

CE 990 Graduate Research Seminar
Civil, Geological, and Environmental Engineering
University of Saskatchewan

Fridays 12:25 pm to 1:35 pm
January 29 to March 26, 2021

Join from the meeting link

<https://usask.webex.com/usask/j.php?MTID=m2f05e6c6bea0c79adff5d1eb8951bad0>

Join by meeting number

Meeting number (access code): 145 794 9446

Meeting password: 6rsG2ecfYG6

Presentations will be made by 31 graduate students

This event is an excellent opportunity to learn about research in Civil,
Geological, and Environmental Engineering

All are welcome!

Program Schedule

Session 1: Friday January 29 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P1	Bryce Marcotte – Evaluation of factors affecting geomembrane strain caused by tire derived aggregate and gravel in landfill barrier applications. Program: Ph.D., Supervisor: Ian Fleming
12:43 pm	P2	Logan Morhart – Designing a Geothermal Heat Extraction Well for Low Grade Geothermal Energy from Landfilled Waste. Program: M.Sc., Supervisor: Ian Fleming
1:00 pm	P3	Michael Andre – Unsaturated Characteristics of a Geotextile used for Soil Drainage. Program: M.Sc., Supervisor: Ian Fleming
1:17 pm	P4	Benjamin Fox – Modelling Geogrid Stabilized Composite Layers from a Large-Scale Plate Load Test Using Finite Element Analysis. Program: M.Sc., Supervisors: Ian Fleming

Session 2: Friday February 5 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P5	Pouya Sabokruhie – Time development of scour in clayey soils by submerged vertical circular turbulent impinging jets. Program: M.Sc., Supervisor: Kerry Mazurek
12:43 pm	P6	Mohammad Hasan – Framework for Evaluating Stability of Human Body in the Flow Below a Weir. Program: M.Sc., Supervisor: Kerry Mazurek
1:00 pm	P7	Ajay Muthukumar – Modifying the Secondary Flow Pattern to Improve Retention Times in a Vortex-Type Stormwater Retention Pond. Program: M.Sc., Supervisor: Kerry Mazurek
1:17 pm	P8	Jacob Wilson – Mitigating the Drowning Hazard below Weirs using Submerged Vanes. Program: M.Sc., Supervisors: Kerry Mazurek

Session 3: Friday February 12 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P9	Timothy Vogel – Community Determined Costs and Values for Water Systems in First Nations. Program: Ph.D., Supervisors: Kerry McPhedran, Kerry Black
12:43 pm	P10	Daniel Hamilton – Analyzing the Impact of Particle Size in Mineral Processing with Regards to Froth Flotation. Program: Ph.D., Supervisors: Kerry McPhedran, Wonjae Chang
1:00 pm	P11	Tanya Labelle – Community Centered Design in Indigenous Communities of Saskatchewan. Program: Ph.D., Supervisors: Kerry McPhedran, Terry Fonstad
1:17 pm	P12	Stephanie Lipoth – Dual Desalination System in a Novel Treatment Method for Hydrocarbon and Salt Impacted Sites. Program: M.Sc., Supervisor: Wonjae Chang

Session 4: Friday February 26 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P13	Lijie Guo – Responses of Hydrology to Agricultural Land-Use and Climate Change in Semi-Arid Cold Region. Program: Ph.D., Supervisor: Warren Helgason
12:43 pm	P14	Anders (Nolan) Hunter – Adapting a High Spatial Resolution Evapotranspiration Model for Field Crops. Program: M.Sc., Supervisor: Warren Helgason
1:00 pm	P15	David Cook – A Survey of Environmental Regulations for Feedlot Development on the Prairies. Program: Ph.D., Supervisor: Terry Fonstad
1:17 pm	P16	Eliza Meldrum – Soil Hydraulic Properties and Implications at the LFCE Research Centre. Program: M.Sc., Supervisor: Terry Fonstad

Session 5: Friday March 5 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P17	Nitesh Chhetri – Impact of Net Web Area of Concrete Masonry Units on Prism Compressive Strength. Program: M.Sc., Supervisor: Lisa Feldman
12:43 pm	P18	Tinh Hin (Gordon) Chui – Evaluation of Masonry Assembly Strength in accordance with CSA S304 and ASTM C1314 Requirements. Program: M.Sc., Supervisor: Lisa Feldman
1:00 pm	P19	Thomas Vachon – Influence of Compressive Stress Orientation on the Flexural Compressive Strength of Concrete Block Masonry. Program: M.Sc., Supervisor: Lisa Feldman
1:17 pm	P20	Jawdat Alfarrar – Mechanical Behaviour of Masonry Assemblages Built with Mortar Containing Anti-Freeze Admixtures Subject to Sub-Freezing Curing Temperatures. Program: M.Sc., Supervisors: Moh Boulfiza, Leon Wegner

Session 6: Friday March 12 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P21	Mohanad Zaghoul – Generation Mechanisms of Prairie Spring-Floods. Program: Ph.D., Supervisors: Amin Elshorbagy, Simon Papalexou
12:43 pm	P22	Behdad Saed – Water-Food-Energy nexus in the Canadian Prairies. Program: Ph.D., Supervisors: Amin Elshorbagy, Saman Razavi
1:00 pm	P23	Rohan Gaddam – Analysis of Temperature extremes in Canadian Cities using CMIP6 Data. Program: M.Sc., Supervisors: Simon Papalexou, Jian Peng
1:17 pm	P24	Salma Hobbi – Discrepancies in Köppen-Geiger climate classification maps in observations. Program: M.Sc., Supervisor: Simon Papalexou
1:34 pm	P25	Mennatullah El Rashidy – Simulating wetland-upland hydrological interactions in the Canadian boreal region. Program: Ph.D., Supervisors: Andrew Ireson, Saman Razavi

Session 7: Friday March 19 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P26	Kelvin Sattler – Novel techniques to monitor changes in near-surface water content for a slow-moving retrogressive landslide in British Columbia, Canada. Program: Ph.D., Supervisors: David Elwood, Michael Hendry
12:43 pm	P27	Minh Nguyen – A Method to Estimate Grain-size Distribution from Soil-water Characteristic Curve. Program: M.Sc., Supervisor: David Elwood
1:00 pm	P28	Blake Woroniuk – Groundwater Flow in the Intermediate Zone. Program: M.Sc., Supervisor: Grant Ferguson
1:17 pm	P29	Joel Steeves – Mine Waste Management in Cold Regions. Program: Ph.D., Supervisor: Grant Ferguson

Session 8: Friday March 26 – 12:25 pm to 1:35 pm

Time	Presentation No.	Presenter, Title, Program, Supervisor(s)
12:26 pm	P30	Mai Alawneh – Investigating the Microstructure of Asphalt Mixture after Freeze-Thaw Cycling Using Imaging Techniques and Mechanical testing. Program: Ph.D., Supervisor: Haithem Soliman
12:43 pm	P31	Saeid Tayebikhorami – Road Safety Analysis Using Machine Learning Algorithms. Program: M.Sc., Supervisor: Emanuele Sacchi