

# **Technical Excellence Update**

# 2017 Calendar Year

## (sorted alphabetically by publication author)

I am pleased to present the *Technical Excellence Update* for the 2017 calendar year, which showcases the public domain publications and presentations available through SRC. This version is sorted alphabetically by the publication author.

SRC continues to be an innovative research and development organization with a focus on the mining and minerals and energy sectors and the environmental considerations that are important across both. Our employees have a wide range of experience and scientific expertise, enabling SRC to meet unique and varied client needs. SRC technical specialties include, but are not limited to:

### **Natural Sciences**

biology, chemistry, computing science, geology, math, physics, etc.

**Engineering** chemical, civil, industrial, mechanical, metallurgical, petroleum, etc.

#### **Management Sciences**

business administration, business disruption/resumption management, commerce, facilities management, information technology, marketing and communications, law, risk management, safety, etc.

Visit our website at www.src.sk.ca for additional calendar year updates.

Laurier Schramm President and CEO July 2018



Anweiler, D., (2017), *Testing and Validation of New Partial Upgrading Technologies*, Presentation, New Technology for In Situ Oil Sands Facilities Conference, Calgary, AB

Baird, F., (2017), Laboratory Innovation - New Experimental Methods and Systems, Presentation, Global Petroleum Show, Calgary, AB

Bonsal, B., C. Cuell, E. Wheaton, D. Sauchyn and E. Barrow, (2017), An Assessment of Historical and Projected Future Hydro-climatic Variability and Extremes over Southern Watersheds in the Canadian Prairies, Journal Article, International Journal of Climatology, DOI: 10.1002/joc.4967

Crabtree, M., (2017), C-DER, Presentation, Global Petroleum Show, Calgary, AB

Crabtree, M., (2017), Post CHOPS Well Centre, Presentation, Global Petroleum Show, Calgary, AB

Crabtree, M. and P. Nakutnyy, (2017), Heavy Oil in Canada - Laboratory Evaluation and Canadian Experience, Presentation, Ecopetrol Workshop, Villavicencio, Columbia

Danoczi, J., (2017), 3-Curve Densimetric Analysis, Presentation, Canadian Mineral Processors Conference, Saskatoon, SK

Danoczi, J., (2017), A 3-Curve Densimetric Analysis, Presentation, Canadian Institute of Mining, Metallurgy and Petroleum Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Danoczi, J., (2017), Densimetric Analyses of Processing Plants as Part of Plant Auditing, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Danoczi, J., (2017), *Environmental Information for Processing*, Presentation, Canadian Institute of Mining, Metallurgy and Petroleum Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Danoczi, J. and M. McCubbing, (2017), Applied Diamond Services for Improved Diamond Recovery, Magazine Article, North of 60 Magazine

Danoczi, J. and M. McCubbing, (2017), *Densimetric Analysis in Mineral Processing*, Presentation, Canadian Institute of Mining, Metallurgy and Petroleum; Maintenance, Engineering and Reliability Society of Canadian Institute of Mining Webinar

Derbowka, A., (2017), Four Reasons to Start an Employee Volunteer Program, SRC Internet Blog, "From the Lab to the Loading Dock"

Downing, A., (2017), <u>How Mentorships can be Mutually Beneficial for Industry and Academia</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Dunn, S. and V. Wittrock, (2017), Climate Reference Station, Conservation Learning Center, RM of Prince Albert #461, Annual Summary 2016, Research Report, Saskatchewan Research Council, Saskatoon, SK, SRC Publication: 13000-1E17

Edwards, C.R., (2017), *Costs of Processing*, Invited Presentation, Fourth Year Students, University of Alberta, Department of Civil and Environmental Engineering and the School of Mining and Petroleum Engineering, Edmonton, AB

Edwards, C.R., (2017), *Good PowerPoint Presentations*, Invited Presentation, Fourth Year Students, University of Saskatchewan, Department of Chemical and Biological Engineering, Saskatoon, SK

