# Exporting food irradiation plants: an interview

*Dr. Martin Welt, who pioneered the technology in the United States, now sees the future of food irradiation to be overseas. Marjorie Mazel Hecht reports.*

Dr. Martin Welt, founder of Radiation Technology, Inc., in New Jersey, has led the fight for U.S. commercialization of food irradiation for more than 20 years. It was his petition initiatives that led the U.S. Food and Drug Administration to issue regulations permitting the irradiation of spices, enzymes, herbs (up to 3 megarads), and fresh pork (up to 100 kilorads for trichina control). Another FDA regulation is expected later this year, as a result of a Radiation Technology petition, to permit high dose irradiation for sterilizing processed foods.

Welt recently founded a new company, Alpha Omega Technology, Inc., in Morris Plains, New Jersey, which will concentrate on the export market for food irradiation plants, especially in the developing sector. The company is now selling 20 shares of stock at $25,000 per share and expects to split the stock in February at $60,000 per share, going public sometime later in the year.

Although he pioneered the technology here, Welt now sees the future of food irradiation to be overseas. In part this is because of the pressing need for food preservation and the lack of inexpensive alternatives in developing countries. As he describes below, food irradiation is less than one-fourth the cost of conventional canning methods of preservation and less than one-third the cost of freezing.

The other reason Welt feels that food irradiation will be commercialized first abroad, is the ugly climate that has been created in this country by the anti-nuclear environmentalists and their friends in the regulatory agencies. "They wanted to emasculate the food irradiation industry, and so they tried to chop off its head," Welt said of the vendetta carried out against him and his efforts to bring irradiation technology to commercialization.

In addition to exporting food irradiation plants, Alpha Omega Technology, Inc., will offer consulting services in the United States not only for radiation preservation of food, but also in the area of government regulations concerning radiation and other uses (as he describes this, leading others through the regulatory jungle). It will also promote other uses of the technology, such as irradiation treatment to turn raw sewage into fertilizer. An environmental audit division will offer training of health-care personnel who use radiation for diagnostic or therapeutic purposes and monitoring of the equipment involved. In addition, this division will be able to provide radon surveys for homes, offices, and land, and supply remedial measures if necessary. Welt also intends to market quality assurance procedures for the radiation field, as well as radiation-related medical software.

Welt holds three engineering degrees, a master's in chemical engineering from Iowa State, a master's in nuclear engineering from MIT, and a Ph.D. in plasma physics from North Carolina State. He began his career with the Atomic Energy Commission in the 1950s, and was one of the first formally trained physicists to license nuclear reactors, including the Indian Point plant in New York and the on the Nautilus. In February 1986, he won the "Entrepreneur of the Year Award," an honor conferred by the R&D Managers Association based in Chicago.

He was interviewed Aug. 2, 1986.