

# PRESENTATIONS

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**Understanding EHC Fluid Condition Monitoring**, K. Brown with Matt Hobbs EPT, STLE 2019 Annual Meeting, Nashville, TN, May 21-24, 2019.

**'We Need to do Better – Tribology for Everyone'**, Presentation at UOIT, Oshawa, March 12, 2019

**'Grease Lubrication of MOV Components'**, K. Brown with Rich Wurzbach and Domingo Cruz, Motor Operated Valve Users Group Meeting, January 14-16, 2019, Desert Springs, CA,

**'Tribological Friction and Wear Loses – We need to do better'**, K. Brown, STLE Toronto Section Workshop on 'Reducing Tribological Loses and Failures, November 14, 2018, Kinectrics, Toronto

**'EHC Fluid Maintenance – Testing and Monitoring Best Practices'**, 2018 EPRI Turbine Generators Users Group Meeting, August 13, 2018, Baltimore, Maryland

**'Fire Resistant Fluid Management in Canadian Fleet'**, K. Brown with E. Prescott, EPRI Workshop on Asset Management of Nuclear Steam Turbine Generators, May 7-8, 2018 • Bruce Power,

**'Lubrication (Why, what, when, where, who & The Need to do Better'**, K. Brown, STLE Toronto Section Ed Course on 'The Fundamentals of Lubrication, April 16, 2018, OPG Pickering Training Center.

**Lubrication (Why, what, when, where, who & The Need to do Better)**, February 1, 2017, Toronto Section STLE, Ryerson University presentation to 4th year Engineering students.

**'What You Need to Know about Oil & Greases and Compatibility Testing'** K. Brown with T. Austin and W. Mackwood, Motor Operated Valve Users Group Meeting, January 2017, Desert Springs, CA

**'MOV Grease Evaluations with a Modified 4-Ball Wear Test'**, K. Brown, Eco Fluid Center Ltd., Toronto, ON, W. Mackwood and S. Wilson, Chemtura Co/Cie, West Hill, ON, E. Austin, Canoil Canada, Mississauga, ON, Power Generation, STLE Annual Meeting, May 16-20, 2016, Las Vegas, NV.

**'Understanding Lower Temperature MOV Greases'**, Jan 13, 2015, Motor Operated Valve Users Group Meeting, Hyatt Regency Riverfront Hotel, Jacksonville, FL.

**'Condition Monitoring (Why, what, when, where, who & The Need to do Better)'**, Nov 20, 2014, Canadian Machinery Vibration Association - CMVA Ontario Chapter Meeting. Information Center – PNGS.

**'Conditioning Monitoring and Preventative Maintenance'**, Oct 29, 2014, Toronto Section Education Course on Understanding the Principles and Application of Lubrication Science, Old Mill, Toronto, ON.

**'EHC Electrohydraulic Control Fluid Maintenance'**, EPRI Condition Based Maintenance Conference, July 15, 2014, Four Seasons Hotel, St. Louis, MI

**'Why We Need Lubricants and Why We Need to do Better'** January 30, 2014, Toronto Section STLE, Ryerson University presentation to 4<sup>th</sup> year Engineering students.

**'MOV Stem Nut Grease Wear Testing – Update'**, K. Brown, Eco Fluid Center Ltd., Toronto, ON, W. Mackwood and S. Wilson, Chemtura Co/Cie, West Hill, ON, and E. Austin, Canoil Canada Ltd, Mississauga, ON, Motor-Operated Valve Users' Group Annual Meeting, Jan 13-15, 2014, Hyatt Regency Riverfront Hotel Jacksonville, FL.

**'EHC Fluid Tutorial'**, 2 hours, K. Brown, Eco Fluid Center Ltd., 13th EPRI Steam Turbine-Generator Workshop, Vendor Exhibition and TGUG Meeting, August 12-16, 2013, Charlotte, NC.

**'MOV Actuator Oil Seepage Causes and Solutions'**, K. Brown, Eco Fluid Center Ltd., Toronto, ON, W. Mackwood, Chemtura Co/Cie, West Hill, ON, E. Austin, Forsythe Lubrication Associates, Hamilton, ON, Power Generation Industrial Council, STLE Annual Meeting, May 4-8, 2013, Detroit, MI.

