

# Technical Excellence Update

# 2016 Calendar Year

## (sorted alphabetically by publication author)

I am pleased to present the *Technical Excellence Update* for the 2016 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 2017



Allen, D. and C. Reid, (2016), From Planning to Completion: Remediating the Lorado Uranium Mill Site, SRC Internet Blog/Conference Presentation, "From the Lab to the Loading Dock"; Association of Engineers and Geoscientists of Saskatchewan Annual Meeting and Professional Development Conference, Saskatoon, SK

Allen, D. and C. Reid, (2016), Legacy Uranium Mine Mill Sites Remediation, Conference Presentation, Association of Engineers and Geoscientists of Saskatchewan Annual Meeting and Professional Development Conference, Saskatoon, SK

Allen, D., M. Calette and T. Dwyer, (2016), <u>Implementing Social Sustainability in an Environmental Remediation Project in Northern Saskatchewan</u>, Conference Presentation, Fourth Annual International Conference on Sustainable Remediation (SustRem), Montreal, QC

Banuilis, K., (2016), Why Spore-formers Aren't the Enemy in Biomanufacturing: Containment is Key, SRC Internet Blog, "From the Lab to the Loading Dock"

Bendzsak, M., E. Thiessen and V. Wittrock, (2016), SRC's Saskatoon Climate Reference Station, Virtual Tour, SRC Website

Bogatkov, D., (2016), Thermal Solvents, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB

Bonsal, B., C. Cuell and E. Wheaton, (2016), *Historical and Projected Future Hydro-climatic Variability and Extremes Over the Oldman River and Swift Current Creek Basins*, Technical Report, Prepared for the Vulnerability and Adaptation to Climate Extremes in the Americas (VACEA); Prairie Adaptation Research Collaborative, University of Regina, Regina, SK; Environment Canada, Saskatoon, SK, 9 pp.

Collett, D., (2016), The Future of Agricultural Biologics, Article, Biotechnology Focus, biotechnologyfocus.ca.

Crabtree, M., (2016), C-DER, Conference Presentation, Global Petroleum Show (GPS), Calgary, AB; World Heavy Oil Congress (WHOC), Calgary, AB

Crabtree, M., (2016), Energy Division Overview, Interview, Oil and Gas Product News

Crabtree, M., (2016), Miscible and Immiscible Gas Flooding in Mature Oil Fields, Conference Presentation, Mature Fields Congress, Mexico City, Mexico

Crabtree, M., (2016), Post-CHOPS Well Centre, Conference Presentation, Global Petroleum Show (GPS), Calgary, AB; World Heavy Oil Congress (WHOC), Calgary, AB

Crabtree, M., (2016), Recovering Saskatchewan's Long-Lost Heavy Oil, SRC Internet Blog, "From the Lab to the Loading Dock"

Crabtree, M., (2016), Surfactant Enhanced Oil Recovery, Conference Presentation, Mature Fields Congress, Mexico City, Mexico

Crabtree, M., (2016), Thermal Recovery Technologies, Conference Presentation, Mature Fields Congress, Mexico City, Mexico

Crabtree, M. and P. Nakutnyy, (2016), *Heavy Oil Waterflooding*, Conference Presentation, Mature Fields Congress, Mexico City, Mexico; Global Petroleum Show (GPS), Calgary, AB

Crabtree, M. and P. Nakutnyy, (2016), *Mastering Light and Tight Oil*, Conference Presentation, Mature Fields Congress, Mexico City, Mexico; Global Petroleum Show (GPS), Calgary, AB

Crabtree, M. and P. Nakutnyy, (2016), *Polymer Enhanced Oil Recovery*, Conference Presentation, Mature Fields Congress, Mexico City, Mexico; Global Petroleum Show (GPS), Calgary, AB

Creighton, S., (2016), Indicator Mineral Recovery Using Dense Medium Separation (DMS), Article, Northern Prospector

Danoczi, J. and L. Hunt, (2016), Diamond Breakage and Grade Prediction, Presentation, 44th Annual Geoscience Forum, Yellowknife, NWT

Danoczi, J. and S. Creighton, (2016), <u>Microdiamond Analysis - A Method for Estimating the Size Frequency Distribution of Macrodiamonds</u>, Journal /Conference Presentation, Southern African Institute of Mining and Metallurgy (SAIMM) Diamond Conference, Botswana, South Africa

Downing, A., (2016), How to Establish a Safety Program that Engages Employees, SRC Internet Blog, "From the Lab to the Loading Dock"

Dunn, S. and V. Wittrock, (2016), *Climate Reference Station, Conservation Learning Center, Annual Summary 2015*, Research Report, Saskatchewan Research Council (SRC), Saskatoon, SK, 36 pp., SRC Publication: 13000-1E16

Emery, E., (2016), Partial Upgrading May Overcome Drawbacks of Heavy Oil Production, Article, Roughneck Magazine, April Edition

Fleisher, C. and R. Hursky, (2016), <u>Empowering Insight: The Role of Collaboration in the Evolution of Intelligence Practice</u>, Journal, South African Journal of Information Management, Volume 18, Number 2, 10 pp.

