Refereed Journal Publications¹

- 1. Swytink-Binnema, N.* and D.A. Johnson, (2015), "Digital tuft analysis of stall on operational wind turbines", Wind Energy, DOI: 10.1002/we.1860
- 2. Gharali, K.* and D.A. Johnson, (2014), "PIV-based load investigation in dynamic stall for different reduced frequencies", Exp. Fluids, 55, 1803, DOI: 10.1007/s00348-014-1803-8.
- 3. Swytink-Binnema, N.* and D.A. Johnson, (2014), "Novel Image Analysis Method for Blade Aerodynamic Performance on Operational Turbine", J. Physics Conf. Ser. 524(1):012016. DOI:10.1088/1742-6596/524/1/012016.
- 4. Abdelrahman, A.* and D.A. Johnson, (2014), "Experimental Testing of Axial Load Alleviation using Trailing Edge Flaps: Static Flap Angles Case", J. Physics Conf. Ser. 524(1):012059. DOI:10.1088/1742-6596/524/1/012059.
- 5. Gharali, K.* and D.A. Johnson (2014), "Effects of non-uniform incident velocity on a dynamic wind turbine airfoil", Wind Energy, DOI: 10.1002/we.1694.
- 6. Bale, A.* and D.A. Johnson, (2013), "The Application of a MEMS Microphone Phased Array to Aeroacoustics of Small Wind Turbines", Wind Engineering, 37, 6, 637-658.
- 7. Gharali, K.* and D.A. Johnson (2013), "Dynamic stall simulation of a pitching airfoil under unsteady freestream velocity" J. Fluids and Structures, 42, 228-244.
- 8. Johnson, D.A., Abdelrahman, A.*, and D. Gertz* (2012), "Experimental indirect determination of wind turbine performance and Blade Element Theory parameters in controlled conditions", Wind Engineering, 36, 6, 717-738.
- 9. Gertz, D.*, Johnson, D.A. and Nigel Swytink-Binnema*, (2012), "An evaluation testbed for wind turbine blade tip designs winglet results", Wind Engineering, 36, 4, 389-410.
- 10. Johnson, D.A. and B. Gaunt*, (2012), "Wind turbine performance in controlled conditions: experimental results", Int. J. Green Energy DOI:10.1080/15435075.2012.675799
- 11. Gharali, K.* and D.A. Johnson, (2012), "Numerical modeling of an S809 airfoil under dynamic stall, erosion and high reduced frequencies", Applied Energy, 93, 45-52.
- 12. Gertz, D.* and D. Johnson, (2011), "An evaluation testbed for wind turbine blade tip designs—baseline case", Int. J. Energy Research, 35, 15, 1360-1370 DOI: 10.1002/er.1897
- 13. Orlando, S.*, Bale, A.*, and D. Johnson, (2011) "Experimental study of the effect of tower shadow on anemometer readings", J. Wind Eng. Industrial Aerodynamics, 99,1-6.
- 14. Devaud, C.B., Weisinger, J.*, Johnson, D.A and E.J. Weckman, (2009) "Experimental and Numerical Characterization of the Flowfield in the Large-scale UW Live Fire Research Facility", International Journal for Num. Methods in Fluids, 60, 5, 539-564.
- 15. Almutairi, Z.A.*, Glawdel, T., Ren, C. and D. A. Johnson, (2009), "A Y-channel design for improving zeta potential and surface conductivity measurements using the current monitoring method", Microfluid Nanofluid, 6, 241–251 DOI 10.1007/s1040400803206

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^{1 *} denotes supervised graduate student

