

## ŠTÚDIUM ZÍSKAVANIA UŠĽACHTILÝCH KOVOV Z KYSLÝCH ROZTOKOV POMOCOUIÓNOMENIČOV

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### ABSTRACT

Vužňáková L., Štofková M.: **The Study of Recovery of Precious Metals from Acid Solutions by Ion Exchangers**

Precious metals (PM) include iridium, osmium, palladium, platinum, rhodium, ruthenium gold and silver thanks to their rare properties have found many practical applications in different branch of industry. The limited world sources, low contents of PM in ores and high cost of their recovery become serious problem and have led to the development of new processes for the recovery of these metals from the spent materials. There is a need for new processes specially focused on the recovery of these metals from waste treatment solution and diluted acid solutions such as those resulting from mining and treatment activities or exhausted leaching liquors. The sorption of Pd(II) on the macroporous chelating resin Lewatit TP 214 and influence of Zn(II) and Cu(II) ions has been investigated. The results obtained in chloride media showed adsorption for Pd(II) (99%), for Zn(II) (6–44%) and for Cu(II) (42–100%), depending on metal concentration.

**Key words:** ion exchange, Lewatit TP 214, Pd (II), Zn (II), Cu (II)