

## **Application of Gamma Irradiation Technology in Preservation of Food: Prospects and Challenges**

Nitish Kumar<sup>1</sup> and Sanjay Kumar<sup>2</sup>

*<sup>1</sup>Department of Biotechnology, Central University of South Bihar,  
Gaya 824 236, Bihar, India*

*<sup>2</sup>Department of Chemistry, University of Petroleum and Energy Studies,  
Bidholi Dehradun 248 007, India*

**KEYWORDS** Food Preservation. Food Technology. Gamma Irradiation. Nuclear. Residues

**ABSTRACT** Since about over a quarter of the harvested food is lost due to different types of wastage and spoilage, preservation of food is no less important than production of food. Gamma irradiation technology is one of the most appropriate and prominent technologies that can be applied in preservation of food. Gamma area science, also restrict the spoilage and wastage of castrate various maintain security of benefits gamma irradiation high power of, effortlessly, less it is and economically absence awareness, education socialisation the utilisation of gamma irradiation, there are still several societies, which think that gamma irradiation technology is hazardous and its radiation damages the proteins and genes. In fact, preservation of food using nuclear irradiation has been tested, researched and inspected and presently marketable practice in different nations. Gamma irradiation technology is still required to be advanced and it is encouraged so that it can be applied extensively through the regulation that is decided by the administrations to enhance the information of peoples about the advantage of nuclear irradiation power. It is also be considered that irradiated food and foodstuffs and the research outputs of the technology must be socialised, advertised, and published in a variability of advertising mode both in public community and scientific society, so that irradiated food and foodstuffs can be documented and recognised by various communities.