



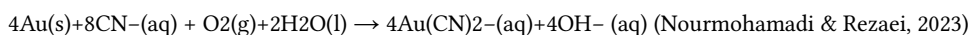
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## ESTABLISHMENT OF OXYGEN VARIATION IN VAT LEACHING TANKS

*Monday, 18 November 2024 18:15 (15 minutes)*

The establishment of oxygen variation in vat leaching tanks will be investigated. Experiments will be conducted by setting up leaching tanks with ore samples typical of artisanal and small-scale mining. Oxygen concentration and consumption rate will be measured using oxygen meters in different ores. Oxygen is essential during the oxidation of gold and its dissolution in the cyanide solution (Nicol, 2020).



Additionally, oxygen is also consumed by competing reactions like cyanocides (e.g. copper). During vat leaching, the process is static and replenishing of used up oxygen is difficult, therefore oxygen is high likely to be insufficient at the bottom of the tank therefore experiments to investigate the concentration of oxygen will be conducted.

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