Mo-99 Production Using a Superconducting Electron Linac

Valeriia N. Starovoitova, Chase H. Boulware, Amanda K. Grimm, Terry L. Grimm, Jerry L. Hollister, and Erik S. Maddock
Niowave, Inc., 1012 N. Walnut St., Lansing, MI 48906 – United States

ABSTRACT

The lack of a domestic supply of Mo-99 and the current practice of using weapons grade material to produce Mo-99 led Congress to pass the American Medical Isotope Production Act in 2013. This legislation establishes a program to develop domestic production of Mo-99 by non-federal entities, and to phase out the use of highly enriched uranium for Mo-99 production. To meet the domestic need for Mo-99, Niowave is embarking on a major expansion to include a radioisotope production facility. This new $200 million facility will focus on medical radioisotopes and radiopharmaceutical production with plans to ship the isotopes across the country via air and ground transportation. Groundbreaking for the new facility, located at the Capitol Region International Airport near Niowave’s existing headquarters in Lansing, Michigan, is scheduled for 2014. In addition to Mo-99, Niowave will deliver other medical and industrial radioisotopes to the DOE Isotope Program in 2014.