

Abstract:

Flotation typically represents the first step in mineral processing separation, and a major contributor to recovery losses in the mine-to-metals value chain. Industrial real-time measurement of the pulp and froth conditions of flotation cells provides monitoring, control and optimization benefits.

In this talk, the various industrial approaches to measuring pulp and froth conditions (e.g., computer vision, hydrodynamic, mechanical techniques) will be reviewed and critiqued. The actual and potential application of pulp and froth measurements in industrial monitoring, control and optimization will also be reviewed and illustrated with a number of practical case studies.