Fraser, R., (2016), Driving Technology Acceleration, Article, Roughneck Magazine, May Edition

Freitag, N. P., (2016), <u>Chemical-Reaction Mechanisms That Govern Oxidation Rates During In-Situ Combustion and High-Pressure Air Injection</u>, Journal Paper, Society of Petroleum Engineers, SPE Reservoir Evaluation & Engineering, Volume 19, Issue 4, SPE-170162-PA

Freitag, N. P., (2016), Overview of Heavy Oil EOR Technologies, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB

Ganeshan, S., (2016), *In Vitro-cultured Wheat Spikes as a Rapid System for Functional Genomic Analyses,* Invited Presentation, World Congress on In Vitro Biology, San Diego, CA, USA

Ganeshan, S., (2016), Sustainable Bioleaching and Bioprecipitation as Complementary Strategies for Uranium Mining, Presentation, Saskatchewan Environmental Industry and Managers Association (SEIMA) Conference, SustainTech, Saskatoon, SK

Gotto, R., (2016), <u>Eight Reasons Why Experimental Learning is Important in Business</u>, SRC Internet Blog/Online Newsletter, "From the Lab to the Loading Dock"; <u>The Learning Partnership, Spark, Issue 5</u>

Grismer, K., (2016), UAVs for H₂S Detection and Mapping, Conference Presentation, Global Petroleum Show (GPS), Calgary, AB

Imran, M., (2016), Current and Future Challenges of Heavy Oil Recovery, Conference Presentation, Global Petroleum Show (GPS), Calgary, AB; World Heavy Oil Congress (WHOC), Calgary, AB

Imran, M., (2016), *High Temperature (Volatile) Surfactants*, Conference Presentation, Global Petroleum Show (GPS), Calgary, AB; World Heavy Oil Congress (WHOC), Calgary, AB

Imran, M., (2016), In-Situ Reflux: A New In-situ Recovery Process for Oil Sands, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB

Imran, M., (2016), ISR - An Improved In-Situ Recovery Method for Oil Sands, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB

Imran, M. and K.D. Knorr, (2016), Effect of Solvent Injection Rate on SVX Process Performance, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB

Imran, M. and K.D. Knorr, (2016), SVX Process Optimization - Concept of SVX Process Loop, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB

Jansen, R., (2016), Cowessess Wind Turbine and Battery Storage System, Interview, Saskatoon StarPhoenix

Jansen, R., (2016), Field Performance of a Utility Scale Lithium-lon Battery and Wind Turbine, Conference Presentation, National Institute of Wind Energy (NIWE) / Indian Wind Power Association (IWPA) International Workshop - Wind Energy Forecasting, Chennai, India

Jansen, R., (2016), <u>HERC Power System Case Study</u>, Presentation, Saskatchewan Environmental Industry and Managers Association (SEIMA) Conference, SustainTech, Saskatoon, SK

Jansen, R., (2016), HERC Power System for CLEANS Mine Remediation Site, Conference Presentation, First Nations Energy Forum, Saskatoon, SK

Johnston, M., (2016), Adaptation to Climate Change in Saskatchewan Forest Management, Invited Presentation, Saskatchewan Environment's Forestry Bootcamp, Prince Albert, SK

Johnston, M., (2016), Canadian Model Forest Network and SFM projects from Central Canada, Invited Presentation, via Skype, Forest Management Class, Swedish Agricultural University, Umeå, Sweden

Johnston, M., (2016), Climate Change and Canadian Forests: An Emerging Synthesis, Invited Lecture Presentation, Biology Department, University of Alberta, Edmonton, AB

Johnston, M., (2016), Climate Change Impacts to Mistik Management's Forest Management Agreement Area, Invited Presentation, Mistik Management Ltd. Public Advisory Group Meeting, Meadow Lake, SK

