

CURRICULUM VITAE

PERSONAL DETAILS

Name: Dr. Ahmed Rufa'i USMAN

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Designation: Lecturer II

Researcher link: <https://scholar.google.com/citations?user=KSed3q8AAAAJ&hl=en&authuser=1>



ACADEMIC QUALIFICATION

(Qualification), (Institution), (Date).

Doctor of Philosophy (Ph.D.), Department of Physics, University of Malaya, Kuala Lumpur, Malaysia (2017)

M.Sc. Physics, Department of Physics, Bayero University, Kano, Nigeria (2013)

B.Sc. Physics, Department of Physics, Bayero University, Kano, Nigeria (2006)

AREAS OF EXPERTISE

Nuclear reactions and cross-sections

Radiation Detection and Measurements

Radiation applications in medical Physics

Environmental Radioactivity and Heavy Metals

EXPERIENCES WITH SCIENTIFIC RESEARCH FACILITIES

(Facility), (Location or Level), (Date).

Nigerian Research Reactor, Center for Energy Research and Training, Ahmadu Bello University Zaria, Nigeria; 2011 – 2013 (M.Sc. research).

AVF Cyclotron at RIKEN RI Beam Factory, Nashina Center for Accelerator Based Science, Wako, Saitama, Japan, 2014 – 2017 (Ph.D. research).

Gamma cell and HPGe Gamma Ray Detecting Set up at Radiation Laboratory, University of Malaya, 2013 – 2017.

AWARDS

(Title of award), (Organization), (Period).

1. Best paper award (Life Sciences), International Conference in Biomedical Engineering and Life Sciences, Kuala Lumpur, Malaysia (2015).
2. Runner up, University of Malaya 'Three Minutes Thesis Competition' Faculty Level (2016).
3. Runner up, Poster Conference Presentation, International Nuclear Science and Technology (INST-2016) Conference, Bangkok, Thailand (2016).

RECENT PUBLICATIONS

(Articles in Academic Journals and proceedings)

1. **A.R. Usman**, M.U. Khandaker, H. Haba, N. Otuka, M. Murakami, (2017). **Excitation functions of alpha particles induced nuclear reactions on natural titanium in the energy range of 10.4 – 50.2 MeV**. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 399, 34-47. (ISI Publication).
2. **A.R. Usman**, M.U. Khandaker, H. Haba, (2017). **Cyclotron production of ^{48}V via $^{nat}\text{Ti}(d,x)^{48}\text{V}$ nuclear reaction; a Promising Radionuclide**. *Journal of Physics: Conference Series*, Vol. 860, Conference 1.
3. N. Otuka, B. Lalremruata, M.U. Khandaker, **A. R Usman**, & Punte, L. R. M. (2017). **Uncertainty propagation in activation cross section measurements**. *Radiation Physics and Chemistry*, DOI: 10.1016/j.radphyschem.2017.01.013. (Accepted Manuscript, ISI Publication).
4. **A.R. Usman**, M.U. Khandaker, H. Haba, N. Otuka, M. Murakami, Y. Komori (2016). **Production cross-sections of radionuclides from α -induced reactions on natural copper up to 50 MeV**. *Applied Radiation and Isotopes 114*, 104-113. (ISI Publication).
5. **A.R. Usman**, M.U. Khandaker, H. Haba, M. Murakami, N. Otuka, (2016). **Measurements of deuteron-induced reaction cross-sections on natural nickel up to 24 MeV**. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms 368*, 112-119. (ISI Publication).
6. M.U. Khandaker, H. Haba, N. Otuka, **A.R. Usman**, (2014). **Investigation of (d, x) nuclear reactions on natural ytterbium up to 24MeV**, *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 335, 8-18. (ISI Publication).
7. M.U. Khandaker, K. Asaduzzaman, S. Nawari, **A.R. Usman**, Y. Amin, E. Daar, D. Bradley, H. Ahmed, A. Okhunov, (2015). **Assessment of Radiation and Heavy Metals Risk due to the Dietary Intake of Marine Fishes (Rastrelliger kanagurta) from the Straits of Malacca**, *PloS One*, 10 (6), e0128790. (ISI Publication).
8. **A.R. Usman**, N.F. Isa, A. Shu'aibu, (2012). Comparative Study of Uranium and Thorium Content of some selected Nigerian and Nigerien Cereals Using Neutron Activation Analysis. *Journal of the Nigerian Association of Mathematical Physics*, 20, 239 – 244.
9. **A.R. Usman**, M.U. Khandaker, N.F. Isa, Y.A. Ahmed, (2016). **Elemental Analysis of Nigerian and Nigerien Foods Using Neutron Activation and Estimation of Daily Intake**, in: Ibrahim, F., Usman, J., Mohktar, M., Ahmad, M. (Eds.), *International*

Conference for Innovation in Biomedical Engineering and Life Sciences. Springer Singapore, 56, 53-56.

10. S. Abubakar, **A.R. Usman**, N.F. Isa, M.U. Khandaker, N. Abubakar, (2014). **Investigation of therapeutic potentials of some selected medicinal plants using neutron activation analysis**, *AIP Proceedings*, 1657 (1).
11. P. Ahmad, M.U. Khandaker, Y.M. Amin, N. Muhammad, **A.R. Usman**, M. Amin, (2015). **The effect of reaction atmosphere and growth duration on the size and morphology of boron nitride nanotubes**, *New Journal of Chemistry*, 39, 7912-7915. (ISI Publication).

WORKSHOPS ATTENDED

(Title), (Event, Date), And (Venue)

Nuclear Physics Theory and Cross-section of data determination using computer codes, (May 19 – 24, 2013), National Mathematical Center – Abuja, Nigeria.

Winter School on Nuclear Physics, 4th UM – UKM – Universite` de Bordeaux, Nov., 2015, UM, Kuala Lumpur, Malaysia.

ACADEMIC PRESENTATIONS

International Nuclear Science and Technology Conference (INST-2016), Bangkok, Thailand, August 3 – 6, 2016.

International Conference for Innovation in Biomedical Engineering and Life Sciences (ICIBEL), Putrajaya, Malaysia (December, 2015).

IRDI – Conference, 2012, International Research and Development Institute, (International).

2nd International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 2015.

NAMP – 20th annual Colloquium, 2010, at Bayero University Kano, Nigeria, (National).

NAMP – 22nd annual Colloquium and Conference, 2011, Nigerian Association of Mathematical Physics, at Ado-Ekiti University, Nigeria (National).

National Physics Conference (PERFIK), Kuala Lumpur, Malaysia, 2014.

International Conference on Waste Managements and Environment, University of Malaya, 2015

SUPERVISION

Undergraduate Level

(Title of Project), (Academic Session)

Determination of Heavy Metals from Industrial Wastes Around Katsina Metropolis Using XRF Technique, 2012/2013, Umaru Musa Yar'adua University, Katsina.

ONGOING RESEARCH

Charged-Particle-Induced Residual Radionuclides Production Cross-Sections Using AVF Cyclotron.

CONTRIBUTION TO SOCIETY

(Contribution to Society), (Level), (Start Date), (End Date).

National Youth Service Corp, (National), March, 2007 – Feb. 2008.

Millennium Development Goals (MDG), (National), March, 2007 to Feb., 2008.

2nd QS Summer School Summit, by QS Asia and University of Malaya, (Student Ambassador), Dec. 1 - 2. 2015.