Challenges and Good Practices in Implementation of Safety and Security of Radioactive Sources throughout their Life Cycle

The application of nuclear science and technology for peaceful purposes contributes to the developmental activities in various sectors world over. In applying nuclear science and technology for peaceful purposes, radioactive sources are widely used. However, the use of radioactive sources poses a risk of exposing the workers, the general public and the environment to ionizing radiation which can cause harmful effects. This, therefore, calls for the implementation of safety and security of the radioactive sources throughout their life cycle to ensure that the people and the environment are protected from harmful effects of ionizing radiation. In implementation of safety and security of the radioactive sources, challenges are encountered. On the other hand, best practices are adopted and implemented to ensure safety and security of the radioactive sources.

This paper, therefore aims at exploring the challenges that are associated with ensuring the safety and security of radioactive sources throughout their life cycle. The paper also highlights the good practices associated with ensuring the safety and security of radioactive sources throughout their life cycle.