KARATINA UNIVERSITY

STAFF PROFILE TEMPLATE

1. **Name:** [Mr. Aggrey K Mukoya]
2. **Designation**: [Assistant Lecturer]
3. **Employment details**

   School: [School of pure and applied sciences]

   Department: [Biological and Physical sciences]

4. **Contact Information**

   Email Address: amukhoya@karu.ac.ke, aggreymukoya@gmail.com

4. **Describe your professional self**

Mr. Aggrey Mukoya is an Assistant lecturer in the school of pure and applied sciences at Karatina University where he has been a faculty member since 2015 and specializes in Physics. Aggrey is doing his PhD at Masinde Muliro University of Science and Technology and did his masters at Moi University and undergraduate studies at Egerton University. His research interests are in Condensed matter Physics

He is currently working on formulations of Thermodynamic quantities of a binary Mixture of Bosons and Fermions at low temperatures. He is currently an Examination Coordinator at rhe Department of Biological and Physical Sciences, school of Pure and Applied Sciences of Karatina University.

5. **Area/ Field of specialization**: [Physics]

6. **Research interests**: [Theoretical Physics]

7. List some of your key published works.

Peer-reviewed Publications

1. Rapando BW, Ayodo YK, Sakwa TW, Khanna KM, Sarai A, **Mukoya AK** TRANSITION TEMPERATURE OF SUPERCONDUCTING HYBRIDIZED CUPRATE SYSTEMS- international Journal of Physics and Mathematics; JPMS 16-016. 2013 VOL. 3.
2. Sakwa TW, Rapando BW, Ayodo YK, Sakwa TW, Khanna KM, Sarai A, **Mukoya AK** THERMODYNAMICS OF GRAND-CANONICAL BINARY SYSTEM AT LOW TEMPERATURE- International Journal of Physics and Mathematics; JPMS 14- 015.2013 VOL.3.
3. Kanyeki FG, Masinde FW, Murunga GS, Tanui PK, Obota SEO, Muguru KM, **Mukoya AK** , Ochieng SO, Khanna KM ROLE OF ATTRACTIVE INTERACTION IN THE HIGH-TC SUPERCONDUCTIVITY. International Journal of Physics and Mathematics; JPMS 2014 VOL. 4(1)
4. Kanyeki FG, Masinde FW, Murunga GS, Tanui PK, Obota SEO, Muguru KM, **Mukoya AK** , Ochieng SO, Khanna KM MEAN-FIELD INSTABILITY OF TRAPPED DILUTE BOSON-FERMION MIXTURE. international Journal of Physics and Mathematics; JPMS 2014 VOL. 4(1).
5. **Mukoya AK**, Sakwa TW, Rapando BW, Ayodo YK, Sakwa TW, Khanna KM, Sarai A, CRITICAL TEMPERATURE AND CONDENSATE FRACTION OF BEC TRAPPED IN A FINITE VOLUME international Journal of Physics and Mathematics; JPMS 2015 VOL. 5(3). JM Kihiko, Shaikh Mhd, Azhar, Samuel Rotich, **Aggrey Mukoya**
6. DETERMINATION OF FOCAL LENGTH OF DIVERGING LENSES USING CONVEX LENSES BASED ON OPTICAL SENSOR, International Education Research Journal E.ISSN NO:2454-9916 Volume :9 Issue 5 May 2023