

M.Sc. Geology Public Lecture Candidate: Camila Aliaga Morales Supervisor: Neil Banerjee

The characterization of breccias at the Iska Iska silver-tin polymetallic project, Bolivi June 17, 2025 at 1:00 pm Via ZOOM

Abstract

The Iska Iska silver-tin polymetallic project, located in the southern Bolivian Tin Belt, is hosted within a Miocene igneous complex that intruded Ordovician sedimentary rocks. The deposit is interpreted as a collapsed caldera with resurgent doming and intrusive activity, overprinted by a telescoped tin-rich xenothermal system and a high- to intermediate-sulphidation epithermal system, all structurally controlled. Mineralization (Sn-Ag-Zn-Pb) occurs as vein-breccias, veins, stockworks, replacements, and disseminations, distributed in six mineralizing stages that are associated with complex hydrothermal alteration. Breccias are one of the main ore hosts, commonly containing the highest grades of silver and tin. Through detailed textural analysis, petrography, and 3D modelling, eleven breccia types were identified. They are genetically linked to contact, intrusion, phreatic, phreatomagmatic, and injection events. Intrusion and phreatomagmatic breccias show the greatest mineralization potential. Understanding the nature, distribution, and evolution of breccias at Iska Iska is essential for refining genetic models, improving drill targeting, and informing metallurgical strategies in polymetallic systems.

> Topic: Camila Aliaga Morales - Thesis Presentation (public) Time: Jun 17, 2025 01:00 PM Eastern Time (US and Canada) Join Zoom Meeting <u>https://westernuniversity.zoom.us/j/97888041611</u>

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