

Publications and Presentations

- 82) R. Shukla and K.A. Sallam, "Effect of Liquid Transparency on Laser-Induced motion of Drops," J. Fluids Engineering, In press.
- 81) J. Lee, J., K.A. Sallam, K.-C. Lin, K.-C., and C.D. Carter, (2009), "Spray Structure in Near-Injector Region of Aerated Jet in Subsonic Crossflow," J. Prop. Power, Vol. 25, No. 2, pp. 258-266.
- 80) J. Lee, B. Miller, and K.A. Sallam, (2009), "Demonstration of Digital Holographic Diagnostics for the Breakup of Liquid Jets Using a Commercial-Grade CCD Sensor," Atom. Sprays, Vol. 19, No. 5, pp. 445-456.
- 79) J. Lee and K.A. Sallam, "Three-Dimensional Motion of Polymer Jets during Electrospinning of Nanofibers," Oklahoma EPSCoR Annual State Conference, March 31 – April 1, 2009, Oklahoma City, Oklahoma (Poster Only).
- 78) J. Lee and K.A. Sallam, "Three-Dimensional Motion of Polymer Jets during Electrospinning of Nanofibers," 20th Annual OSU Research Symposium and Research Scholar Conference Wednesday, February 18 - 20, 2009 (Poster Only).
- 77) A. Osta and K.A. Sallam, "The Effect of the Nozzle Length to Diameter Ratio on the Surface Properties of Turbulent Liquid Jets in Gaseous Crossflow," AIAA paper No. 2009-1374, 47th AIAA Aerospace Sciences Meeting, Orlando, Florida, January 2009.
- 76) D.S. Olinger, K.A. Sallam, K.-C. Lin, and C. Carter, "Effects of GLR on the Spray Structure in the Near-Injector Region of Aerated Liquid Jets in Subsonic Crossflow," AIAA paper No. 2009-1373, 47th AIAA Aerospace Sciences Meeting, Orlando, Florida, January 2009.
- 75) B. Miller, K.A. Sallam, M. Bingabr, K.-C. Lin and C. Carter (2008), "Breakup of Aerated Liquid Jets in Subsonic Crossflow," J. Prop. Power, Vol. 24, No. 2, pp. 253-258 (Times cited 1).
- 74) C.-L. Ng, R. Sankarakrishnan, and K.A. Sallam (2008), "Bag Breakup of nonturbulent liquid jets in crossflow," Int. J. Multiphase Flow, Vol. 34, No. 3, pp. 241-259.
- 73) J. Lee and K.A. Sallam, "Orthogonal Double View Digital Holographic Diagnostics for Random Motion of Micro Polymer Jet by Electrospinning," APS 61th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 53, No. 15, pp. 127, 2008 (Abstract Only).
- 72) A. Osta and K.A. Sallam, "Effect of Nozzle Passage Length on the Surface Properties of Turbulent Liquid jets in Cross^{ow}," APS 61th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 53, No. 15, pp. 145, 2008 (Abstract Only).
- 71) D.S. Olinger and K.A. Sallam, "Toward a Fully-Automated Digital Holographic Spray Analyzer," AIAA Paper No. 2008-4045, 38th Fluid Dynamics Conference, Seattle, Washington, 2008.
- 70) D.S. Olinger, J. Lee, A. Osta, and K.A. Sallam, "Single- and Double-View Digital Holographic Diagnostics for Sprays," 21st Annual ILASS-Americas Conference, Orlando, Florida, May 18–21, 2008.
- 69) J. Lee, and K.A. Sallam, "Holographic Diagnostics for the Breakup of Micro Liquid Jets," Proceedings of the 28th Oklahoma AIAA/ASME Symposium, Saturday, March 8, 2008, Tulsa, OK (Abstract Only).
- 68) A. Osta, D. Olinger, and K.A. Sallam, "Investigating the Onset of Primary Breakup of Liquid Jets Using Digital Holographic Microscopy," Proceedings of the 28th Oklahoma AIAA/ASME Symposium, Saturday, March 8, 2008, Tulsa, OK (Abstract Only).
- 67) K.A. Sallam, A.M. El-Leathy, A. Narasimhan, and V. Joseph, "The Mechanism of Beads Formation during Electrospinning of Biodegradable Nanofibers," NanoFocus and Oklahoma NSF EPSCoR Annual State Conference, Oklahoma City, Oklahoma, March 6-7, 2008 (Poster Only).
