

CURRICULUM VITAE

Personal Information

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Nationality: Indian

Research Interests

Monte Carlo simulations in radiation dosimetry

Particle interactions and secondary radiation

Hadron therapy and accelerator-based medical physics

Nuclear physics applications in medical dosimetry

Education

M.Sc. in Radiation Physics, University of Calicut (2024–2026)

B.Sc. in Physics, Vimala College (Autonomous), Thrissur, University of Calicut (2020–2023)

Master's Thesis

Fragmentation and Dosimetric Investigation of Oxygen-Ion Beams on Carbon Using GEANT4

- Monte Carlo simulation of alpha-particle fragmentation relevant to hadron therapy
- Analysis of secondary particle production and absorbed dose distributions
- Application of particle transport and nuclear interaction physics to medical dosimetry

Technical & Scientific Skills

Geant4, Python, C, C++, ROOT

Radiation Physics, Hadron Therapy, Dosimetry

Ubuntu, LaTeX, Scientific Reporting

Relevant Training & Workshops

Radiation Safety in Interventional Cardiology – 9 Feb 2025

National Workshop on Geant4 – 19–21 Feb 2025

School-cum-Workshop Biological Effects of Ionizing Radiation – 24-26 Sept 2025

Referee

Prof M M Mustafa - mmm@uoc.ac.in