Emery, E., (2017), *Technologies for the Mitigation of Low Volume Methane Emissions*, Presentation, Advancing the Low Carbon Economy Through Innovation and R&D – Canadian GHG Emission Reductions Forum, Calgary, AB

Fisher, N. (2017), <u>Environmental Data Management System for Site Remediation</u> and <u>en español</u>, Video (English and Spanish versions), SRC's YouTube Channel

Freitag, N.P. and A.E. Dolter, (2017), <u>Simple Calculation of the Effect of Volatile Solvents and Dissolved Gases on the Viscosity of Heavy Oils and</u> <u>Bitumens</u>, Conference Paper/Presentation, Society of Petroleum Engineers Canada Heavy Oil Technical Conference, Calgary, AB, SPE-185003-MS

Ganeshan S. and R.N. Chibbar, (2017), <u>A Simple Novel Expedited Spike Culture-derived Variation Creation Strategy in Wheat</u>, Journal Article, Cereal Research Communications

Ganeshan, S., (2017), Sustainable Bioleaching and Bioprecipitation as Complementary Strategies for Uranium Mining, Presentation, Canadian Institute of Mining, Metallurgy and Petroleum Conference, Montreal, QC

Gervais, M., (2017), SRC's Real-World Science, At Home Campaign, Interview, Global TV Saskatoon and CTV Saskatoon Morning Shows

Glatt, R., (2017), <u>Case Study: Complex Remediation Work Starts with Project Management</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Gotto, R, (2017), *SRC's Aboriginal Mentorship Program (AMP)*, Presentation, University of Regina, Aboriginal Students Centre, Regina, SK; University of Saskatchewan, Aboriginal Students Centre, Saskatoon, SK; University of Saskatchewan, College of Engineering, Saskatoon, SK

Gotto, R., (2017), <u>8 Key Elements of a Successful Mentoring Program</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Gotto, R., (2017), Saskatchewan - The Next Big Producer of Rare Earth Elements?, SRC Internet Blog, "From the Lab to the Loading Dock"

Gotto, R., (2017), Why is Water Quality Testing Important?, SRC Internet Blog, "From the Lab to the Loading Dock"

Hill, S., (2017), Support for Maintenance and Reliability Through Engineered Equipment Upgrades, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Hill, S., (2017), *The Role of Engineering in Maintenance, Engineering, and Reliability Initiatives,* Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Imran, M., (2017), SRC Heavy Oil EOR - Laboratory Methods for Thermal and Chemical Process Evaluation, Presentation, Global Petroleum Show, Calgary, AB

Ingerman, C., (2017), Building a Human Firewall to Protect Your Business, SRC Internet Blog, "From the Lab to the Loading Dock"

Jackson, A., (2017), Safety Tips for Winter Travelling in Saskatchewan, SRC Internet Blog, "From the Lab to the Loading Dock",

Jansen, R., (2017), <u>7 Ways to Reduce Your Energy in 2017</u>, SRC Internet Blog/Interview, "From the Lab to the Loading Dock"; CFQC CTV Saskatoon, Saskatoon, SK

Jansen, R., (2017), *Environmental Monitoring*, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Jansen, R., (2017), Integrating Renewable Energy in Canada's Prairie Provinces: A Saskatchewan Perspective, Presentation, Renewable Energy Integration Trade Mission to Canada, Calgary, AB

Jansen, R., (2017), *Renewable Generation in Mining*, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Johnston, M., (2017), Climate Change Adaptation and Land Management, Presentation, Canadian Oil Sands Innovation Alliance Innovation Summit, Calgary, AB

Johnston, M., (2017), *Estimating Carbon Stocks in Boreal Wetlands*, Interview, by Centrix Productions on behalf of Ducks Unlimited, Swan River, MB

Johnston, M., (2017), *Forest Carbon Management*, Invited Moderator, Forest Carbon Science Forum organized by the Ontario Ministry of Natural Resources and Forestry, Toronto, ON

Johnston, M., (2017), *Implications of Climate Change for SFM in the Western Boreal*, Presentation, Mountain Pine Beetle Science Forum, Edmonton, AB