- 66) J. Lee, K.A. Sallam, K.-C. Lin and C. Carter, "Spray Structure in Near-Injector Region of Aerated Jet in Subsonic Crossflow," AIAA paper No. 2008-1043, 46th AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2008.
- 65) A.R. Osta and K.A. Sallam, "Effect of Injector Length/Diameter Ratio on the Breakup of Round Liquid Jet in Crossflow," AIAA paper No. 2008-1040 2008, 46th AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2008.
- 64) K. Lee, C. Aalburg, F.J. Diez, G.M. Faeth, and K.A. Sallam (2007), "Primary Breakup of Turbulent Round Liquid Jets in Uniform Crossflows," AIAA Journal, Vol. 45, No. 8, pp. 1907-1916.
- 63) A.M. El-Leathy and K.A. Sallam, "Effect of Polymer Concentration on Beads Formation during Electro Spinning of Nanofibers," Twelfth International Conference on Aerospace Sciences and Aviation Technology, ASAT-12, May 29-31, 2007, Cairo, Egypt.
- 62) R. Shukla and K.A. Sallam, "Effect of Liquid Transparency on Laser-Induced-Motion of Drops," APS 60th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 52, No. 17, pp. 22-23, 2007 (abstract only).

- 61) D. Olinger and K.A. Sallam, "Automating Digital Holographic Spray Analysis," APS 60th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 52, No. 17, pp. 151, 2007 (abstract only).
- 60) K.A. Sallam, A. Osta, and A.M. El-Leathy, "Instabilities of Charged Liquid Jet of Polymer Solution and Electrospinning of Nanofibers," APS 60th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 52, No. 17, pp. 269, 2007 (abstract only).
- 59) A. Osta and K.A. Sallam, "Effect of Nozzle Length/Diameter Ratio on the Breakup of Liquid Jets in Crossflow," APS 60th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 52, No. 17, pp. 150, 2007 (abstract only).
- 58) J. Lee and K.A. Sallam, "Breakup of Micro Liquid Jets in Crossflow," APS 60th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 52, No. 17, pp. 247, 2007 (abstract only).
- 57) J. Lee, B. Miller, K.A. Sallam, and M. Bingabr, "Digital Double-Pulsed Microscopic Holography Diagnostics for Sprays using Commercial-Grade CCD," International Conference on Multiphase Flow, ICMF 2007, Leipzig, Germany, July 9 – 13, 2007.
- 56) J. Lee, B. Miller, K.A. Sallam, K.-C. Lin, and C. Carter, "Velocity and Size Measurements of Aerated Spray using Digital Microscopic Holography," ILASS-AMERICAS 2007, May 15-18, 2007 - Chicago, Illinois.
- 55) A. Narasimhan, A.M. El-Leathy, and K.A. Sallam, "Electrospinning of Polymeric Nano-Spheres," Oklahoma NSF EPSCoR Annual State Conference, Stillwater, Oklahoma, May 17, 2007 (Poster only).
- 54) A. Narasimhan, J. Lee, A.M. El-Leathy, and K.A. Sallam, "Generation of Biodegradable Nano-Spheres," 5th annual NanoMaterials for Defense Applications Symposium: Accelerating the Transition, 23 - 26 April 2007 in San Diego, CA. (Poster only).
- 53) R. Shukla and K.A. Sallam, "Laser Induced Micro Drop Motion," Proceedings of the 27th Oklahoma AIAA/ASME Symposium, Saturday, March 31, 2007, Tulsa, OK (Abstract Only).
- 52) A. Osta, and K.A. Sallam, "Effect of Injector Length/Diameter Ratio on the Breakup of Liquid Jets in Crossflow," Proceedings of the 27th Oklahoma AIAA/ASME Symposium, Saturday, March 31, 2007, Tulsa, OK (Abstract Only).
- 51) B. Miller, K.A. Sallam, M. Bingabr, K.-C. Lin and C. Carter, "Secondary Breakup of Aerated Liquid Jets in Subsonic Crossflow," AIAA paper No. 2007-1342, 45th AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2007.
- 50) K.A. Sallam, C. Aalburg, G.M. Faeth, K.-C. Lin, C.D. Carter, and T.A. Jackson (2006), "Primary Breakup of Aerated-Liquid Jets in Supersonic Crossflows," Atomization and Sprays, Vol. 16, No. 6, pp. 657-672 (Times cited 2).