Johnston, M., (2016), Forest Management and Climate Change in the Prairie Region, Invited Lecture Presentation, Department of Plant Sciences, University of Saskatchewan, Saskatoon, SK

Johnston, M., (2016), Forest Management Planning and Vulnerability Assessment: Opportunities for Integrating Climate Change Science into Sustainable Forest Management, Presentation, Adaptation Canada National Symposium on Climate Change Adaptation, Ottawa, ON

Johnston, M., (2016), Future of Canada's Boreal Forest, Keynote Address, Canadian Institute of Forestry Meeting, Edmonton, AB

Johnston, M., (2016), Grand Challenges for the Boreal Forest: How Can Genomics Help?, Invited Presentation, Rocky Mountain Section of the Canadian Institute of Forestry Special Symposium on Genomics and Forest Management, Edmonton, AB

Johnston, M., (2016), Innovations for Including Indigenous Peoples in Implementing Sustainable Forest Management, Presentation, Nordic Rural Realities Conference, Akureyri, Iceland

Johnston, M., (2016), *Mainstreaming Climate Change into Sustainable Forest Management in Canada*, Invited Presentation, International Symposium on Forest Management for Enhancing Resilience to Climate Change, Seoul, South Korea

Johnston, M., (2016), Measuring Carbon in Wetlands: A Rapid Assessment Protocol, Invited Presentation, Sustainable Forestry Initiative (SFI) Annual Conference, Clearwater Beach, FL, USA; SFI Conservation Grants Program Technical Workshop, Washington, DC, USA

Johnston, M., (2016), *Opportunities for Integrating Climate Change Science into Sustainable Forest Management*, Presentation, Natural Resources Canada National Conference Adaptation, Ottawa, ON

Jonasson, R., M. Imran and D. Bogatkov, (2016), Surfactant and Solvent Additives in the SAGD Lab Testing and Modelling, Short Course, World Heavy Oil Congress (WHOC), Workshop/Seminar, Calgary, AB

Kannan U., R. Sharma, Y. Khedikar, M.P. Gangola, S. Ganeshan, M. Båga M. and R.N. Chibbar, (2016), <u>Differential Expression of Two Galactinol Synthase Isoforms LcGolS2 in Developing Lentil (Lens culinaris Medik. cv CDC Redberry)</u>, Online Journal, Plant Physiology and Biochemistry, Volume 108:422-433

Ketilson, S. and D. Sanscartier, (2016), Assessing and Applying Sustainability in Remediation Projects, Presentation, School of Environment and Sustainability, (SENS) 990 Seminar, University of Saskatchewan, Saskatoon, SK

Knorr, K. D., (2016), Industry's Research Demand Shifting – SRC, Article, Pipeline News

Knorr, K. D., (2016), *Partial Upgrading Research Past and Current*, Conference Presentation, Global Petroleum Show (GPS), Calgary, AB; World Heavy Oil Congress (WHOC), Calgary, AB

Knorr, K. D., (2016), Wormholes and Post-CHOPS EOR, Conference Presentation, Global Petroleum Show (GPS), Calgary, AB; World Heavy Oil Congress (WHOC), Calgary, AB

Knorr, K.D. and G. Renouf, (2016), Smart Prototype Laboratory Equipment - Part 1, Article, Roughneck Magazine, February Edition

Knorr, K.D. and M. Imran, (2016), Smart Prototype Laboratory Equipment - Part 2, Article, Roughneck Magazine, March Edition

Kulshreshtha, S., E. Wheaton and S. Poudel, (2016), *Economics of Crop Production Under Climate Change*, Presentation, Adaptation Canada Conference, Ottawa, ON; University of Saskatchewan, Saskatoon, SK

Kulshreshtha, S., E. Wheaton and V. Wittrock, (2016), *The Impacts of the 2001-2002 Drought in Rural Alberta and Saskatchewan,* Book Chapter, Chapter 4 in Diaz, H., M. Hurlbert and J. Warren (editors) Vulnerability and Adaptation to Drought on the Canadian Prairies; University of Calgary Press, Calgary, AB

Lettvenuk, J., (2016), <u>UAVs to the Rescue: A New Tool for Emergency Measurement</u>, SRC Internet Blog, "From the Lab to the Loading Dock" Luo, P., (2016), <u>Capillary Pressure and Wettability Determination for Bakken Cores Using an Ultra-High-Speed Centrifuge</u>, Presentation, ShaleTech Canada Workshop, Calgary, AB