**'MOV Long Life Grease A Decade Later - Approval and Lessons Learnt'**, K. Brown, Eco Fluid Center Ltd., Toronto, ON, and T. Austin, Forsythe Lubrication Associates, Hamilton, ON, Motor-Operated Valve Users' Group Annual Meeting, Jan 14-16, 2013, Marriott Rivercenter, San Antonio, TX.

**'Why we need lubricants and why we need to do better'**, K. Brown, Eco Fluid Center Ltd., Toronto, ON, UOIT (University of Ontario Institute of Technology), November 2, 2011, Oshawa, ON.

**'Why We Need Lubricants and Why We Need to do Better'**, Mohandes – Canadian Society of Iranian Engineers and Architects, Sep 7, 2011, Sheraton Parkway, Toronto, ON

**'Application / Equipment (Why We Need Lubricants and Why We Need to do Better)'**, STLE Toronto Section Education Course: Lubrication Time Capsule, February 8, 2011, Toronto, ON.

**'Glossary of Terms'**, STLE Toronto Section Education Course: Lubrication Time Capsule, February 8, 2011, Toronto, ON.

**'Trouble Shooting Steam Turbine Phosphate Ester EHC Fluids'**, Power Generation Industrial Council, STLE Annual Meeting, May 16-20, 2010, Las Vegas, NV.

**'EHC Fluid Maintenance -Trouble Shooting'**, OPG Workshop on "IX Treatment for Steam Turbine Control Fluid", May 14, 2010 at Pickering NGS, Pickering, ON.

**'EHC Fluid Maintenance – Turbine OEM Equipment'**, OPG Workshop on "IX Treatment for Steam Turbine Control Fluid", May 14, 2010 at Pickering NGS, Pickering, ON.

**'Biodegradability and other 'Green' Issues'**, STLE Toronto Section Education Course on Green Lubrication – The Good, The Bad and the Ugly, February 17, 2010, Old Mill, Toronto, ON.

**'Eco Friendly Lubricants'**, STLE Toronto Section Education Course. Lubrication Fundamentals and Future Directions, February 10, 2009, Old Mill, Toronto, ON.

**'Reducing Oil Seepage in SMB Actuators'**, Motor Operated Valve (MOV) Users Group Meeting, January 5-7, 2009, Contemporary Resort, Orlando, FL.

**'Shop Floor Assessment of Grease in Motor Operated Valves'**, Power Generation Technical Session, STLE Annual Meeting, May 18-22, 2008, Cleveland, OH.

**'Tribological Due Diligence'**, STLE Toronto Section Education Course, Lubrication Fundamentals, February 12, 2008, Toronto, ON.

**'Commercial Grade Dedication and In-Service MOV Long Life Grease Testing'**, 2008 Motor Operated Valve (MOV) Users Group Meeting, January 14-16, 2008, Contemporary Resort, Orlando, FL.

**'EHC Fluid Analysis and Component Issues B Off-Line Condition Assessment'** EPRI Turbine Generators Users Group (TGUG) Winter Workshop, January 15-16, 2007, Royal Plaza, Orlando, FL.

**'EHC Fluid Analysis and Component Issues B On-Line Condition Assessment'** EPRI Turbine Generators Users Group (TGUG) Winter Workshop, January 15-16, 2007, Orlando, FL.

**'MOV Stem Grease Wear Testing'**, 2007 MOV Users' Group Meeting, Sheraton Sand Key, Clearwater, FL, prepared but given by T. Austin.

**'Electrohydraulic (EHC) Fluid Issues and Maintenance'** EPRI 4<sup>th</sup> Turbine-Generators Technology Transfer Workshop and Vendor Exposition, July 24-25, 2006, The Hilton, Charlotte University Place, NC.

**'MOV Long Life Grease Condition Monitoring Update'**, 2006 MOV Users' Group Meeting, Sheraton Sand Key, Clearwater, FL.

**'EHC Fluid Twenty Years Later - Still Going Strong'**, 2005 STLE Annual Meeting, Power Generation Session 5F, Las Vegas, NV, given by T. Austin.  
and Key, Clearwater, FL.