- 16. Mamun, M.*, Johnson, D. A., Leong, W., and T. Hollands, (2008), "PIV Measurements of the Flow Field inside an Enclosed Cubical Cavity in Natural Convection", Experiments in Fluids, 44, 4, 647-659.
- 17. McWilliam, M.* and D.A. Johnson, (2008), "Velocity Measurement of Flow around Model Vertical Axis Wind Turbines", International Journal Green Energy, 5, 1-2, 55-68.
- 18. McPhee, A.D.* and D.A. Johnson, (2008), "Experimental Heat Transfer and Flow Analysis of a Vented Brake Rotor", Int. Journal of Thermal Sciences, 47, 4, 458-467.
- 19. Nguyen, T.C.*, Weckman, D. C., and D.A. Johnson, (2007) "Predicting the Onset of High-Speed Gas Metal Arc Weld Bead Defects Using Dimensional Analysis Techniques", Science and Technology of Welding and Joining, 12, 7, 634-648.
- 20. Nguyen, T.C.*, Weckman, D. C., and D.A. Johnson, (2007), "The Discontinuous Weld Bead Defect in High-Speed Gas Metal Arc Welds", Welding Journal, 86,11, 360s-372s
- 21. Nguyen, T.C.*, Weckman, D.C., Johnson, D.A., and Kerr, H.W. (2007), "High speed fusion weld bead defects", Science Technology of Welding and Joining, 11, 6, 618-633.
- 22. Johnson, D.A., Orakwe, P.*, and E. Weckman, (2006), "Experimental examination of welding nozzle jet flow at cold flow conditions", Sci Tech Weld Joining, 11, 6, 681-687.
- 23. Nguyen, T.C.*, Weckman, D. C., Johnson D. A. and H. W. Kerr, (2005), "The humping phenomenon during high speed gas metal arc welding", Sci Tech Weld Join, 10, 447-459.
- 24. Mamun, M.*, Leong, W.H., Hollands, K.G.T., and D.A. Johnson, (2005), "Erratum to: Cubical-cavity natural-convection benchmark experiments: an extension", International Journal of Heat and Mass Transfer, 48, 1224
- 25. Young, C.*, Johnson, D.A. and E. Weckman, (2004), "A Model-Based Validation Framework for PIV and PTV", Experiments in Fluids, 36, 23-35.
- 26. Young, C.*, Johnson, D.A. and E. Weckman, (2004), "A method to anchor displacement vectors to reduce uncertainty and improve Particle Image Velocimetry results", Measurement Science and Technology, 15, 9-20.
- 27. Johnson, D.A., (2004), "Wall Jet Development in a Turbulent Recirculating Cavity Flow", Chemical Engineering Communications, 191, 5, 625-640.
- 28. Mamun, M.*, Leong, W.H., Hollands, K.G.T., and D.A. Johnson, (2003), "Cubical-cavity natural-convection benchmark experiments: an extension", International Journal of Heat and Mass Transfer, 46, 3655-3660.
- 29. Johnson, D.A., Sperandei, B.*, and Gilbert, R.*, (2003) "Analysis of the Flow through a Vented Automotive Brake Rotor", ASME J. of Fluids Engineering, 125, 6, 979-986.
- 30. Gilbert, R.*, and D.A. Johnson, (2003), "Evaluation of FFT based cross-correlation algorithms for PIV in a periodic grooved channel", Experiments in Fluids, 34, 473-483.
- 31. Johnson, D.A., (2001), "Analysis of the Immediate Boundary Conditions of an Axial Flow Impeller", ASME Journal of Fluids Engineering, 123, 771-779.
- 32. Stan, G.*, and D.A. Johnson, (2001), "Experimental and Numerical Analysis of Turbulent Opposed Impinging Jets", AIAA Journal, 39, 10, 1901-1908.

- 33. Johnson, D.A. and P.E. Wood, (2000), "Self-Sustained Oscillations in Opposed Impinging Jets in an Enclosure", Canadian J. of Chemical Engineering, 78, 5, 867-875.
- 34. Johnson, D.A., (2000), "Experimental and Numerical Examination of Confined Laminar Opposed Jets Part I. Momentum Imbalance", Int. Comm. Heat Mass Trans, 27, 443-454.
- 35. Johnson, D.A., (2000), "Experimental and Numerical Examination of Confined Laminar Opposed Jets Part II.Momentum Balancing", Int Comm Heat Mass Transfer, 27, 455-463.
- 36. Johnson, D.A., Wood, P.E., and A.N. Hrymak, (1996), "The Effect of Geometrical Parameters on the Flow Field of an Opposed Jet RIM Mix Head: Equal Flow and Matched Fluids", Canadian Journal of Chemical Engineering, 74, 40-48.
- 37. Wood, P., Hrymak, A., Yeo, R., Johnson, D.A. and A. Tyagi, (1991), "Experimental and Computational Studies of the Fluid Mechanics in an Opposed Jet Mixing Head", Physics of Fluids A, 3, 5, 1362-1368.
- 38. Johnson, D.A. and M. Shoukri, (1989), "An Experimental and Numerical Investigation of Turbulent Recirculating Flow in a Cavity with an Inlet Wall Jet", Chemical Engineering Communications, 86, 225-239.