- 49) K.A. Sallam, C.-L. Ng, and R. Sankarakrishnan, "On Breakup Regime Transitions of Liquid Jets in Gaseous Crossflow," APS 59th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 51, No. 9, pp. 95, 2006 (abstract only).
- 48) B. Miller, K.A. Sallam, K.-C. Lin and C. Carter, "Digital Holographic Spray Analyzer," ASME paper No. FEDSM2006-98526, ASME Joint U.S.-European Fluids Engineering Summer Meeting, Miami, Florida, July 2006.
- 47) S. Bogadi and K.A. Sallam, "Primary Breakup of a Charged Round Liquid Jet in a Cross Electric Field," Proceedings of the 26th Oklahoma AIAA/ASME Symposium, Saturday, April 15, 2006, Norman, OK (Abstract only).
- 46) B. Miller and K.A. Sallam, "Digital In-Line Holography and its Use in Spray Diagnostics," Proceedings of the 26th Oklahoma AIAA/ASME Symposium, Saturday, April 15, 2006, Norman, OK (Abstract only).
- 45) C.-L. Ng, K.A. Sallam, H.M. Metwally, and C. Aalburg, "3D Simulation of Round Nonturbulent Liquid Jets in Uniform Gaseous Crossflow," Proceedings of the 26th Oklahoma AIAA/ASME Symposium, Saturday, April 15, 2006, Norman, OK (Abstract only).
- 44) K.A. Sallam, C. Aalburg, K. Lee, C.-L. Ng and R. Sankarakrishnan "Breakup of Turbulent and Non-Turbulent Liquid jets in Gaseous Crossflows," AIAA paper No. 2006-1517, 44th AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2006, (Invited).
- 43) C. Aalburg, B. Van Leer, G.M. Faeth and K.A. Sallam (2005), "Properties of Nonturbulent Round Liquid Jets in Uniform Gaseous Crossflows," Atomization and Sprays, Vol. 15 No. 3, pp. 271-294 (Times cited 3).
- 42) K.A. Sallam, C.-L. Ng, and R. Sankarakrishnan, "Bag Breakup of Liquid Jets in Gaseous Crossflow," APS 58th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 50, No. 9, pp. 184-185, 2005 (abstract only).

- 41) G. Bassiri, N. B. Phelps and K.A. Sallam, "Apple Snail: a Bio Cleaner of the Water Free Surface," APS 58th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 50, No. 9, pp. 247, 2005 (abstract only).
- 40) G. Bassiri, B. Miller and K.A. Sallam, "Apple Snail: A Bio Cleaner of Free Surface," APS 58th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 50, No. 9, pp. 10, 2005 (Video Entry).
- 39) R. Sankarakrishnan and K.A. Sallam, "Bubble nest of Siamese Fighting Fish," APS 58th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 50, No. 9, pp. 9, 2005 (Video Entry).
- 38) B. Miller, and K.A. Sallam, "Comparison of Different Holographic Techniques and Their Application to Sprays," OKLAHOMA RESEARCH DAY, University of Central Oklahoma, Edmond, Oklahoma, November 11, 2005 (poster only).
- 37) R. Sankarakrishnan, and K.A. Sallam, "Properties of Turbulent Liquid Jets in Gaseous Crossflow," OKLAHOMA RESEARCH DAY, University of Central Oklahoma, Edmond, Oklahoma, November 11, 2005 (poster only).
- 36) S. Bogadi, and K.A. Sallam, "Properties of Round Nonturbulent Liquid Jets in a Cross Electric Field," OKLAHOMA RESEARCH DAY, University of Central Oklahoma, Edmond, Oklahoma, November 11, 2005 (poster only).
- 35) C.-L. Ng, and K.A. Sallam, "Wave Phenomena and Droplets Properties of Liquid Jets within the Bag Breakup Regime," OKLAHOMA RESEARCH DAY, University of Central Oklahoma, Edmond, Oklahoma, November 11, 2005 (poster only).
- 34) R. Sankarakrishnan, K.A. Sallam, and F.W. Chambers "Effects of Turbulence on the Breakup of Round Liquid Jets in Gaseous Crossflow," ASME paper No. FEDSM2005-77407, ASME Fluids Engineering Summer Conference, Houston, TX, June 2005.
- 33) C.-L. Ng, K.A. Sallam, H.M. Metwally, and C. Aalburg "Deformation and Surface Waves Properties of Round Nonturbulent Liquid Jets in Gaseous Crossflow," ASME paper No. FEDSM2005-77469, ASME Fluids Engineering Summer Conference, Houston, TX, June 2005.
