

Chloride removal from the secondary source of zinc

N Dakhili, H Razavizadeh, M T Salehi and S H Seyedein
Iran University of Science and Technology, Iran

Zinc containing wastes/secondaries such as zinc ash, dross, flue dusts, sludge, residue etc. are generated in various chemical and metallurgical industries. The materials contain different level of impurities depending on the source. If zinc content material, like zinc ash and zinc slag, contains various

amounts of chlorides like zinc chloride, zinc oxy-chloride, which comes from ammonium chloride and other chloride fluxes used by galvanizers, the chloride content has to be removed for the evaluation of this secondary resource for recovery as zinc metal or zinc oxide. The results (of the galvanizing slag's treating that left after some pyrometallurgical processes) indicate that roasting at 800 °C for 30 min, followed by alkali washing treatment, at 70 °C for 45 min by 1/6 solid/liquid ratio and 1.5 times the stoichiometric amount, will be useful for chloride removal with 94% efficiency.

nafiseh_dakhili@hotmail.com