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Press release

Defence on 11 June 2021

How to double silver production rate

Title of the doctoral thesis	Application of High-Speed Silver Electrorefining
Content of the doctoral thesis	In the vast growing demand of electric and electronic equipments in the wave of green energy future, demand of silver as one of the important metals in the development has been steadily growing. With the increasing silver supply from both mine production and recycling process, higher production rate of silver refining is required to meet the supply of silver bearing materials. This thesis studied the application of high current density silver electrorefining in order to increase to production rate of silver. Study of the compatibility of current silver electrorefining system for a high current density (HCD) operation was conducted by developing empirical models for mitigating the impact HCD application. As a result, an optimum range and limitation of the parameters was established for an efficient HCD operation.
Field of the doctoral thesis	Hydrometallurgy
Doctoral candidate and contact information	M.Sc. (Tech.) Arif Tirto Aji e mail arif.tirto.aji@gmail.com or arif.aji@aalto.fi
Defence date and time	11th June 2021 at 16 o'clock (Helsinki time)
Remote defence	https://aalto.zoom.us/j/66609396360
Place of defence	Aalto University School of Chemical Engineering, Circular Raw Materials Hub, lecture hall Aluminium, Vuorimiehentie 2, Espoo
Opponent(s)	Professor Corby G. Anderson, Colorado School of Mines, USA
Custos	Professor Mari Lundström, Aalto University School of Chemical Engineering, Finland
Link to electronic thesis	Application of High-Speed Silver Electrorefining (aalto.fi)
Keywords	Silver electrorefining, high current density, empirical modelling