- 32) S. Bogadi and K.A. Sallam, "Pressure-Assisted Electrostatic Atomization of Liquid Jets," 18th Annual Conference on Liquid Atomization and Spray Systems, Irvine, CA, May 2005 (poster only).
- 31) R. Sankarakrishnan, K.A. Sallam, and C.W. Chambers, "Breakup of nonturbulent liquid jets in Turbulent crossflow," 18th Annual Conference on Liquid Atomization and Spray Systems, Irvine, CA, May 2005 (poster only).
- 30) C.-L. Ng, K.A. Sallam, H.M. Metwally, and C. Aalburg "Surface Properties of Round Nonturbulent Liquid Jets in Gaseous Crossflow," 18th Annual Conference on Liquid Atomization and Spray Systems, Irvine, CA, May 2005 (poster only).
- 29) K. Lee, J.F. Diez, G.M. Faeth, C. Aalburg, and K.A. Sallam, "Breakup of Round Turbulent Liquid Jets in Air Crossflows," Proceedings of the 18th Annual Conference on Liquid Atomization and Spray Systems, Irvine, CA, May 2005 (Awarded the Marshall Award, Toronto, Canada, 2006).
- 28) C. Aalburg, G.M. Faeth, and K.A. Sallam, "Primary Breakup of Round Turbulent Liquid Jets in Uniform Gaseous Crossflows," AIAA paper No. 2005-0734, 43rd AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2005.
- 27) K.A. Sallam, C. Aalburg and G.M. Faeth (2004), "Breakup of Round Liquid Jets in Gaseous Crossflows," AIAA Journal, Vol. 42, No. 12, pp. 2529-2540 (Times cited 13).
- 26) S.M. Bogadi and K.A. Sallam, "Monodisperse Nanoparticles Generation by Electrostatic Atomization," APS 57th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 49, No. 9, pp. 17, 2004 (abstract only).
- 25) C. Aalburg, K. Lee, G.M. Faeth and K.A. Sallam, "Experimental Study of the Breakup of Turbulent Round Liquid Jets in Gaseous Crossflows," APS 57th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 49, No. 9, pp. 236, 2004 (abstract only).
- 24) K.A. Sallam, S.M. Bogadi, and R. Sankarakrishnan, "Fabrication and Transport of Metallic Nano Particles via Electrostatic Atomization," Transport Phenomena in Micro and Nanodevices meeting, Kona, Hawaii, October 2004 (abstract only).
- 23) K.A. Sallam, C. Aalburg, G.M. Faeth, K.-C. Lin, C. D. Carter, and T. A. Jackson "Primary Breakup of Aerated-Liquid Jets in Uniform Gaseous Crossflows," Proceedings of the 19th Annual Conference, ILASS-Europe, Nottingham, UK, September 2004.

- 22) K.A. Sallam, C. Aalburg, and G.M. Faeth, "Primary Breakup of Nonturbulent Round Liquid Jets in Uniform Gaseous Crossflows," Proceedings of the 19th Annual Conference, ILASS-Europe, Nottingham, UK, September 2004.
- 21) S. Jakkamreddy, R. Sankarakrishnan, and K.A. Sallam, "Metallic Nano Particles Generation by Electrostatic Atomization," Oklahoma NSF EPSCoR Annual State Conference, Stillwater, Oklahoma, May 2004, pp. 4 (poster only).
- 20) K.A. Sallam, C. Aalburg, G.M. Faeth, K.-C. Lin, C.D. Carter, and T. A. Jackson "Properties of Aerated-Liquid Jets in Supersonic Crossflows," Proceedings of the 17th Annual Conference on Liquid Atomization and Spray Systems, Arlington, Virginia, May 2004.
- 19) K.A. Sallam, C. Aalburg, G.M. Faeth, K.-C. Lin, C.D. Carter, and T.A. Jackson "Breakup of Aerated-Liquid Jets in Supersonic Crossflows," AIAA paper No. 2004-0970, 42nd AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2004.
- 18) C. Aalburg, K.A. Sallam, and G.M. Faeth, "Properties of Nonturbulent Round Liquid Jets in Uniform Crossflows," AIAA paper No. 2004-0969, 42nd AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2004.
- 17) K.A. Sallam and G.M. Faeth (2003), "Surface Properties during Turbulent Primary Breakup of free Liquid Jets," AIAA Journal, Vol. 41, pp. 1514-1524 (Times Cited 7).