MacWilliam, S., D. Sanscartier, R. Lemke, M. Wismer and V. Baron, (2016), <u>Environmental Benefits of Canola Production in 2010 Compared to 1990: A Life Cycle Perspective</u>, Journal, Agricultural Systems 145, p. 106-115

Marchildon, G., E. Wheaton, A. Fletcher, and J. Vanston, (2016), Extreme Drought and Excessive Moisture Conditions in Two Canadian Watersheds: Comparing the Perception of Farmers and Ranchers with the Scientific Record, Journal, Natural Hazards 82(1):245-266 DOI 10.1007s11069-2190-7

McGilp, L., (2016), Pipeline Transport, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB

Muldoon, J., M. Calette and L.L. Schramm, (2016), *Aboriginal and Northern Involvement and Benefits from Gunnar Uranium Mine Environmental Remediation – Northern Saskatchewan,* Conference Presentation, Third Canadian Conference on Nuclear Waste Management, Decommissioning and Environmental Restoration, Ottawa, ON; International Conference on Advancing the Global Implementation of Decommissioning and Environmental Remediation, Madrid, Spain; Editorial Board-Reviewed Paper IAEA-CN-238-29

Murray, C. and C. Baptiste, (2016), Aboriginal Mentorship Program, Presentation, Saskatchewan Human Rights Commission Employment Equity Seminar, Saskatoon, SK

Nakutnyy, P. and G. Renouf, (2016), Data Mining for Better Oil Recovery, Article, Roughneck Magazine, January Edition

Nakutnyy, P. and P. Luo, (2016), *Bakken Roadmap - Mapping Existing Resources and Activities in the Bakken Play*, Workshop Presentation, Petroleum Technology Alliance Canada (PTAC) Tight Oil and Gas Innovation Network (TOGIN) Plays and Production Workshop, Calgary, AB

Ogilvie-Evans, P. and D. Sanscartier, (2016), Assessment of Risks Associated with Underground Workings at Abandoned Mines in Northern Saskatchewan, Abstract/Conference Presentation, Saskatchewan Mining Association (SMA) Environmental Forum, Saskatoon, SK

Parker, D. J., (2016), *Greenhouse Gas Emissions from Uranium Mining and Milling in Saskatchewan*, Conference Presentation, Saskatchewan Environmental Industry and Managers Association (SEIMA) Conference, SustainTech, Saskatoon, SK; Saskatchewan Mining Association Environmental Forum, Saskatoon, SK

Parker, D.J., C. McNaughton and G. Sparks, (2016), *Life Cycle Greenhouse Gas Emissions from Uranium Mining and Milling in Canada*, Abstract, Environmental Science & Technology. DOI: 10.1021/acs.est.5b06072

Paynter, P., (2016), SRC Energy Services Overview, Conference Presentation, Mature Fields Congress, Mexico City, Mexico; Global Petroleum Show (GPS), Calgary, AB; World Heavy Oil Congress (WHOC), Calgary, AB

Petelina, E., D. Sanscartier, S. MacWilliam and R. Ridsdale, (2016), <u>Gathering and Analyzing Stakeholders' Opinion for Mine Remediation Using a Web-based Multi-Criteria Analysis Tool</u>, Presentation, Fourth Annual International Conference on Sustainable Remediation (SustRem), Montreal, QC

Peter, N., (2016), <u>Developing New Means of Pipeline Communication</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Petts, D.C., T. Sachel, R.A. Stern, L. Hunt and G. Formadas, (2016), <u>Multiple Carbon and Nitrogen Sources Associated with the Parental Mantle Fluids of Fibrous Diamonds from Diavik, Canada, Revealed by SIMS Microanalysis</u>, Abstract, Contributions to Mineralogy and Petrology

Poudel, S., S. Kulshreshtha and E. Wheaton, (2016), *Economic Impacts of Climate Change Extremes on Canadian Prairie Mixed Farms,* Presentation, Eighth International Conference on Climate Change: Impacts and Responses, University of Science, Vietnam National University, Hanoi, Vietnam; University of Saskatchewan, Saskatoon, SK, 27 slides

Poudel, S., S. Kulshreshtha, E. Wheaton and S. Kienzle, (2016), *Economic Impacts of Climate Change and Extremes on Canadian Prairie Mixed Farms: A VACEA Fact Sheet*, Technical Report, Prepared for the Vulnerability and Adaptation to Climate Extremes in the Americas Project (VACEA), Prairie Adaptation Research Collaborative, University of Regina, Regina, SK; University of Saskatchewan, Saskatoon, SK, 6 pp.

