

RECOVERY OF URANIUM AND ACCOMPANYING METALS FROM THE SECONDARY RAW MATERIALS

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Abstract

In the last years interest in uranium recovery from secondary sources is growing. In Poland, the advanced studies are undertaken concerning the possibility of obtaining uranium from domestic resources and also secondary resources such as phosphate rocks and industrial wastes, including flotation tailings from the copper industry and phosphogypsum.

There are two main reasons for these kind of studies:

- recovery of heavy metals from the industrial wastes is important to the society, industry and environment;
- the selective separation of uranium is a very important in the context of energy production and treatment of nuclear wastes.

In the studies described the solid materials were leached with using either acid or alkaline solutions in stationary reactors or with percolative leaching. The obtained liquors were separated from solid residue and then were purified by liquid-liquid extraction or ion exchange chromatography.

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