

# **NATIONAL WORKSHOP ON THE OVERVIEW OF TRENDS IN TEACHING AND RESEARCH IN INORGANIC CHEMISTRY AND ITS APPLICATIONS IN KENYA**

## **PREAMBLE**

Inorganic Chemistry is the mother chemistry; it is the rest of chemistry after the split of organic, physical, analytical, pharmaceutical etc, chemistry disciplines. While there are no clear cut boundaries of inorganic and the other chemistry disciplines, the main stream inorganic chemistry feeds into these disciplines of chemistry as well as other sciences. It is mainly concerned with the study of the synthesis, structure and behaviour of chemical compounds, including element behaviour, resulting in the build up of the periodic table. It is the only chemistry discipline that examines specifically the differences, behaviour and interactions among all the different kinds of elements. It looks into the influence of species of elements in molecules and compounds, in coordination chemistry, organometallic molecules and in the synthesis and catalysis of reactions just to name a few.

Inorganic chemistry is rich and wide in its spread of influence in the world we live in today. It transcends across the general classifications of science and technology, from the engineering sciences, through the agricultural sciences to the health sciences. It is domiciled in the environmental and natural sciences where its influence is not in dispute. The most prosperous nations of the world today, the Group of Eight (G8), have one thing in common, a strong inorganic chemistry research and development base, that supports their technological advancement, so are the new developed nations of Brazil, Russia, India, China, South Africa (BRICS). It is imperative that a young nation such as Kenya should focus on enhancing science and technology, particularly inorganic chemistry, at this point in time.

In our Vision 2030 development agenda, among the three pillars of social, economic and political, emphasis to achieve and sustain a middle level income country status, science and technology are placed very highly as vehicles for delivery. The recent discovery of minerals such as titanium, rare earth, fossil fuels of petroleum and coal, has placed chemistry and in particular inorganic chemistry at an elevated pedestal, so has the advancement of organometallic sciences in health.

This Inorganic Chemistry workshop rightfully placed at this premier institution of higher learning, the University of Nairobi, is intended to bring together key stakeholders of our economy and society that include policy makers, users and generators of inorganic chemistry skills and technology, with a view of plugging into our nation building in the envisaged human and physical development. The workshop intends to lay grounds for improved delivery of inorganic chemistry skills to students in learning institutions, starting from secondary schools, undergraduate and postgraduate training in our universities. It will look into curricula, in our schools and universities, capacities; human and infrastructure, as well as research capabilities in inorganic chemistry. The workshop will endeavour to loop in the users of inorganic chemistry skills and technology in private and public institutions. Collaboration with private sector, who are the major employers of both our graduates and research results need to be developed and consolidated so as to achieve sustainable results. Inorganic chemists in this country need to advance and apply their skills for the betterment of the nation at large. That is DEVELOPMENT.