Johnston, M., (2017), Integrating Climate Change Adaptation into Forest Management in the Canadian Forest Sector: The State of Play, Presentation, 11<sup>th</sup> North American Forest Ecology Workshop, Edmonton, AB; Canadian Institute of Forestry Annual Conference and Annual General Meeting, Ottawa, ON

Johnston, M., (2017), SFI Conservation Projects: Focus on Forest Carbon, Presentation, Programme for the Endorsement of Forest Certification, London UK

Johnston, M., (2017), SRC's Work in Carbon Sequestration, Presentation, Programme for the Endorsement of Forest Certification, London, UK

Johnston, M., (2017), Wetlands and Carbon - Filling the Knowledge Gap, SRC Internet Blog, "From the Lab to the Loading Dock"

Johnston, M., (2017), Why We Need to Learn More About How Wetlands Store Carbon, SRC Internet Blog, "From the Lab to the Loading Dock"

Johnston, S., (2017), <u>5 Ways to Add a Dash of Science to Your Holiday Season</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Johnston, S., (2017), <u>Things We Wish We Knew About Careers and Work When We Were in Grade 9</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Johnston, S., (2017), <u>Uncovering Saskatchewan's History: Finding and Protecting Artifacts</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Jonasson, R., (2017), Chemical Analysis of Bitumen: A Brief Introduction, Lecture, University of Regina, Regina, SK

Klyashtorin, A., D. Sanscartier, M. Calette, C. Reid, S. Ketilson and I. Wilson, (2017), *The Legacy of the Cold War - Cleaning Up Abandoned Uranium Mine Sites in North Saskatchewan*, Presentation, Canadian Radiation Protection Association Annual Conference, Saskatoon, SK

Knorr, K.D., (2017), Field Testing EOR Processes - A Post-Chops Well Test Centre Approach, Invited Presentation, Society of Petroleum Engineers Canada Heavy Oil Technical Conference, Calgary, AB

Knorr, K.D., (2017), *Gaps and Challenges for Light and Tight EOR*, Presentation, Petroleum Technology Alliance Canada Workshop: Light and Tight Oil Innovation, Calgary AB; Williston Basin Conference, Regina, SK; Global Petroleum Show, Calgary, AB

Knorr, K.D., (2017), Partial Upgrading Research Past and Current, Presentation, Global Petroleum Show, Calgary, AB

Knorr, K.D., (2017), Paying Up for Field Tests to Speed Up EOR Innovation, Interview, JPT Emerging Technology Online

Knorr, K.D. and P. Nakutnyy, (2017), SRC - General Overview, Presentation, New Mexico Institute of Mining and Technology, Socorro, New Mexico; University of Texas, Austin, TX

Knorr, K.D., M. Imran, D. Bogatkov and R. Jonasson, (2017), *Enhanced Heavy Oil Recovery Technologies*, Presentation, Kuwait Oil Company and Kuwait Institute for Scientific Research Workshop, Kuwait

Knorr, K.D., P. Nakutnyy and P. Luo, (2017), *Navigating the Future of Unconventional Resources*, Internet Blog, Energy Now

Kong, D. and L.D. Wilson, (2017), Synthesis and Characterization of Cellulose-Goethite Composites and their Adsorption Properties with Roxarsone, Journal Article, Carbohydrate Polymers, Volume 169, p. 282-294

Luo, P. and S. Li, (2017), CO2 Flooding of Tight Oil Reservoirs, Presentation, 38<sup>th</sup> International Energy Agency Enhanced Oil Recovery Workshop & Symposium, Quintana Roo, Mexico

Luo, P. and S. Li, (2017), Simultaneous Capillary Pressure and Wettability Determination for Tight Bakken Cores Using an Ultra-High-Speed Centrifuge, Presentation, Society of Petroleum Engineers Canada Unconventional Resources Conference, Calgary, AB, SPE-185067-MS

Mann, B., (2017), How Industry is Working Together to Protect Midge-Tolerant Wheat, SRC Internet Blog, "From the Lab to the Loading Dock"

