WORK LEARN INTERNATIONAL UNDERGRADUATE RESEARCH AWARD | SUMMER 2025



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My Work Learn International Undergraduate Research Award (WL IURA) project focuses on finding new uses for steelmaking by-products. When steel is produced, it creates a material called "Electric Arc Furnace (EAF) slag," which is often treated as waste. However, this slag contains valuable elements that could be recovered and reused, such as critical and rare earth minerals essential for technologies like renewable energy and electronics. The research looks at the chemical and mineral makeup of EAF slag to better understand its potential as a resource rather than waste. The goal is to explore sustainable ways to reduce environmental impacts while supporting the circular economy by turning an industrial by-product into something useful.

I first heard about this position at our Mining Engineering Alumni Dinner, where I happened to sit next to one of my professors. What started as casual small talk quickly turned into a conversation about a research project she was working on. As she described it, I asked thoughtful questions and expressed genuine interest, eventually telling her, "I would love to be able to work with you on this." Not long after, she asked for my resume; and that's how the opportunity began. Experiences like this remind me how valuable it is to participate in class, engage in conversations, and put yourself out there. Professors and TA's really notice genuine curiosity, and being approachable makes it much easier to build those connections. Opportunities often grow from the smallest interactions, whether in the classroom or simply sitting next to someone at a dinner.

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Funny enough, I never initially saw myself in mining. When I first started at UBC, I didn't even know what Mining Engineering was. Later, in a first-year class (APSC 100), they explained all the different engineering disciplines. The person who came in to describe Mining began his presentation with a question: "What is Minecraft as a career?" Safe to say, after that I was hooked. I immediately called my mom and said, "Mom, my heart is glowing." She thought I was crazy, but at that moment I knew mining was the right path for me; and I haven't regretted it since.

I had always known I didn't want a purely officebased job, and the idea of seeing projects develop in person, handling materials, and doing hands-on work felt like the perfect fit. That same curiosity carried into my research, where I even had the chance to help write an upcoming research paper with my supervisor; something I never imagined achieving this early in my degree.



Working on this project has been a balance between independence and guidance. While taking two summer courses, my supervisor helped me design a flexible schedule that allowed me to manage both school and research. Lab work, data processing, and sample testing often happen



on my own time, but support is always available when needed. This independence has given me the confidence to take ownership of my work while still learning from the expertise around me.

Looking back, I realize that opportunities like this come from being open to experiences you never expected. Starting my career, I hadn't considered research at all, but by paying attention in the lab, attending events, talking to professors, and following my curiosity, I ended up in a role that has shaped my

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future. My advice is to take every chance that comes your way, even if it feels uncertain. University is a once in a lifetime experience, so take every opportunity that comes. Enjoy it completely, don't have any regrets. If you love it, you love it and if you don't, well now you know! It's always worth having the experience.

