

Senior Formulation Scientist – Biostimulants and Biologicals

Location: *Ryley, Alberta, Canada*

Job Type: *Full-Time*

Compensation: *Competitive and based on experience*

Lead Product Development in Agricultural Biostimulants

Black Earth develops advanced soil and crop input technologies built from the world's highest quality Humalite deposit in Alberta, Canada. This unique resource produces highly active humic substances with exceptional purity and consistency. Our technologies improve nutrient efficiency, root development, microbial activity, and crop performance under real field conditions.

We are expanding our research and development capability to accelerate the next generation of humic, biological, and biostimulant products.

We are seeking an experienced formulation scientist with deep expertise in agricultural inputs to lead formulation and product development work from our Ryley, Alberta laboratory.

This role focuses on building commercially viable technologies that perform in modern farming systems.

Role Overview

This role focuses on practical formulation development for biostimulant and biological crop inputs. The successful candidate will develop new formulations, improve existing products, and evaluate performance through controlled plant studies.

Key Responsibilities

Formulation and Product Development

- Develop liquid, soluble, and granular formulations incorporating humic substances, biological organisms, nutrients, and plant-active compounds
- Optimize product stability, solubility, and compatibility across fertilizer and crop input systems
- Improve existing formulations to increase biological activity, compatibility, and shelf stability

Compatibility and Stability Testing

- Evaluate tank mix compatibility with fertilizers, crop protection products, and other agricultural inputs
- Conduct precipitation, pH tolerance, and stability testing across multiple fertilizer systems
- Develop formulations suitable for fertigation, foliar, and in-furrow applications

Greenhouse and Grow-Out Studies

- Design and conduct greenhouse studies to evaluate plant response to formulation changes
- Run grow-out trials comparing internal formulations with competitive products in the market
- Evaluate root development, nutrient uptake, stress response, and plant growth metrics

Manufacturing and Scale-Up

- Translate laboratory formulations into scalable manufacturing processes
- Develop production specifications and quality control parameters
- Work with production teams to ensure consistent formulation and manufacturability

Qualifications

- Background in chemistry, chemical engineering, agricultural chemistry, soil chemistry, biochemistry, or related disciplines
- Experience formulating agricultural inputs such as biostimulants, biologicals, fertilizers, or adjuvants
- Experience with liquid suspensions, soluble powders, and granular formulations
- Experience designing greenhouse or plant response studies
- Experience scaling formulations from laboratory to commercial manufacturing

How to Apply

Please submit your resume or CV along with a cover letter outlining relevant formulation experience to cwilliams@westmetgroup.com