - Academic advising, internship coordination, and industry engagement.
 - Department Representative at FST meetings, presentation of BMET grids.
 - **Postgraduate Curriculum Review** — Leading curriculum review and revision of BIPH 6103 (Workplace: Safety and Protection) to align with international standards.
 - **Clinical Training Programme Development** — Led the development of a proposal for a Clinical Medical Physics Residency in Radiation Oncology, supporting national clinical training and workforce development.
 - **Academic–Industry Partnership Development** — Established a formal academic–industry collaboration with Western Scientific TT, supporting student placements and strengthening biomedical technology workforce readiness (from Aug 2026).
 - **Programme Coordinator**, MSc Medical Physics, National University of Science & Technology, Zimbabwe (Feb 2021–Jan 2023) — Led academic administration, curriculum delivery, and clinical training oversight.
-

11. RESEARCH FUNDING & GRANTS

(I) COMPETITIVE RESEARCH FUNDING

1. **Natural Sciences and Engineering Research Council of Canada (NSERC) / Canada Research Chair Program – Compute Canada Access (2020–2022)**
Competitive research infrastructure award providing funded access to national high-performance computing resources for large-scale Monte Carlo simulations.
2. **High Energy Advanced Radiation Dosimetry (HARD) Award, Medical Research Council of South Africa (MRC-SA) (2014–2019 | ~USD 31,500)**
Competitive research award supporting advanced radiation dosimetry for radiotherapy.

(II) DEVELOPMENT FUNDING

- **Study & Travel Grant (STG), UWI, St. Augustine (July 2025 | USD 2,760)**
Institutional award supporting tuition for the Certification in Radiological Engineering & Health Physics at The Ohio State University, USA.

12. CONFERENCE PRESENTATIONS

(I) ORAL PRESENTATIONS

1. Mahuvava C. *Patient Safety and Quality*. 56th South African Association of Physicists in Medicine and Biology (SAAPMB) Congress, Pretoria, South Africa (Oct 22, 2018).
2. Mahuvava C. *Radiating Africa*. 55th SAAPMB Congress, Durban, SA (Sept 25, 2017).
3. Mahuvava C. *Training & Education*. 54th SAAPMB Congress, Cape Town, South Africa (Sept 6, 2016).
4. Mahuvava C. *Imaging in Radiotherapy*. 53rd SAAPMB Congress, Bloemfontein, South Africa (Sept 23, 2015).

(II) POSTER PRESENTATIONS

1. **Mahuvava C, Moyo D, Chemugarira DK, et al.** *Medical Physics Education and Training Capacity in Zimbabwe: Institutional Structures, Geographic Distribution, and Workforce Alignment*. Digital Poster Viewing, 2026 Joint AAPM | COMP Annual Meeting & Exhibition, Vancouver, BC, Canada (July 19–22, 2026).
2. **Mahuvava C, Moyo D, Chemugarira DK, et al.** *Clinical Medical Physics Workforce Capacity and Distribution in Zimbabwe: Registration Status, Practice Patterns, and Service Coverage*. Digital Poster Viewing, 2026 Joint AAPM | COMP Annual Meeting & Exhibition, Vancouver, BC, Canada (July 19–22, 2026).
3. **Mahuvava C.** *Monte Carlo Dose Calculations for Radiobiology Studies*. Virtual ePoster, AAPM 63rd Annual Meeting & Exhibition, Columbus, USA (July 25, 2021).

Date: 07-April-2026



4. **Mahuvava C.** *Monte Carlo Study for Accurate Dose Calculations in Pre-Clinical Radiobiology Experiments.* ePoster, Winter Institute of Medical Physics, Colorado, USA (March 20, 2021).

(III) CONFERENCES ATTENDED

1. AAPM 67th Annual Meeting — Virtual (On-Demand) (July 2025).
2. AAPM 63rd Annual Meeting & Exhibition, Columbus, USA (July 2021).

13. CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

(I) SELECTED INTERNATIONAL WEBINARS

1. **AAPM Webinar** — *Landing A New Job: From Job Search to Getting Established in Your New Role Part 1: Job Search and Application Foundations.* April 28, 2026.
2. **IOMP Webinar** — *Healthcare Sustainability in LMIC Countries.* April 22, 2026 (CPD Certificate).
3. **IOMP Webinar** — *Remote and Automated QC in Radiology – an IAEA Approach.* April 23, 2026 (CPD Certificate).
4. **AAPM Webinar** — *MP3.0 Webinar Series: From Recon to Report: Advances in Breast Imaging Artificial Intelligence.* March 17, 2026.
5. **AAPM Webinar** — *An Introduction to Radiopharmaceutical Dosimetry: Dose Calibrator Fundamentals – Ensuring Accuracy from the Ground Up.* March 26, 2026.
6. **IOMP Webinar** — *Basics of Theranostics.* February 9, 2026 (CPD Certificate).
7. **IOMP Webinar** — *International Day of Medical Physics 2025: Medical Physics and Emerging Technologies – Shaping the Next Decade.* Nov 7, 2025 (CPD Certificate).
8. **IOMP Webinar** — *Applications of Surface-Guided Radiation Therapy for 4D CT, Surface-Guided Planning, Motion Management During Treatment Delivery, and Dose Visualization Using Cherenkov Imaging.* Oct 17, 2025 (CPD Certificate).
9. **SDX® by DYN'R Medical Systems** — *Patient Safety and Workflow Management in Radiotherapy: Role of Identification and Accessory Verification Systems.* Sept 23, 2025.
10. **IOMP Webinar** — *Meet the Industry: Streamlining Radiation Oncology – Automated Planning and Quality Assurance.* July 30, 2025 (CPD Certificate).
11. **C-RAD Webinar** — *Routine Clinical Practice Guidance for C-RAD Patient Positioning and Motion Management.* Aug 27, 2024.
12. **IOMP & UNSCEAR Webinar** — *Advancing Radiation Safety in Medicine: Insights on Ionizing Radiation Exposure.* July 3, 2024.
13. **AAPM Webinar (Global Research and Scientific Innovation Committee)** — *Medical Physics Research Mentorship and Global Opportunities.* February 2024.

Date: 07-April-2026



(II) WORKSHOPS

1. **UWI CETL, St. Augustine** — *An Orientation to Peer Observation*. September 13, 2024 (Certificate of Completion).
 2. **UWI CETL, St. Augustine** — *How Do I Get Students to Complete Reading Assignments?* Sept 10, 2024 (Certificate of Completion).
 3. **UWI CETL, St. Augustine** — *Effective Course Design with Artificial Intelligence*. September 11, 2024 (Certificate of Completion).
-

14. SHORT COURSES & PROFESSIONAL TRAINING

- a) **Collaborative Institutional Training Initiative (CITI Program), UWI** — Responsible Conduct of Research (RCR Basic Course). November 21, 2025.
 - b) **Panel on Research Ethics (PRE)** — TCPS 2: CORE – Course on Research Ethics (Ethical Conduct for Research Involving Humans). November 22, 2025.
 - c) **Training and Resources in Research Ethics Evaluation (TRREE)** — Introduction to Research Ethics; Research Ethics Evaluation. Nov 21, 2025.
 - d) **IAEA Medical Physics E-Learning Programme** — 14 courses completed (July–Aug 2024), including: Radiation Dose Management in CT; Diagnostic Reference Levels in Medical Imaging; Quality Assurance and Dosimetry in Digital Radiology and Mammography; Radiation Protection; Nuclear Medicine Imaging; Radiobiology.
 - e) **Southern African Institute for Nuclear Technology & Sciences (SAINTS)** — Radiation Interaction and Detection. Oct 2–6, 2023.
-

15. PROFESSIONAL CERTIFICATIONS

1. **The Ohio State University (OSU), College of Engineering, USA** — Certification in Radiological Engineering & Health Physics. *Completed March 18, 2026*
 - Three courses (12 Continuing Education Units):
 - Radiation Physics & Radiological Engineering (September 2025)
 - Radiation Dosimetry (November 2025)
 - Radiation Safety & Radiological Instrumentation (March 2026)
2. **The University of the West Indies (UWI), St. Augustine** — Postgraduate Certificate in University Teaching & Learning (CUTL). *September 2024 – April 2025*
 - GPA: 4.30 / 4.30; Academic e-portfolio developed
3. **Allied Health Practitioners Council Zimbabwe (AHPCZ)** — Medical Physicist Certification. *April 2021*

Date: 07-April-2026



16. PROFESSIONAL MEMBERSHIPS

1. American Association of Physicists in Medicine — Full Member (2025–Present)
2. Canadian Organization of Medical Physicists / MPWB — Full Member (Pending)
3. Trinidad and Tobago Organization of Medical Physicists — Member (Pending)
4. Allied Health Practitioners Council Zimbabwe—Medical Physicist (Apr 2021–Present)
5. South African Institute of Physics — Professional Physicist (July 2018 – Dec 2023)
6. Institute of Physics and Engineering in Medicine — Affiliate Member (lapsed)

17. AWARDS & SCHOLARSHIPS

1. AAPM Global Early Career Researcher Access Award / MPWB (July 2025)
Full access award to the AAPM 2025 Annual Meeting.
2. Worldwide Innovations in Medical Physics (WIMP) Competition — Finalist Award,
43rd Winter Institute of Medical Physics Annual Meeting (March 2021)
3. Best Oral Presentation Award, SAAPMB Conference (2015)
4. Merit-Based Postgraduate Scholarship, UCT (2013)
5. Six Dean's Commendations, UKZN (2010–2012)
6. Fifteen Merit Certificates, UKZN (2010–2012)
7. Merit-Based Presidential Scholarship, UKZN (2010)