**'MOV Long Life Grease Condition Monitoring Tests'**, MOV Users' Group Meeting, January 9-12, 2005, Sheraton Sand Key, Clearwater, FL.

**'EHC Fluid Quality and Effect on Overspeed Protection System Reliability'**, EPRI Turbine Overspeed Risk Management and Reliability Improvement Workshop, February 3-4, 2004, Palmer House Hilton, Chicago, IL.

**'MOV Long Life Limit Switch Applications'**, 2004 MOV Users' Group Meeting, January 12-14, 2004, Hilton Myrtle Beach Resort, SC.

**'Hydroelectric 'Green' Wicket Gate Grease – 10 Years Later'**, STLE Annual Meeting, Power Generation I, Monday 9:00, May 17-20, 2004, Toronto, ON.

**'Effect of Water on Properties of Fire Resistant EHC Fluids'**, STLE Annual Meeting, Power Generation I, Monday 9:00, May 17-20, 2004, Toronto, ON.

**'Phosphate Ester Electro-hydraulic Fluids'**, Southern Co. Condition Based Maintenance User Group Meeting, February 18-21 2003, Auburn, AL.

**'All-In-One Grease, An Update On MOV Long Life'**, MOV Users' Group Meeting, January 13-15, 2003, Sheraton Sand Key, Clearwater, FL.

**'EHC Fluid Maintenance'**, EPRI Turbine Generator, Technology Transfer Workshop, July 22, 2002, Charlotte, NC

**'EHC Fluid Quality Maintenance'**, 7<sup>th</sup> EPRI Turbine/Generators Users Workshop, given by R. L. Slover and E.M. Austin, August 20-23, 2001 Baltimore, MD.

**'Ten Years Experience with Ion Exchange Purification'**, with L. Billings and T. Austin, Power Generation Council, STLE 2001 Annual Meeting in Orlando, FL.

**'Introduction to Predictive Maintenance'**, STLE Toronto Section Education Course on Oil Analysis and Condition Monitoring, Feb 14, 2001, Toronto, ON.

**'Phosphate Ester Electro-hydraulic Control Fluids'**, with T. Austin, Forsythe at EPRI NMAC Turbine Generators Users Group – EHC Workshop@, Jan 15-17, 2001, New Orleans, LA.

**'Consolidating Lubricants' and 'Phosphate Ester Electrohydraulic Fluid'**, EPRI /NMAC Lubrication & Bearing Workshop@, March 29-31, 2000, Williamsburg, VA

**'Consolidating Lubricants Without Compromising Lubrication'**, Noria Oil Analysis Conference, October 26-27, 1999, Tulsa, OK.

**'Bearings and Problem Solving'**, STLE Toronto Section Education Course on Lubrication Problem Solving into the Next Millennium, February 23, 1999, Toronto, ON.

**'Fire Protection and Hazards of Lubricating and Hydraulic Fluids'**, with T. Austin, Society of Fire Protection Engineers Southern Ontario Chapter, March 9, 1999, Toronto, ON.

**'Steam Turbine Control Fluid Seminar'**, Monticello GS Texas Utilities, two half day seminars, March 1, 1999, Monticello GS, TX.

**'Greener Lube Practises for Hydro-electric Stations'**, Power Generation Council, STLE Annual Meeting, May 11-21, 1998, Detroit, MI.

**'Effect of Water on Phosphate Ester Control Fluids'**, with L. Billings & T. Austin, Power Generation Council, STLE Annual Meeting, May 11-21, 1998, Detroit, MI.

**'Cost Effective Particulate Contamination Control' and 'Lubrication Surveys'**, STLE Toronto Section Education Courses, Feb 17, 1998 Toronto & Feb 19, 1998 Ottawa, ON.

**'Trouble Shooting EHC Systems'**, Power Generation Council, STLE 1997 Annual Meeting, Kansas City, MI.

**'Lubrication Fundamentals'**, Two Day Diagnostics Seminar, Tulsa, OK, Aug 5-7, 1996.

**'Recommended Maintenance Activities' and 'Typical Operating Problems'**, Steam Turbine Control Fluid Symposium, STLE 1995 Annual Meeting, Cincinnati, OH.