Submitted to Refereed Journals

39. Gharali, K.*, D.A. Johnson, Lam, V.* and Gu, M.* (2014), "A 2D blade element study of a wind turbine rotor under yaw loads", *submitted to* Wind Engineering 14/08/2014

Refereed Book Chapters

- 40. Gertz, D.*, Johnson, D.A. and N. Swytink-Binnema*, "Comparative Measurements of the Effect of a Winglet on a Wind Turbine", in *Wind Energy-Impact of Turbulence*, Hölling, Peinke, Ivanell, eds. Springer, 2014 ISBN 978-3-642-54696-9
- 41. Gharali, K.*, Johnson, D.A. and V. Lam*, "Unsteady Flow Investigation Around a Pitching Wind Turbine Blade Element", in *Part III: Experiments, Wind Energy-Impact of Turbulence*, Hölling, Peinke, Ivanell, eds. Springer, 2014 ISBN 978-3-642-54696-9

Fully Refereed Conference Proceedings

- 42. Gharali, K.*, Tam, N.* and D.A. Johnson, "A PIV Load and Flow Study of a Serrated Dynamic Airfoil ", 17th Int. Symp. Appl Laser Tech Fluid Mechanics, July 7-10, 2014, Lisbon, Portugal, 10 pp.
- 43. Almutairi, Z.*, D.A. Johnson and Ren, C., "μPIV Study of Passive Droplet Generation in a T-junction in the Squeezing, Transition, and Dripping Regimes", 17th Int. Symp. Appl Laser Tech Fluid Mechanics, July 7-10, 2014, Lisbon, Portugal, 8 pp.
- 44. Swytink-Binnema, N.* and D.A. Johnson, "Novel Image Analysis Method for Blade Aerodynamic Performance on an Operational Turbine", The Science of Making Torque from Wind, June 17-20, 2014, Copenhagen, DK, 10 pp.
- 45. Abdelrahman, A.* and D.A. Johnson, "Experimental Testing of Axial Load Alleviation using Trailing Edge Flaps: Static Flap Angles Case", The Science of Making Torque from Wind, June 17-20, 2014, Copenhagen, DK, 11 pp.

- 46. Kashyap,S., Almutairi, Z. *, Bedi, S., Johnson, D., Ren, C., "μPIV Study of the Circulation Flow Fields Inside a Moving Droplet In the Presence As Well As Absence of Surfactants", ICNMM2014, Chicago, IL, USA, Aug 3-7, 2014.
- 47. Almutairi, Z.*, Ren, C. and D.A. Johnson, "Experimental Study of the Hydrodynamic Resistance of Liquid Droplets in Polycarbonate Microchannels" APS meeting, Denver, CO, March 2014.
- 48. Gharali, K.*, Gu, M.* and D.A. Johnson, "Reduced frequency effects on dynamic stall phenomena", 10th Int. Symp. Particle Image Velocimetry, Delft, NL July 1-3, 2013
- 49. Gu, M.* and D.A. Johnson, "Coherent structures in flow around a pitch-oscillating square cylinder", 10th Int. Symp. Particle Image Velocimetry, Delft, Netherlands July 1-3, 2013
- 50. Gharali, K.*, Gu, M.* and D.A. Johnson, "A PIV Study of a Low Reynolds Number Pitch Oscillating SD7037 Airfoil ", 16th Int. Symp. Appl Laser Tech Fluid Mechanics, Lisbon, Portugal, July 9-12, 2012, 10 pp.
- 51. Gertz, D.*, Johnson, D.A. and N. Swytink-Binnema*, "Experimental Evaluation of a Wind Turbine Blade Winglet", EUROMECH 528, Oldenburg, Germany, Feb 22-24, 2012
- 52. Gharali, K.*, Lam, V.* and D.A. Johnson, "Unsteady Flow Investigation around a Pitching Wind Turbine Blade Element", EUROMECH 528, Oldenburg, Germany, February 22-24, 2012
- 53. Almutairi, Z.*, Ren, C., and D.A. Johnson, "Effects of Hydrophobic Recovery of Plasma Treated PDMS on Surface Tension Driven Flow", ASME 2010 3rd US-European Fluids Eng., FEDSM2010-ICNMM2010 -31243, Montreal, QC, Canada, Aug 1-5, 2010, 6 pp.
- 54. Gertz, D.* and D.A. Johnson, "An Evaluation Testbed For Alternative Wind Turbine Blade Tip Designs", International Green Energy Conference IGEC V, Waterloo, Canada, June 1-3, 2010.
- 55. Bale, A.*, Orlando, S.* and D.A. Johnson, "Design and Preliminary Testing of a MEMS Microphone Phased Array for Aeroacoustic Testing of a Small-Scale Wind Turbine Airfoil", International Green Energy Conference IGEC V, Waterloo, Canada, June 1-3, 2010.
- 56. Lam, V.* and D.A. Johnson, "Wind resource assessment and loss factors for small wind turbines", International Green Energy Conference IGEC V, Waterloo, Canada, June 1-3, 2010.
- 57. Gharali, K.* and D.A. Johnson, "Numerical Modeling Of Pitch Oscillating S809 Airfoil Dynamic Stall In 2D With Application To A Horizontal Axis Wind Turbine", International Green Energy Conference IGEC V, Waterloo, Canada, June 1-3, 2010.
- 58. Orlando, S.*, Bale, A.* and D.A. Johnson, "Design And Preliminary Testing Of A MEMS Microphone Phased Array", Proceedings of Berlin Beamforming Conference BeBeC, Berlin, Germany, February 24-25, 2010, 8 pp.
- 59. Gharali, K.* and D.A. Johnson, "Pressure and Acceleration Determination Methods Using the PIV Velocity Data Set", ASME Fluids Engineering Division, Jacksonville, FL, 657-664, FEDSM2008-55157, August 10-14, 2008.

