



A Comprehensive Course on Slurry Pipeline Systems

May 16-19, 2023

Innovation Place, Saskatoon, SK, Canada

Overview

Slurry pipeline transportation is a field that is not adequately covered in undergraduate engineering courses. Consequently, engineers are generally ill-equipped when faced with the task of designing a slurry transportation system or troubleshooting an existing installation.

The Saskatchewan Research Council (SRC) and Paterson and Cooke (P&C) have joined forces to offer a comprehensive course in slurry pipeline design and operation. SRC has conducted hundreds of slurry pipeline R&D programs and developed a primarily mechanistic model describing the pipeline flow of settling slurries. P&C is an internationally recognized firm that has designed numerous slurry handling installations throughout the world.

The course focuses on applying the basic principles of slurry pipeline flows to actual design situations. This course will provide an excellent opportunity for people involved in slurry transportation to meet in an informal environment, to share experiences and to foster a uniform technical language and approach for slurry flow analysis.

The course will run from 8 a.m. on May 16 to 12 p.m. on May 19. A casual reception will be held on the evening of May 16 (location TBD).

To Register:

Complete the online registration form at

<https://src.nu/slurrycourseform>

by **April 30, 2023**.

Contact shannon.klatt@src.sk.ca to arrange alternative payment

Registration Fee - \$3,300 + applicable taxes

Who should attend:

All professionals involved in solids handling in the mining, chemical, industrial and engineering fields, who have not previously taken the Slurry Pipeline Systems Course. Previous courses have been attended by: process engineers, equipment reliability and maintenance engineers, mining engineers, metallurgists, consulting engineers and equipment suppliers.



Course objectives:

Participants will learn about the principles governing the pipe flow of slurries and will be able to apply appropriate scale-up methods for the design of fine-particle (homogeneous) and coarse-particle (settling) slurry pipelines. This course is designed to offer a comprehensive overview of the key considerations for, and unique challenges encountered in the design, implementation and operation of slurry pipeline systems.

Course content:

- Rheology: Newtonian and non-Newtonian slurries
- Friction losses for fine-particle (homogeneous) slurries
- Friction losses for coarse-particle (settling) slurries
- Minimum operating velocities
- Use of the SRC Pipe Flow Model for slurry flow calculations
- Slurry pump performance and selection criteria
- Hydraulic design of slurry systems
- Class examples to illustrate key concepts
- Laboratory measurements and data analysis (conducted at SRC's Pipe Flow Technology Centre™)

You Will Need To Bring:

- A calculator is required for the design sessions.
- A laptop computer is required to run the SRC Pipe Flow Model software.
- PPE is required for visiting SRC's facility.

Instructors:

Dr. Robert Cooke

Paterson & Cooke • Golden, CO, USA

Dr. Sean Sanders

University of Alberta • Edmonton, AB

Dr. Ryan Spelay

SRC Pipe Flow Technology Centre™ • Saskatoon, SK

Joshua Stowe

Paterson & Cooke • Golden, CO, USA

Dr. Reza Hashemi

SRC Pipe Flow Technology Centre™ • Saskatoon, SK

Course registration fee includes:

- Pipe Flow Model software to assist with the design calculations
- Comprehensive course notes
- Copies of the course presentation material
- Hands-on laboratory data collection and analysis, conducted at SRC's Pipe Flow Technology Centre™
- Lunch and coffee/tea breaks
- Casual reception



Accommodation:

Although there is no preferred hotel, conveniently located hotels include:

- Delta Bessborough Hotel
- Sheraton Cavalier Hotel
- Delta Hotels by Marriott
- Parktown Hotel
- Holiday Inn Express & Suites Saskatoon East (University Hotel)

Early bookings are recommended.