- 16) K.A. Sallam, C. Aalburg, and G.M. Faeth, "Experimental Study of the Breakup of Nonturbulent Round Liquid Jets in Gaseous Crossflows," APS 56th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 48, No. 10, pp. 27-28, 2003 (abstract only).
- 15) C. Aalburg, B. van Leer, G.M. Faeth, and K.A. Sallam, "Properties of Nonturbulent Round Liquid Jets in Uniform Gaseous Crossflow," APS 56th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 48, No. 10, pp. 158-159, 2003 (abstract only).
- 14) K.A. Sallam, C. Aalburg, and G.M. Faeth, "Primary Breakup of Nonturbulent Liquid Jets in Gaseous Crossflows," Proceedings of the 16th Annual Conference on Liquid Atomization and Spray Systems, Monterey, California, May 2003 (Featured on the proceeding cover).
- 13) K.A. Sallam, C. Aalburg, and G.M. Faeth, "Primary Breakup of Round Nonturbulent Liquid Jets in Gaseous Crossflows," AIAA Paper No. 2003-1326, 41st AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2003.
- 12) K.A. Sallam, Z. Dai and G.M. Faeth (2002), "Liquid Breakup at the Surface of Turbulent Round Liquid Jets in Still Gases," International Journal of Multiphase Flow, Vol. 28, pp. 427-449 (Times cited 23).
- 11) K.A. Sallam and G.M. Faeth, "Measurements of Deformation and Breakup of Liquid Jets in Gaseous Crossflows," APS 55th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 47, No. 10, p. 43, 2002 (abstract only).
- 10) K.A. Sallam, Z. Dai, and G.M. Faeth, "Turbulent Primary Breakup of Round and Plane Liquid Jets in Still Air," AIAA Paper No. 2002-1115, 40th AIAA Aerospace Sciences Meeting, Reno, Nevada, January 2002.
- 9) K.A. Sallam and G.M. Faeth, "Surface Properties of Turbulent Liquid Jets in Still Air," APS 54th Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 46, No. 10, p. 136, 2001 (abstract only).
- 8) K.A. Sallam, Z. Dai, and G.M. Faeth, "Liquid Breakup Properties at the Surface of Turbulent Liquid Jets in Still Air," 14th Annual Conference on Liquid Atomization and Spray Systems, Dearborn, Michigan, May 2001, pp. 301-303 (poster only).
- 7) K.A. Sallam, G.M. Faeth, and Z. Dai, "Turbulent Primary Breakup of Round and Plane Liquid Jets," APS 53rd Annual Meeting of the Division of Fluid Dynamics, Bulletin of the American Physical Society, Vol. 45, No. 9, pp. 176-177, 2000 (abstract only).
- 6) K.A. Sallam, Z. Dai, and G.M. Faeth, "Turbulent Primary Breakup of Round and Plane Liquid Jets in Still Air," 8th International Conference on Liquid Atomization and Spray Systems, Pasadena, California, 16-20 July 2000, pp. 167-168 (poster only).
- 5) K.A. Sallam, Z. Dai and G.M. Faeth (1999), "Drop Formation at the Surface of Plane Turbulent Liquid Jets in Still Gases," International Journal of Multiphase Flow, Vol. 25, pp. 1161-1180 (Times cited 15).
- 4) K.A. Sallam, Z. Dai, and G.M. Faeth, "Breakup of Turbulent Liquid Jets in Still Gases," AIAA Paper No. 99-3759, 30th AIAA Fluid Dynamics Conference, Norfolk, Virginia, June 1999.
- 3) K.A. Sallam, Z. Dai, and G.M. Faeth, "Breakup Lengths of Turbulent Liquid Jets in Still Gases," Proceedings of the 12th Annual Conference on Liquid Atomization and Spray Systems, Indianapolis, Indiana, May 1999, pp. 219-223.

- 2) Z. Dai, K.A. Sallam, and G.M. Faeth, "Turbulent Primary Breakup of Plane Free Bow Sheets," Proceedings of the 22nd Symposium on Naval Hydrodynamics, National Academy Press, Washington, D.C., 1998, pp. 568-581.
- 1) K.A. Sallam, A.S. Sabry, M.A. Serag-Eldin, and M.A. Fouad, "Characteristics Based Nonlinear Simulation of Reactive Silencers," Proceedings of the International Congress on Fluid Dynamics & Propulsion, Cairo, Egypt, December 1996, pp. 370-385.