- 60. McWilliam, M.* and D.A. Johnson, "Development of a Wind Tunnel Test Apparatus for Horizontal Axis Wind Turbine Rotor Testing", ASME 2nd International Conference on Energy Sustainability, Jacksonville, FL, 679-687, ES2008-54194 August 10-14, 2008.
- 61. Johnson, D.A., "Renewables-based Micro Grid Development for Remote Communities", 14th Technology Summit: Clean Technologies, Hotel The Grand, Delhi, India, Sponsor Cdn. Dept. Foreign Affairs (Invited), Dec. 4-6, 2008.
- 62. Gaunt, B.* and D.A. Johnson, "The Effect of Wind Turbine Airfoil Pitching on Stall", ASME 2nd International Conference on Energy Sustainability, Jacksonville, FL USA, ES2008-54231, August 10-14, 2008.
- 63. Parker, P. and D.A. Johnson, "Renewable Energy in Remote Communities: First Nations and a wind-based strategy", 2008 Canadian Association of Geographers Annual Meeting, Université Laval, Quebec, Canada May 20-24, 2008.
- 64. Almutairi, Z.*, Glawdel, T., Ren, C., and D. A. Johnson, "A Novel Y-Channel Design for Measuring the Zeta Potential using the Current Monitoring Technique", Proceedings of IMECE2007 ASME International Mechanical Engineering Congress and Exposition, Seattle, Washington, USA, IMECE2007-42240, November 11-15, 2007, 7 pp.
- 65. Johnson, D.A., Pedersen, N., and C.B. Jacobsen, "Experimental Measurements of the Effect of Blade Number on a Centrifugal Pump Impeller" CMFF'06 Conf. on Modelling Fluid Flow, 13th Intl Conf. Fluid Flow Tech., Budapest, HU, Sept. 6-9, 2006, 8 pp.
- 66. Young, C.* and D.A. Johnson, "Enhanced Particle Tracking Algorithm Based On A Modified Expectation Maximization Algorithm", 13th Int'l. Symp. on Applications of Laser Tech. to Fluid Mechanics, Lisbon, Portugal, June 26-29, 2006, 10 pp.
- 67. Johnson, D.A., Pedersen, N., and C.B. Jacobsen, "Measurements of Rotating Stall inside a Centrifugal Pump Impeller", 5th Int. Symp. Pumping Machinery, ASME Fluids Eng. Conf., Houston, Texas, 1436-1443, FEDSM2005-77313, June 19-23, 2005, 13 pp.
- 68. Mamun, M.*, Johnson, D.A., Leong, W.H. and T. Hollands, "PIV Measurements of the Flow Field inside an Enclosed Cubical Cavity in Natural Convection", 12th Int'l Symp. Appl. Laser Techniques to Fluid Mechanics, Lisbon, Portugal, July 12-15, 2004, 13 pp.
- 69. Young, C.*, Johnson, D.A., and E.Weckman, "Application of Invariant Feature Matching and Multiquadratic Smoothness for Validation in Cross Correlation PIV", 11th Intl. Symp. Appl. of Laser Tech. Fluid Mechanics, Lisbon, Portugal, July 8-11, 2002, 14 pp.
- 70. Young, C.*, Gilbert, R.*, Johnson, D.A., and E. Weckman, "Vector Positioning for cross correlation PIV" Flow Visualization and Laser Anemometry Symposium, ASME Fluids Engineering Div., Montreal, Canada, FEDSM2002-31171, 183-192 July 14 18, 2002.
- 71. Johnson, D.A., Weckman, E., and P. Orakwe*, "Examination of Welding Nozzle Jet Flow at Cold Flow Conditions", Flows in Manufacturing Processes Symposium, ASME Fluids Eng Div, Montreal, Canada, FEDSM2002-31375, 3-11 July 14-18, 2002, 9 pp.
- 72. Johnson, D. A., and C. Onwuama*, "Experimental Investigation of Flow Separation and Blade Loading in a Low Specific Speed Centrifugal Impeller", Fourth International Symposium on Pumping Machinery, ASME Fluids Engineering Division, New Orleans, LA, 2, 271-278, FEDSM2001-18075, May 29-June 1, 2001, 8 pp.