McGilp, L., (2017), *Building Tomorrow's Miners Together*, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

McGilp, L., (2017), Pipeline Transport, Presentation, Global Petroleum Show, Calgary, AB

McKibben, M., (2017), Pipe Flow Technology Centre<sup>TM</sup>, Presentation, 20<sup>th</sup> International Conference on Hydrotransport, Melbourne, Australia

McKibben, M., (2017), *Pipelines as Process Vessels*, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Muldoon, J. and J. Tsannie, (2017), Successes and Challenges: Aboriginal and Northern Engagement in Environmental Remediation Projects, Public Lecture, University of Regina, Regina, SK; University of Saskatchewan, Saskatcon, SK via video-conference

Nakutnyy, P., (2017), *Innovative Laboratory Technologies for Tight Oil Formations*, Presentation, Global Petroleum Show, NextShale, Calgary, AB

Nakutnyy, P., (2017), *New Tools and Approaches for Light and Tight EOR*, Presentation, Petroleum Technology Alliance Canada Workshop: Light and Tight Oil Innovation, Calgary AB; Williston Basin Conference, Regina, SK; Global Petroleum Show, Calgary, AB

Nakutnyy, P., (2017), SRC Chemical EOR Evaluation Overview, Presentation, Cairn India Limited, New Delhi, India

Nakutnyy, P., (2017), SRC Enhanced Waterflood - Chemical Screening, Selection and Evaluation, Presentation, Global Petroleum Show, Calgary, AB

Nakutnyy, P., (2017), Surfactant Flooding of Heavy Oil, Presentation, 38<sup>th</sup> International Energy Agency Enhanced Oil Recovery Workshop & Symposium, Quintana Roo, Mexico

Nakutnyy, P., (2017), Waterflooding and Chemical EOR - Laboratory Evaluation and Canadian Experience, Presentation, Ecopetrol Workshop, Villavicencio, Columbia

Nelitz, M., P. de la Cueva, C. Cranmer, V. Wittrock and E. Wheaton, (2017), *Flood and Drought Management in the Context of Uncertainty and Climate Change: A Research Summary*, Research Report, Canadian Council of Ministers of the Environment; ESSA Technologies Ltd, Vancouver, BC, 202 pp.

Ogilvie-Evans, P., (2017), <u>Underground Models Reveal What's Beneath the Surface of Abandoned Mine Sites</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Ogilvie-Evans, P. and R. McCullum, (2017), *Risk Based Assessments of Physical Mine Hazards at Abandoned Mines*, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Parker, D., (2017), Lifecycle Greenhouse Gas Emissions from Uranium Mining and Milling in Saskatchewan, Presentation, Canadian Nuclear Safety Commission Public Hearing, La Ronge, SK

Paslawski, J., J. Perras, D. Sanscartier and M. Kilcup, (2017), <u>Challenges in the Environmental Assessment and Development of Risk-Based</u> <u>Corrective Actions Associated with an Abandoned Uranium Satellite Site</u>, Presentation, Remediation Technologies Symposium, Banff, AB

Paynter, P., (2017), SRC Energy Services Overview, Presentation, Global Petroleum Show, Calgary, AB

Paynter, P., (2017), SRC Overview - ADIPEC Executive Dialogues; the Middle Eastern Heavy Oil Opportunity, Presentation, Calgary, AB; Abu Dhabi International Petroleum Exhibition and Conference, Abu Dhabi, UAE

Paynter, P. and D. Anweiler, (2017), SRC Update to Canadian Heavy Oil Association (CeDER, Post-CHOPS, Partial Upgrading), Presentation, Canadian Heavy Oil Association, Calgary, AB

Petelina, E. and A. Sizo, (2017), *Environmental Data Management System (EDMS) for Site Remediation: CLEANS and AUCM Case Studies*, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Petelina, E. and A. Sizo, (2017), Environmental Data Management System (EDMS) for Site Remediation: Project CLEANS, Invited Presentation, ESRI Canada User Conference, Regina, SK