Schramm, L.L., (2016), Calling All Creative Spirits! We Need 6,000 New Ideas, SRC Internet Blog, "From the Lab to the Loading Dock"

Schramm, L.L., (2016), Everyone's Creative Talents Can Be Developed, SRC Internet Blog, "From the Lab to the Loading Dock"

Schramm, L.L., (2016), *Gunnar Uranium Mine. Canada's Cold War Ghost Town,* Book, Saskatchewan Research Council, Saskatoon, SK and Amazon.com Inc.

Schramm, L.L., (2016), Key Enabling Technologies for Game-Changing Innovation, SRC Internet Blog, "From the Lab to the Loading Dock"

Schramm, L.L., (2016), Research and Development on the Prairies: A History of the Saskatchewan Research Council, Book, Saskatchewan Research Council, Saskatoon, SK and Amazon.com Inc.

Schramm, L.L., (2016), <u>The Nascence of Research Councils in Canada - A Saskatchewan Perspective</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Sizo, A., E. Petelina and I. Wilson, (2016), Environmental Data Management System for Site Remediation (Case Study), Poster Presentation, URISA GIS-Pro Conference, Toronto, ON

Sohani, S., (2016), Stepping into the Shoes of a Safety Coordinator for Personal and Professional Development, Conference Presentation, Canadian Society of Safety Engineering (CSSE), Navigating the Future of OH&S, Vancouver, BC

Soveran, D., (2016), Accelerating Solutions for Flare Gas and Vent Gas Conversion, Article, Roughneck Magazine, June Edition

Soveran, D. and D. Anweiler, (2016), SRC's Partial Upgrading Research, Past and Current Activities, Invited Presentation, National Partial Upgrading Program Workshop, Calgary, AB

Spelay, R.B., R.G. Gillies, S.A. Hashemi and R.S. Sanders, (2016), <u>Effect of Pipe Inclination on the Deposition Velocity of Settling Slurries</u>, Abstract/Conference Proceedings, Canadian Journal of Chemical Engineering; Volume 94, Issue 6, p. 1032-1039, DOI: 10.1002/cjce.22493

SRC Communications, (2016), Take Our Kids to Work Day: A Student's Perspective, SRC Internet Blog, "From the Lab to the Loading Dock"

SRC Communications, (2016), <u>The AMP Experience: Putting My Academic Knowledge to Work</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Stephan, P., D. Leroux-Peterson and L. O'Connor, (2016), Showcasing Science, Technology and Innovation on a National and International Scale. NRC-SRC Partnership: How our Regional and National Research and Technology Organizations are Collaborating to Develop the Bio-based Economy in Canada and Beyond, Conference Poster, BIO World Congress on Industrial Biotechnology, San Diego, CA, USA

Taman Athmer, E., (2016), *Innovative Employee Volunteering*, Invited Presentation, Corporate Community Investment Council Conference, Conference Board of Canada, Regina, SK

Thiessen, E., (2016), Cleaning Up the Lorado Uranium Mill, Video, SRC's YouTube Channel

Thiessen, E., (2016), Community Leaders Visit the Gunnar Mine and Mill Site, Video, SRC's YouTube Channel

Thiessen, E., (2016), SRC Diamonds Tour, Video, SRC's YouTube Channel

Thiessen, E., (2016), SRC LIMS: A Software Solution for Environmental Labs, Video, SRC's YouTube Channel

Thiessen, E., (2016), SRC's Environment Services, Video, SRC's YouTube Channel

Thiessen, E., (2016), <u>Take Our Kids to Work™ Day at SRC</u>, Video, SRC's YouTube Channel

Thiessen, E., (2016), The Post-CHOPS Well Test Centre: A Visual Overview, Video, SRC's YouTube Channel

Thiessen, E., (2016), The Post-CHOPS Well Test Centre: The Process, Video, SRC's YouTube Channel

Thiessen, E., (2016), *The Safening: A Reminder from IT*, Video, SRC's YouTube Channel

Wheaton, E., D. Sauchyn and B. Bonsal, (2016), <u>Future Possible Droughts</u>, Book Chapter, Chapter 3 in Diaz, H., M. Hurlbert and J. Warren (editors) Vulnerability and Adaptation to Drought on the Canadian Prairies; University of Calgary Press, Calgary, AB

Wilson, I. (Contributing Author), (2016), <u>Strategic Considerations for the Sustainable Remediation of Nuclear Installations</u>, Policy Paper, Organization for Economic Cooperation and Development (OECD) – Nuclear Energy Agency