- 73. Johnson, D. A. and G. Stan*,"Experimental Examination of Turbulent Opposed Impinging Jets", Forum on Turbulent Flows, ASME Fluids Engineering Division, Boston, MA, 251, 59-65, FEDSM00-11169 June 11-15, 2000, 7 pp.
- 74. Johnson, D.A., Hrymak, A., and P.Wood,"Experimental and Numerical Examination of an Opposed Jet Rim Mix Head at Process Conditions", Symp. Flows in Manufacturing Proc., ASME Fluids Eng., Washington, DC, FEDSM98-4905, June 21-25, 1998, 10 pp.

Conferences (accepted based on abstract)

- 75. Gallant, T.* and D.A. Johnson, "Analysis of Wind Turbine Blade Stall using Tuft Flow Visualization", 25th Canadian Congress of Applied Mechanics (CANCAM 2015) May 31-June 4, 2015, London.
- 76. Tam, N.*, Gharali, K. and D.A. Johnson, "Aerodynamic And Acoustic Effects of a Serrated Trailing Edge on Wind Turbine Blades", 25th Canadian Congress of Applied Mechanics (CANCAM 2015) May 31-June 4, 2015, London.
- 77. Ghorbanishohrat, F.* and D.A. Johnson, "Oil Flow Visualization of the Laminar Separation Bubble on a SD 7037 Airfoil", 25th Canadian Congress of Applied Mechanics (CANCAM 2015) May 31-June 4, 2015, London.
- 78. Gallant, T.* and D.A. Johnson, "Measurement of Rotating Wind Turbine Blade Angle Of Attack with a Five-Hole Pressure Probe", 5th Canadian Congress of Applied Mechanics (CANCAM 2015) May 31-June 4, 2015, London.
- 79. Gallant, T.* and D.A. Johnson, "Analysis of Wind Turbine Blade Stall in a Large Wind Tunnel Setting Using Tuft Flow Visualization", 1000 Island Energy Research Forum, Ottawa Oct. 23-25, 2014.
- 80. Tam, N.* and D.A. Johnson, "Aerodynamic And Acoustic Effects of a Serrated Trailing Edge On Wind Turbine Blades", 1000 Island Energy Research Forum, Ottawa Oct. 23-25, 2014.
- 81. Ghorbanishohrat, F.* and D.A. Johnson, "Effects of the laminar separation bubble on the performance of a small wind turbine blade", 1000 Island Energy Research Forum, Ottawa Oct. 23-25, 2014.
- 82. Johnson, D., Moscardi, A.* and K. Gharali*, "Performance of a Wind Turbine under Yaw loads using a multi-hole pressure probe", CanWEA 30th Ann Conf. Montreal, Canada Oct 27-29, 2014.
- 83. Johnson, D., Tam, N.*, Abdelrahman, A.*, and K. Gharali*, "The Effects of Turbine Blade Trailing Edge Serrations for Noise Reduction and Performance Enhancement", CanWEA 30th Ann Conf. Montreal, Canada Oct 27-29, 2014.
- 84. Abdelrahman, A.*, Knischewsky, C.*, and D. Johnson, "Experimental Testing of Load Alleviation using Trailing Edge Flaps: Rig Design and Instrumentation", CanWEA 29th Ann Conf./WESNet, Toronto, Can, Oct 7-10, 2013. 1st prize WESNet peer competition.
- 85. Johnson, D., Knischewsky, C.*, Swytink-Binnema, N.*, and N. Tam, "Performance Monitoring System including blade aerodynamics of a Passively-Controlled Wind Turbine", CanWEA 29th Ann Conf. Toronto, Canada Oct 7-10, 2013.
- 86. Swytink-Binnema, N.* and D. Johnson, "The Pitching Mechanism on a 30 kW Wind Turbine", CanWEA 29th Ann Conf. Toronto, Canada Oct 7-10, 2013.
- 87. Tam, N. * and D. Johnson, "Implementation of a Wireless Data Acquisition System on a Wind Turbine", CanWEA 29th Ann Conf. Toronto, Canada Oct 7-10, 2013.

