

## **ADDRESS TO PHYSICS AND MATHS STUDENTS ON MONDAY MAY 27, 2013**

---

Good afternoon ladies and gentlemen!

I will start my short address by giving a formal definition of Physics. Physics is “The study of natural laws and properties of matter and energy”.

It spans the Atom to the UNIVERSE and also the ABSTRACT (e.g. relatively) to the Practical (e.g. radiotherapy or electronics). Physics builds models of the natural world to see how it operates – i.e. to understand the How and Why.

The Department of Physics offers undergraduates programme in Physics (I20), Microprocessor Technology and Instrumentation (I39) and Astronomy and Astrophysics (I44). We also have M.Sc. and PhD in Physics with Specialization options in Applied Electronics, Condensed matter Physics, Applied Nuclear and Radiation Physics, Laser Physics and Spectroscopy and Theoretical Physics.

Our Programmes are designed to give students both an “Education THROUGH Physics” and an “Education in Physics”. This gives you (the student) the right skills, attitudes and knowledge to pursue a variety of careers. Career options include:

- **BASIC RESEARCH:** Universities, Parastatals, Government Laboratories, Industrial Laboratories.
- **SPACE & EARTH SCIENCES:** Astronomy, Space Technology, Geophysics, Energy and Resources.
- **EDUCATION:** Universities, Colleges, Technical Training Institutes, High Schools.
- **ENGINEERING:** Electronics, Biomedical Telecommunications, Instrumentation.

- COMPUTER SCIENCE: Graphics, Software Design, Peripherals, Modeling, Artificial Intelligence, Data processing, Programming, Computer Games.
- MEDICINE: Radiation oncology, Magnetic Resonance Imaging, Radiation Protection, Nuclear Medicine.
- COMMUNICATIONS: Telecommunications, Television, Image Analysis, Video Recording, Photography, Laser Technology.
- PUBLISHING: Technical Books, Journals, Software.
- ENVIRONMENTAL SCIENCE: Noise Control, Pollution Control, Conservation, Radiation Protection, Environmental Monitoring.
- NON-TECHNICAL: Law, Administration, Business, Journalism, Museums, Sports, Accounting, Marketing, Art, Science Communication.
- CONSULTING: Industry, Government, Military.

The Department of Physics has an environment that encourages CREATIVITY and INNOVATION.

Thank you very much for your time

**DR. KENNETH A KADUKI**  
**CHAIRMAN, DEPARTMENT OF PHYSICS**