successfully works for several years in the Radium Institute of St.-Petersburg. This generator was developed in the Institute of Physical Chemistry of the Russian Academy of Sciences. Working generator production is fully satisfied the requirements of Russian clinics.

## 2. KITS OF THE REAGENTS FOR 99mTc-GENERATORS

The problem of the production of the ordinary list of the kits for the 99mTc-generators was also solved.

"Diamed" company is the main manufacturer of these kits nowadays. This company was organized on the base of the Institute of Biophysics. Company produces about 20000 kits per year. There are: Pentatech (complex with DTPA), Pyrphotech (complex with pyrophosphate), Technephore (complex with oxabiphore for bone scintigraphy), Technephyte (phytate colloid), Technetril (complex with MIBI), Technemek (complex with DMSA), Bromezida (complex with Br-HIDA).

Facility "Medradiopreparate" produces Pyrphotech, Pentatech, Coren (colloid on the basis of rhenium sulfide), Citratech (citric complex).

All clinical trials were carried out and now the following radiopharmaceuticals are ready for production: Technemag (complex with MAG3), Erytrotech (radiopharmaceutical for erythrocyte labeling in vitro), complex with HMPAO, microspheres of albumin. Tc(Y)-DMSA will be tried in 1996. The kits for express-methods of quality control of 99mTc-radiopharmaceuticals directly in clinics will be putted into production in 1997.

Nowadays the main problems of the research-scientific works in the field of <sup>99m</sup>Tc-radiopharmaceutical usage are:

1. Investigation of the influence of the eluate quality of the commercial

1. Investigation of the influence of the eluate quality of the commercial generators on the clinical quality of the radiopharmaceuticals;