- 88. Tam, N.*, Johnson, D., Knischewsky, C.*, and N. Swytink-Binnema*, "Implementing a data acquisition system on a 30kW wind turbine", 1000 Island Energy Research Forum, TIERF, Queen's University, Kingston, Canada, June 13-15, 2013.
- 89. Abdelrahman, A.*, and D. Johnson, "Experimental indirect determination of wind turbine performance and Blade Element Theory parameters in controlled conditions", 1000 Island Energy Research Forum, TIERF, Queen's University, Canada June 13-15, 2013.
- 90. Gu, M.*, Swytink-Binnema, N.*, and D. Johnson, "Blade Element Momentum Modeling in Support of Experimental Measurements on a 30kW Wind Turbine", 1000 Island Energy Research Forum, TIERF, Queen's University, Kingston, Canada, June 13-15, 2013.
- 91. Swytink-Binnema, N.* and D. Johnson, "Passive Pitch Control on a 30 kW Wind Turbine", 1000 Island Energy Research Forum, TIERF, Queen's University, Kingston, Canada, June 13-15, 2013.
- 92. Johnson, D.A., "Controlled Wind Facility for Turbine Evaluation", Invited Talk, Advanced Energy Conference 2013, New York, NY, US Apr. 30-May 1, 2013.
- 93. Abdelrahman, A.*, Swytink-Binnema, N.* and D. A. Johnson, "Ongoing experimental study of Nacelle Velocity Measurements", NSERC WESNet Ann. Meeting, Toronto, Canada, Oct. 17 2012.
- 94. Swytink-Binnema, N.* and D. Johnson, "Oil Flow Visualization on Blade Tips", CanWEA 28th Ann Conf. Toronto, Canada, Oct 14-17, 2012. 1st prize WESNet paper competition.
- 95. Abdelrahman, A.* and D. Johnson, "Experimental measurement of wind turbine performance through Blade Element Theory", CanWEA 28th Ann Conf. Toronto, Canada, Oct 14-17, 2012.
- 96. Gharali, K.*, Gu, M.* and D. Johnson, "Experimental and Numerical Study of a Pitch Oscillating Airfoil", CanWEA 28th Ann Conf. Toronto, Canada, Oct 14-17, 2012
- 97. Almutairi, Z.*, Glawdel, T., Ren, C. and D. Johnson, "Experimental Studies of Liquid/Liquid Droplets Transport in Curved Microchannels", 64th Annual Meeting of the APS Division of Fluid Dynamics, Baltimore, Maryland, US, Nov.20-22, 2011
- 98. Bale, A.* and D. Johnson, "The Application of MEMS Microphone Arrays to Aeroacoustic Measurements", (Invited), CanWEA 27th Ann Conf. Vancouver, Canada, Oct 3-6, 2011
- 99. Swytink-Binnema, N.* and D. A. Johnson, "Wind tunnel testing of nacelle/rotor arrangement", NSERC WESNet Annual Meeting, Vancouver, Canada, Oct. 6, 2011
- 100. Gharali, K.* and D. Johnson, "Unsteady Flow Investigation Around a Pitching Wind Turbine Blade", CanWEA 27th Ann Conf., Vancouver, Canada, Oct 3-6, 2011
- 101. Gertz, D.* and D. A. Johnson, "The Design, Fabrication, and Testing of a Wind Turbine Blade with Interchangeable Tips", Proceedings of CSME FORUM 2010, Victoria, Canada, June 7-9, 2010
- 102. Gertz, D.* and D. Johnson, "Experimental prediction of wind turbine performance through velocity measurements", 22nd Canadian Congress of Applied Mechanics", Halifax, Canada, May 31-June 4th, 2009
- 103. Gaunt, B.* and D.A. Johnson, "Wind Turbine Performance: Power Production and Flow Visualization Experiments in a Controlled Environment", Canadian Wind Energy Association (CanWEA) 25th Annual Conference, Toronto, Canada, Sept. 20-23, 2009

