Efficient usage of the secondary raw resources to secure the environment becomes the problem of search of new methods of technological productions in mining, chemical and metallurgical industries.

The old technology of magnet treatment of iron ore, which is used in the Azerbaijan Ore-Dressing Plant, do not allow to use efficiently all resource mass, involved into production, and the most of it, which contains useful components, pollutes the environment as the tails. During years of combine work the millions tonnes of crushed in pieces tails have harmed the nature and imbibe new areas.

The technology of complex utilization of the combine tails with extraction of magnetite and other useful components was developed in the institute.

The minerals associations in the tails are elicited and optimal conditions for their extraction, using the method of flotation-magnet treatment, are determined. Foam flotation conditions and watery magnet separation are also elicited, during which the collective sulphide concentrate, magnetite superconcentrate (68.7% Fe) and sand wastes, which are used in the building, are being extracted. During this process up to 80% of copper and plumbum, up to 70% of zinc, 60% of cobalt and 25% of argent are extracted to the flotational concentrate, and additionally 60% of iron is extracted to the magnetite concentrate.