Peter, N., (2017), *Embedding Advanced Technology for Mining*, Presentation, Canadian Institute of Mining, Metallurgy and Petroleum Conference, Montreal, QC

Peter, N., (2017), Novel Pipeline Communications, Presentation, Society for Mining, Metallurgy & Exploration Conference, Denver, CO

Poudel, S., S. Kulshreshtha and E. Wheaton, (2017), *The Economic Impacts of Climate Change and Climatic Extremes on the Mixed Farms of the Canadian Prairie*, Journal Article, International Journal of Climate Change: Impacts and Responses 9(4). DOI: 10.18848/1835-7156/CGP/v09i04/35-52

Schramm, L.L., (2017), History of SRC: The Early Years (1947-72), SRC Internet Blog, "From the Lab to the Loading Dock"

Schramm, L.L., (2017), *Innovation Technology - A Dictionary*, Book, Multiple Editions, de Gruyter, Berlin, Germany ISBN 978-3-11042917-6 (1) (3)

Schramm, L.L., (2017), Introduction to Research, Development, and Innovation, Presentation, Canada School of Innovation, Module 1, Innoventures Canada Inc., Toronto, ON

Schramm, L.L., (2017), SRC's Maturing and Commercial Years: 1972-2000, SRC Internet Blog, "From the Lab to the Loading Dock"

Schramm, L.L., (2017), SRC's New Millennium Years: 2001-2017, SRC Internet Blog, "From the Lab to the Loading Dock"

Schramm, L.L., (2017), The Impacts of SRC's Work: 1947-2017, SRC Internet Blog, "From the Lab to the Loading Dock"

Schreiner, B., (2017), *Heavy Rare Earth Recovery from Uranium Processing Wastes*, Invited Presentation, Saskatchewan Mining Association Exploration Section, Saskatoon, SK

Spelay, R.B., (2017), Advancements in Slurry Pipeline Flow Predictions with the SRC PipeFlow Models, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Spelay, R.B., (2017), *Classification of Slurry Flows: What Does it all Mean*, Presentation, 20<sup>th</sup> International Conference on Hydrotransport, Melbourne, Australia

Spelay, R.B., R.G. Gillies, S.A. Hashemi and R.S. Sanders, (2017), *Kinematic Friction of Concentrated Suspensions of Neutrally Buoyant Coarse Particles*, Presentation, Proceedings, 20<sup>th</sup> International Conference on Hydrotransport, Melbourne, Australia

Spelay, R.B., S.A. Hashemi, M.H. Rahman, A.E. Olayode and R.S. Sanders, (2017), *Effect of Coarse Solids Concentration on the Yield Stress of Non-Newtonian Kaolin Clay Slurries*, Presentation/Proceedings, 20<sup>th</sup> International Conference on Hydrotransport, Melbourne, Australia

Sun, R., (2017), The Impacts of Active Clay on Mineral Slurry Properties and Implications for Mining Processes, Presentation, Canadian Institute of Mining, Metallurgy, and Petroleum - Maintenance, Engineering and Reliability/Mine Operators' Conference, Saskatoon, SK

Taman Athmer, E., (2017), Hot Summer, Cool Science: Become and Honourary Scientist, SRC Internet Blog, "From the Lab to the Loading Dock"

Thiessen, E., (2017), "Cheek Out" Your DNA!, Video, SRC's YouTube Channel

Thiessen, E., (2017), <u>70 Years of SRC</u>, Video, SRC's YouTube Channel

Thiessen, E., (2017), *Become an Honourary Scientist with SRC!*, Video, SRC's YouTube Channel

Thiessen, E., (2017), *Build a Game Day Catapult*, Video, SRC's YouTube Channel

Thiessen, E., (2017), <u>Grow an "Egg-Cellent" Crystal Geode!</u>, Video, SRC's YouTube Channel

Thiessen, E., (2017), Ice Road Builder: A Project CLEANS Story, Video, SRC's YouTube Channel

Thiessen, E., (2017), SRC's Mining Services: Extraction and Processing, Video, SRC's YouTube Channel