**'Effective Particulate Contamination Control'**, Plant Engineering and Maintenance Association of Canada, March 6, 1996, Mississauga, ON.

**'Particulate Contamination Control'**, STLE Toronto Section, October 10, 1995, Toronto, ON.

**'Power Station Particulate Contamination Control'**, STLE 1995 Annual Meeting, Power Generation Industry Council, Chicago, IL.

**'Fire Resistant Fluid: Case Histories'**, with G. Staniewski, STLE 1994 Annual Meeting, Power Generation Industry Council, Pittsburgh, PA.

**'The Need for Tribology in the 90's'**, STLE, at the National Research Council of Canada, March 29, 1994, Ottawa, ON.

**'Fire Resistant Fluid Case Histories'**, Electric Power Research Institute (EPRI) NMAC 4th Annual Conference and Technical Workshop, March 21-23, 1994, Charlotte, NC.

**'Achieving Real Cost Savings in Rotating Equipment'**, Mar 9, 1994, Holliday Inn, STLE Sarnia Section

**'Continuous Improvement'**, provided 3 one day awareness seminars for the Engineering Analysis & Codes Department of Ontario Hydro Nuclear, June 30, July 5 and July 12, 1993, Toronto, ON

**'New Lubricating Materials for Hydraulic Turbine Equipment'**, with K. Matson and D. Taylor, Canadian Electrical Association, March 30, 1993, Montreal, PQ.

**'Friction Reduction and Energy Conservation'**, with R. Okrasa, STLE Hamilton Section, January 19, 1993, Hamilton, ON.

**'Motor Bearing Repairs'**, with I. Culbert, to technical staff at Ontario Hydro stations; Lakeview TGS, Bruce 'A' NGS and Pickering NGS, various dates in 1992/93.

**'Salem Overspeed Incident'**, Presentations to technical staff at Ontario Hydro nuclear stations: Bruce 'A', Bruce 'B', Darlington and Pickering in 1992.

**'Improving Tribological Practices & Energy Conservation'**, with R. Okrasa, STLE Toronto Section, October 8, 1991, Toronto, ON.

**'Effects of Poor Tribological Practices - A Users Perspective'**, Industrial Maintenance Technology Symposium held in conjuncture with the STLE 1991 Annual Meeting, April 29-May 4, 1991, Montreal, Quebec.

**'Careers in Science'**, Agincourt Collegiate, January 23, 1991, given separately to three final year chemistry classes, Scarborough, ON.

**'Lubrication Seminar - Fundamentals of Lubrication, Properties and Uses, Sampling, Greasing Procedures, Economical Costs, and Specific Failures'**, For mechanical maintainers at Ontario Hydro Bruce 'A' NGS, September-October, 1990. Similar one day seminars were given at Bruce 'B' and Lambton TGS, ON.

**'Effects of Poor Tribological Practices-A Users Perspective'**, STLE Vancouver Section, May 24, 1990, Vancouver, BC.

**'Fluid Condition Monitoring and Failure Analysis'**, March 27, 1990, Final year tribology class at McMaster University, Hamilton, ON. Other talks to students have been given at the Universities of Toronto, Waterloo and Rensselaer Polytechnic.

**'Fluid (Oil) Condition Monitoring'**, Ontario Hydro Nuclear Generation Division (NGD) Fourth Maintenance Conference, January 19, 1990, Aurora, ON. Similar presentations were given at most of the Ontario Hydro nuclear and fossil stations.

**'Condition Monitoring and Maintenance of Steam Turbine-Generator Fire Resistant Triaryl Phosphate Control Fluids'**, Condition Monitoring and Preventative Maintenance Conference held in conjuncture with STLE Annual Meeting May 1-4, 1989, Atlanta, GA.

**'Presentation on Tribological Losses'**, Ontario Hydro Design & Development-Generation Quality Engineering Coordinating Committee, August 24, 1988, Toronto, ON.

**'Tribology Education: Present Status and Future Challenges'**, Panel discussion at ASME/STLE Tribology Conference, October 6-8, 1987, San Antonio, TX.

**'Turbine-Generator Bearing Retrofits'**, 4th NRC Associate Committee on Tribology Research Seminar, May 29, 1987, Sarnia, ON.

*Earlier ones available upon request*