- 104. Orlando, S.*, Bale, A.*, Gertz, D.* and D.A. Johnson, "Effect of Tower Shadow on Anemometer Readings", Canadian Wind Energy Association (CanWEA) 25th Annual Conference, Toronto, Canada, Sept. 20-23, 2009
- 105. McWilliam, M.*, Johnson, D.A., Gharali, K.*, McPhee*, A., Gaunt, B.*, Skensved, E.*, Orlando, S.*, Bale, A.*, Gertz, D.* and V. Lam*, "Wind Energy Research", Canadian Wind Energy Association (CanWEA) 24th Ann Conf, Vancouver, Canada, Oct. 19- 22, 2008
- 106. Gertz, D.* and D. Johnson, "Wind Tunnel Testing of a Wind Turbine Blade with Interchangeable Tips", 1000 Island Energy Research Forum, TIERF, Alexandria Bay, NY, Nov. 12-14, 2010
- 107. Lam, V.* and D. Johnson, "Method of analysing the long-term turbulence level from meteorological data", 1000 Island Energy Research Forum, TIERF, Alexandria Bay, NY, Nov 12-14, 2010
- 108. Gharali, K.* and D. Johnson, "Unsteady modeling of dynamic stall phenomena with application to a Horizontal Axis Wind Turbine", CanWEA 26th Ann Conf., Montreal, Canada, Nov. 1-3, 2010
- 109. Gertz, D.* and D. Johnson, "Analysis of Wind Turbine Blade Tips", Canadian Wind Energy Association (CanWEA) 26th Ann Conf., Montreal, Canada, Nov. 1-3, 2010
- 110. Bale, A.* and D. Johnson, "Locating Noise Sources With A Microphone Array", Canadian Wind Energy Association (CanWEA) 26th Ann Conf., Montreal, Canada, Nov. 1-3, 2010
- 111. Lam, V.* and D. Johnson, "Turbulence levels determined from meteorological data", Canadian Wind Energy Association (CanWEA) 26th Ann Conf., Montreal, Canada, Nov. 1-3, 2010
- 112. Gertz, D.* and D.A. Johnson, (2010), "The Design, Fabrication, and Testing of a Wind Turbine Blade with Interchangeable Tips", CSME Forum, Victoria, Canada, June 7 9, 2010
- 113. Gaunt, B.*, Gertz, D.*, Orlando, S.* and D. A. Johnson, "Wind tunnel testing of nacelle/rotor arrangement of a Full Scale Wind Turbine", WESNet Workshop at ÉTS, Montréal, Canada, May 27, 2010
- 114. Gaunt, B.* and D.A. Johnson, "Wind Turbine Performance: Power Production and Flow Visualization Experiments in a Controlled Environment", Canadian Wind Energy Association (CanWEA) 25th Annual Conference, Toronto, Canada, Sept. 20-23, 2009
- 115. Orlando, S.*, Bale, A.*, Gertz, D.* and D.A. Johnson, "Effect of Tower Shadow on Anemometer Readings", Canadian Wind Energy Association (CanWEA) 25th Annual Conference, Toronto, Canada, September 20-23, 2009
- 116. Johnson, D.A., "Wind-Diesel-Storage Project at Kasabonika Lake First Nation", (invited) 2009 Wind-Diesel Workshop, Ottawa, Canada, June 1-2, 2009
- 117. Gaunt, B.* and D.A. Johnson "Investigating Airflow over an Oscillating Wind Turbine Airfoil In the Stalled Region", Can. Wind Energy Conf., Quebec, Canada Sept 30–Oct 3, 2007
- 118. McWilliam, M.* and D.A. Johnson "Research in Dynamic Stall", Canadian Wind Energy Association Conference, Quebec, Canada, Sept. 30 Oct. 3, 2007
- 119. Johnson, D.A., "Aerodynamic Measurements on Wind Turbines", 19th annual Canadian Power Conference Association of Power Producers of Ontario (APPrO), Toronto, Canada, Nov. 13-14, 2007