Thiessen, E., (2017), SRC's Mining Services: Geoscience & Exploration, Video, SRC's YouTube Channel

Thiessen, E., (2017), SRC's Mining Services: Tailings & Water Management, Video, SRC's YouTube Channel

Tracey, C., (2017), *How Mentorship Provided the Next Level of Learning for an Engineering Student*, SRC Internet Blog, "From the Lab to the Loading Dock"

Wheaton, E., (2017), Changing Climates, Parts I and II, Interview, CFCR- 90.5FM; University of Saskatchewan, Saskatoon, SK

Wheaton, E., (2017), Climate Change and Saskatchewan, Invited Presentation, Climate Reality and Al Gore Event, University of Saskatchewan, Saskatoon, SK, 24 slides

Wheaton, E., (2017), Common Ground: Changing Climate Risks in the Canadian Prairies, Invited Presentation, Finding Common Ground Tour, Battle River Watershed Alliance, Hardisty, AB; University of Saskatchewan, Saskatoon, SK, 30 slides

Wheaton, E., (2017), *Riskier Climate Times in the Canadian Prairies*, Invited Presentation, Saskatoon Nature Society, University of Saskatchewan, Saskatoon, SK, 35 slides

Wheaton, E. and S. Kulshreshtha, (2017), <u>Environmental Sustainability of Agriculture Stressed by Changing Extremes of Drought and Excess</u> <u>Moisture: A Conceptual Review</u>, Journal Article, Environmental Sustainability of Agriculture Stressed by Changing Extremes of Drought and Excess Moisture: A Conceptual Review Sustainability 9, 970, doi:10:3390/su9060970

Wittrock, V., (2017), Saskatchewan Flood and Natural Hazard Risk Assessment, SRC Internet Blog, "From the Lab to the Loading Dock"

Wittrock, V., (2017), Saskatchewan's Climate is Changing, Research Report, Saskatchewan Ministry of Environment, SRC Publication: 14207-2E17 Wittrock, V., (2017), Saskatchewan's Evolving Climate Patterns, Invited Presentation, Federation of Sovereign Indigenous Nations "Adapting to Climate Change Impacts" Workshop, Saskatoon, SK, 24 slides, SRC Publication: 13749-5D17

Wittrock, V. and E. Wheaton, (2017), *Natural Hazards: Droughts,* Presentation, Saskatchewan Flood and Natural Hazard Risk Assessment Stakeholder Workshops in Yorkton, Saskatoon, Prince Albert, La Ronge, Swift Current and Regina, SK, 16 slides, SRC Publication: 13113-2D17

Wittrock, V. and S. Dunn, (2017), *Climate Reference Station, Saskatoon, Annual Summary 2016*, Research Report, Saskatchewan Research Council, Saskatoon, SK, SRC Publication: 10440-1E17

Wittrock, V. and S. Johnston, (2017), <u>Know Your Extreme Summer Weather Hazards in Saskatchewan</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Wittrock, V. and S. Johnston, (2017), <u>Know Your Extreme Winter Weather Hazards in Saskatchewan</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Wittrock, V., D. Corkal, R. Halliday, M. Johnston, I. Stewart and E. Wheaton, (2017), *Saskatchewan Flood and Natural Hazards Risk Assessment: Developing the Methods*, Invited Presentation, Saskatchewan Disaster Mitigation Strategy Working Group, Regina, SK, 22 slides, SRC Publication: 14113-1D17

Wittrock, V., E. Wheaton, R. Halliday and M. Johnston, (2017), *Natural Hazards: What about the Future?*, Presentation, Saskatchewan Flood and Natural Hazard Risk Assessment Stakeholder Workshops in Yorkton, Saskatoon, Prince Albert, La Ronge, Swift Current and Regina, SK, 11 slides, SRC Publication: 13113-3D17