Wilson, I., D.E. Allen, L.L. Schramm and J. Muldoon, (2016), Lorado Uranium Mine Environmental Remediation – Northern Saskatchewan, Conference Presentation, International Conference on Advancing the Global Implementation of Decommissioning and Environmental Remediation, Editorial Board-reviewed Paper and Poster IAEA-CN-238-30P, Madrid, Spain

Wittrock, V., J. Parry and A. Terton, (2016), Energy Sector's Vulnerability to Climate Extremes: Case Study of the Souris River Watershed, Canada, Research Report, Saskatchewan Research Council (SRC), Saskatoon, SK, SRC Publication: 13749-1D16

Wittrock, V., (2016), <u>Case Study: Energy Sector's Response to Climate Extremes at Souris Watershed</u>, SRC Internet Blog, "From the Lab to the Loading Dock"

Wittrock, V., (2016), Climatic Extremes and the Energy Sector's Vulnerability: Now and in the Future – Focus on the Canadian Portion of the Souris River Watershed: A Literature Review, Research Report, Prepared for Environmental Systems Assessment Canada Ltd. as part of the Natural Resources Canada Adaptation Platform Energy Working Group; Saskatchewan Research Council (SRC), Saskatoon, SK, 78 pp. SRC Publication: 13757-1E16

Wittrock, V., (2016), Effective Adaptation? Lessons and Best Practices of Selected Industries, Presentation, From Policies to Operations: Adaptation in the Mining Sector; National Symposium on Climate Change Adaptation, Ottawa, ON, SRC Publication: 13749-3D16

Wittrock, V., (2016), Past, Present and Future Climatic Extremes and the Vulnerability to the Energy Sector in the Canadian Portion of the Souris River Watershed, Canada, Article, Saskatchewan Research Council (SRC), Saskatoon, SK, SRC Publication: 13757-3E16

Wittrock, V., (2016), *Preliminary Flood & Drought Assessment Beardy's and Okemasis First Nation*, Research Report, Saskatchewan Research Council (SRC), Saskatoon, SK, SRC Publication: 13388-4D16

Wittrock, V., (2016), *Preliminary Flood and Drought Assessment on Beardy's and Okemasis First Nation, SK*, Research Report, Prepared for the Beardy's and Okemasis First Nation as part of the Aboriginal Affairs and Northern Development Canada Climate Change Adaptation Program, 89 pp., SRC Publication: 13388-1E15

Wittrock, V., (2016), Risks to the Energy Sector from Historic Extreme Climate Events: Case Study of the Souris River Watershed, Canada, Research Report, Prepared for Environmental Systems Assessment Canada Ltd. as part of the Natural Resources Canada Adaptation Platform Energy Working Group; Saskatchewan Research Council (SRC), Saskatoon, SK, 132 pp. SRC Publication: 13757-2E16

Wittrock, V., (2016), Sask. Winter Among Mildest Since Early '60's, Interview, Western Producer

Wittrock, V., (2016), *Selected Industries and Extreme Climate Variability: Adaptable or Vulnerable?*, Presentation, 'Levers to Mainstream Adaptation Effectively: Lessons and Best Practices from Western Canada' Adaptation Canada National Symposium on Climate Change Adaptation, Ottawa, ON, SRC Publication: 13749-2D16

Wittrock, V. and S. Dunn, (2016), *Climate Reference Station, Saskatoon, Annual Summary 2015,* Research Report, Saskatchewan Research Council (SRC), Saskatoon, SK, 49 pp., SRC Publication: 13000-1E16

Wittrock V., D. Corkal, R. Halliday, M. Johnston, I. Stewart and E. Wheaton, (2016), *Saskatchewan Flood and Natural Hazards Assessment: Finalizing the Work Plan*, Invited Presentation, Saskatchewan Ministry of Government Relations; Saskatchewan Research Council, Saskatoon, SK, SRC Publication: 14113-1D16

Zhang, J., B. Zhao and B. Schreiner, (2016), <u>Separation Hydrometallurgy of Rare Earth Elements</u>, Book, Springer International Publishing, Switzerland, ISBN 978-3-319-28235-0

Zimmer, J., (2016), *Environmental Services for the Heavy Oil Industry*, Conference Presentation, World Heavy Oil Congress (WHOC), Calgary, AB Zimmer, J., (2016), *Why Accreditation is Important for Laboratories*, SRC Internet Blog, "From the Lab to the Loading Dock"