



**ICEEM/03 – ENVIRONMENTAL ENGINEERING
SECTION
Solid Waste Management**

**RECOVERY OF ZINC AND IRON FROM THE SLUDGE
RESULTED DURING THERMAL ZINC COATING**

**Lavinia Lupa^{*}, Aurel Iovi, Petru Negrea, Adina Negrea,
Gabriela Szabo**

*University Politehnica Timisoara, Faculty of Industrial Chemistry and Environmental
Engineering, Victoria Square, no.2, 300006 Timisoara*

Abstract

In this paper studies regarding the recovery of zinc and iron from sludge resulted during thermal zinc coating were performed. The sludge results after the neutralisation of discharged wastewaters. It was tried to establish the optimum conditions of heavy metals removal from sludge by extraction with sulphuric acid. Through the optimum condition was followed to obtain a high separation degree of zinc and iron in the extraction solution and the smallest separation degree of calcium and lead, so that the valuable metals to can be reuse.

Keywords: sludge, heavy metals removal and recover

^{*} Author to whom all correspondence should be addressed: Phone/Fax: +40256404192, e-mail:
lavinia.lupa@chim.upt.ro