

The invention pertains to the method of gold extraction from industrial waste and gold containing concentrates and can be used in jewellery for the scrap processing, which is formed during the jewellery articles polishing, both at the gold extraction industry for extraction of gold from gravitation concentrates, containing 3-5 mas. % of gold or more. The method of gold extraction from industrial waste and gold containing concentrates includes leaching of gold by way of mixing the final material with chlorine containing reagent, containing "an active" chlorine, or extracts it in aqueous media with further gold precipitation and separation with known methods. After the mixing of final material with reagent, the reagent or its mixture is added by portions to the mixture, dissociated at  $\text{Cl}^-$  and  $\text{H}^+$  ions, during the period of time which is determined by the formula:

$$t = \frac{(1 + 0.4m)k}{1.2},$$

where  $t$  - durability of the addition of the reagent or its mixture, dissociating at the aqueous media at  $\text{Cl}^-$  and  $\text{H}^+$  ions, hours;  $m$  - mass of final material, kg;  $k$  - coefficient, depending on the grade of dispersion of gold particles in final material, 0,7 – 6,0. The invention gives a possibility to extract gold from industrial waste and gold containing concentrates in a manner, that reagents and a process conditions provide the control of "the active" chlorine content in reaction mixture, which raise the rate of gold extraction from final material without negative influence on the environment.