Wittrock, V., E. Wheaton, S. Kulshreshtha and M. Johnston, (2017), *Sustainability Indicators for Agriculture and Forest Management: Implications of Climate Change and Extremes,* Invited Presentation, Prairie Regional Adaptation Collaborative Research Forum: Exploring Future Directions of Adaptation Research on the Prairies, Winnipeg, MB, 19 slides, SRC Publication: 13749-2D17

Woytiuk, K., D. Sanscartier, B.Y. Amichev, W. Campbell and K. Van Rees, (2017), <u>Life-Cycle Assessment of Torrefied Coppice Willow Co-Firing</u> with Lignite Coal in an Existing Pulverized Coal Boiler, Journal Article, Wiley Online Library; DOI:10.1002/bbb.1788

Yuan, Q., F. Zeng, K.D. Knorr and M. Imran, (2017), *Effects of Concentration-Dependent Diffusion on Mass Transfer and Frontal Instability in Solvent-Based Processes*, Presentation, Society of Petroleum Engineers Heavy Oil Conference Canada, SPE-184994-MS, Calgary, AB

Yuan, Q., F. Zeng, K.D. Knorr and M. Imran, (2017), *Reduction of Interfacial Instabilities in Miscible Displacements in Porous Media*, Presentation, InterPore 10<sup>th</sup> Annual Meeting & Jubilee, New Orleans, LA

Yuan, Q., F. Zeng, K.D. Knorr and M. Imran, (2017), Suppressing Frontal Instabilities and Stabilizing Miscible Displacements with Time-Dependent Rates at Nearly Zero Additional Costs, Presentation, Society of Petroleum Engineers Improved Oil Recovery Conference, Tulsa, OK, SPE-190320-MS

Yuan, Q., J. Wang, Y. Shanshan, F. Zeng, K.D. Knorr and M. Imran, (2017), <u>Highly Accurate Simulation of Frontal Instability at Extremely Large</u> <u>Mobility Ratio in Solvent-Based Oil Recovery</u>, Presentation, Society of Petroleum Engineers Reservoir Characterisation and Simulation Conference and Exhibition, Abu Dhabi, UAE, SPE-186083-MS

Yuan, Q., J. Zhan, J. Wang, F. Zeng, K.D. Knorr and M. Imran, (2017), An Optimal Injection Scheme for Maximizing Oil Recovery in CO2 Miscible Flooding, Presentation, Carbon Management Technology Conference, Houston, TX, CMTC-486447

Yuan, Q., S. Yao, X. Zhou, F. Zeng, K.D. Knorr and M. Imran, (2017), *Miscible Displacements with Concentration-Dependent Diffusion and Velocity-Induced Dispersion in Porous Media*, Journal Article, Journal of Petroleum Science and Engineering, Vol. 159, p. 344-359

Yuan, Q., X. Zhou, F. Zeng, K.D. Knorr and M. Imran, (2017), *Investigation of Concentration-Dependent Diffusion on Frontal Instabilities and* Mass Transfer in Homogeneous Porous Media, Journal Article, Canadian Journal of Chemical Engineering, Vol. 96, p. 323-338

Yuan. Q., X. Zhou, F. Zeng, K.D. Knorr and M. Imran, (2017), Nonlinear Numerical Simulations of Miscible Displacements with Concentration-Dependent Diffusion in Porous Media, Journal Article, Chemical Engineering Science, Vol. 172, No. 23, p. 528-544

Zhao, B. and J. Zhang, (2017), Design, Commissioning and Operation of a Rare Earth Separation Pilot Plant, Presentation/ Proceedings, 49<sup>th</sup> Annual Canadian Mineral Processors Conference, Ottawa, ON

Zimmer, J., (2017), <u>The Little Lungs Project: Testing Saskatchewan Homes for Radon</u>, SRC Internet Blog, "From the Lab to the Loading Dock" Zimmer, J., (2017), Water Quality and Water Testing, Interview, CTV News, Global News and CJWW Radio, Saskatoon, SK

Zimmer, J. and J. Smith-Windsor, (2017), *Little Lungs Project - Testing for Radon in Saskatchewan Homes*, Presentation, Canadian Radiation Protection Association Annual Conference, Saskatoon, SK