In further support of the food-irradiation program, a truck-mounted portable cesium irradiator recently completed a cross-country demonstration tour, stopping at about 75 private food firms in 12 states and processing some 75,000 pounds of produce. It was a practical demonstration of the technique at the food producers' own plants. The AEC has also provided pilot-plant facilities in Gloucester, Mass., in Davis, Calif., and in Honolulu, Hawaii.

This country is also supporting food-irradiation research abroad. Large, semiportable irradiators have been or will be loaned to Israel, Argentina, Iceland, India, Chile, Korea, and Pakistan.

Some 50 countries are conducting studies on food irradiation which 26 other countries are watching with interest. Russia is offering the longest list of approved irradiation items including potatoes, grain, dried fruits, dry food concentrates, fresh fruits, and vegetables. Several prepackaged meat and poultry items are also being market tested in the USSR.

Food scientists seeking an international trade agreement on the production of irradiated foods have proposed establishment of an International Food Irradiation Project under the joint auspices of the IAEA and the European Nuclear Energy Association. The United States is planning to be an active participant in this program.

Other applications of radiation

There is more to agriculture than food, of course. The farmer helps clothe and house the world as well as feed it, and the atom is important in these areas, too.

Radiation is helping to create more appealing textiles, specifically the so-called wash-and-wear or durable-press fabrics. Radiation, usually from cobalt-60, is used in the final processing of the completed garment to produce the ease-of-care or durable-press quality.

Textile people are using what they call "radiation grafting" to build into a fiber a long list of attractive properties including crease recovery, stain release, dyeability, antistatic behavior, increased comfort, rot and mildew resistance, high thermal stability, and even fireproofing qualities. Most radiation processing is done on polyester–cotton blend, but an increasing amount of work is being done with wool, rayon, and other fabrics.