- 120. Soltani, M.*, Johnson, D.A., and A. Ashrafizadeh , "Investigations on the duct design strategies and some preliminary results", CANCAM 2007, Toronto, Canada, June 3–7 2007, CANCAM07-ETS-107
- 121. Almutairi, Z.*, Ren, C. and D.A. Johnson, "Area Averaged Method for Velocity Measurements in Microchannels", CANCAM 2007, Toronto, Canada, June 3–7, 2007
- 122. McWilliam, M.* and D.A. Johnson, "CFD Study in the Applicability of Wind Tunnel Testing for Wind Turbines", CANCAM, Toronto, Canada, June 3–7, 2007
- 123. McWilliam, M.* and D.A. Johnson, "Wind Turbine Aerodynamic Research", Canadian Wind Energy Association Conference, Winnipeg, Canada, Oct. 22–25, 2006
- 124. McPhee, A.* and D.A. Johnson, "Experimental Heat Transfer and Flow Analysis of a Vented Brake Rotor" CSME FORUM 2006, Kananaskis, Canada, May 21-24, 2006 * **Best Paper Competition 2nd place**
- 125. McWilliam, M.* and D.A. Johnson, "Effect of Blade Geometry Distribution on Overall Wind Turbine Performance in Varying Environments" CSME FORUM 2006, Kananaskis, Canada May 21-24, 2006 * **Best Paper Competition 3rd place**
- 126. McWilliam, M.* and D.A. Johnson,"Velocity Measurement Of Savonius Wind Turbines" IGEC-2 2nd International Green Energy Conf., Oshawa, Canada June 25-29, 2006 10pp
- 127. McWilliam, M.* and D.A. Johnson, "Wind Turbine Aerodynamic Research" 2006 CanWEA Annual Conference, Winnipeg, Canada, October 22-27, 2006
- 128. Kim, B.*, Johnson, D.A., and Macdonald, R., "Water Flume Measurements of Pollutant Dispersion in Simulated Street Canyons with Planar Laser-Induced Fluorescence", PHYSMOD 2005 Int'l Wkshp on Phys. Mod. Flow, London, Canada, Aug. 24-26, 2005
- 129. Johnson, D.A., Pedersen, N., and C.B. Jacobsen, "Off Design Velocity Measurements in an Impeller of a Centrifugal Volute Pump", 20th Canadian Congress of Applied Mechanics, CANCAM 2005, Montreal, Canada, May 30-June 2, 2005
- 130. Nguyen, T.C. *, Weckman, D.C., Johnson D.A. and H.W. Kerr, "Predicting the Onset of High-Speed GMA Weld Defects", invited session "Modeling of Weld Defects Understanding and Prevention", American Welding Society (AWS), Chicago, US Nov 13-16, 2005, 05.5-032
- 131. T. C. Nguyen*, Weckman, D.C., Johnson, D.A. and H. W. Kerr, "The Humping Phenomenon in High Speed GMA Welds" Session 5: GMAW Ferrous 2, 85th Annual AWS Convention, Chicago, USA, April 6-8, 2004
- 132. Weisinger, J.*, Taylor, W.*, Johnson, D. and E. Weckman, "Characterization of the UW live fire research facility", 2003 Combustion Institute/Canadian Section Spring Technical Meeting, Vancouver, Canada, May 11–14, 2003
- 133. Weckman, E., Johnson, D. and Strong, A., 2003. University of Waterloo Live Fire Research Facility. *Fire Safety Science* 7: 113-114. doi:10.3801/IAFSS.FSS.7-113
- 134. Mamun, M.*, Johnson, D.A., and T. Hollands, "Natural Convection Heat Transfer and Flow Measurement across a Cubical Cavity", CSME Forum 2002, Queen's University, Kingston, Canada, May 21-24, 2002
- 135. Sperandei, B.* and D.A. Johnson, "Analysis of Turbulent Flow and Separation in a Vented Rotor", CSME Forum 2002, Kingston, Canada, May 21-24, 2002.
- 136. Gilbert, R.*, Johnson, D.A., Nadeau, B., and R. Sporzynski, "Experimental Airflow Measurements for a Series of Brake Rotors", 18th Annual SAE Brake Colloquium, San Diego, US, Oct. 1-4, 2000

- 137. DeMarco, F.*, Johnson, D.A., and E. Weckman, "Annular Jet Impingement On A Flat Plate: Moderate Reynolds Number", 17th Canadian Congress of Applied Mechanics CANCAM 99, Hamilton, Canada, May 30-June 3, 1999, pp. 163-164.
- 138. Johnson, D.A. and P.E. Wood, "Examination of Oscillations in the Flow Field of an Opposed Jet Mix Head", 17th Canadian Congress of Applied Mechanics CANCAM 99, Hamilton, Canada, May 30-June 3, 1999, pp. 167-168.
- 139. Johnson, D.A. and G.Stan*, "Examination of Free and Confined Directly Opposed Jets with Application to the Side Dump Combustor", 7th Aerodynamics Symposium, Canadian Aeronautics and Space Institute, Montreal, Canada, May 2-5, 1999, pp. 189-198.
- 140. Johnson, D.A. and P.E. Wood, "An Investigation of Wall Jet Driven Turbulent Recirculating Flow in a Cavity PIV Measurements", Symp. on Thermal and Fluids Engineering, Canadian Society for Mechanical Engineering (CSME) Forum '98, Toronto, Canada, May 19-22, 1998, pp. 201-209.
- 141. Wood, P.E., Hrymak, A.N., Johnson, D.A., and R.W. Yeo, "Experimental and Computational Study of the Flow Field in Impinging Jet Mixers", 45th Can. Chem. Eng. Conf., Quebec City, Canada, Oct. 15-18, 1995.
- Johnson, D.A., Wood, P.E., and A.N. Hrymak, "Mixing Quality Visualization Techniques for Jet Impingement Mix Heads", Proceedings Polymer Processing Society 7th Annual Meeting, Hamilton, Canada, April 21-24, 1991, p. 374.
- Hrymak, A.N., Wood, P.E., and D.A. Johnson, "Impingement Mixing of Liquids in Reaction Injection Molding", SPE ANTEC, Montreal, Canada, 1991, 37, 2329-2333.