June 2025

JOHN W. KURELEK

Assistant Professor, Mechanical and Materials Engineering
Smith Engineering, Queen's University

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130 Stuart Street
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ACADEMIC APPOINTMENTS

2024 – *present* Assistant Professor, Mechanical and Materials Engineering
Queen's University – *Kingston ON*

2024 – *present* Visiting Research Collaborator, Mechanical and Aerospace Engineering
Princeton University – *Princeton NJ*

2021 – 2023 Postdoctoral Research Fellow, Mechanical and Aerospace Engineering
Princeton University – *Princeton NJ*
Supervisor: Marcus Hultmark

EDUCATION

2016 – 2021 Doctor of Philosophy (dual degree), Mechanical Engineering
University of Waterloo – *Waterloo ON*
Thesis: The Vortex Dynamics of Laminar Separation Bubbles
Supervisor: Serhiy Yarusevych

2016 – 2021 Doctor of Philosophy (dual degree), Aerospace Engineering
Delft University of Technology – *Delft NL*
Supervisor: Marios Kotsonis

2014 – 2016 Master of Applied Science, Mechanical Engineering
University of Waterloo – *Waterloo ON*
Thesis: Transition in a Laminar Separation Bubble and the Effect of Acoustic Excitation
Supervisor: Serhiy Yarusevych

2007 – 2012 Bachelor of Applied Science, Mechanical Engineering
University of Waterloo – *Waterloo ON*
With Distinction and Dean's Honour List

AWARDED RESEARCH FUNDING (in CAD)

2025 *Constant Temperature Anemometry System for Turbulent Flows in Bluff Body Wakes and Renewable Energy Systems* $150,000
Natural Sciences and Engineering Research Council of Canada
Research Tools and Instruments Grant (50% share w. Prof. B. da Silva)

2024 – 2029 *The Individual and Interactive Aerodynamics of Wind Turbines: Experiments and Models for Next-Generation Wind Farms* $187,500
Natural Sciences and Engineering Research Council of Canada
Discovery Grant (100% share)

2024 – 2029 *Wind Turbine Wake Interactions and Improved Wind Farm Performance* $200,000
Queen's University, Faculty of Engineering and Applied Science
Research Initiation Grant and Infrastructure Supplement (100% share)

2024 – 2029 *Wind Tunnel Facility for Renewable Energy Education and Research* $25,000
Queen's University, Mechanical and Materials Engineering

Infrastructure Grant (100% share)

SUPERVISION

TRAINING OF HIGHLY QUALIFIED PERSONNEL (HQP)

2025 – *present* Katie Cooper-Gray – MASc, Queen's University (co-supervised with Prof. B. da Silva)
Analytical Modelling of Rotor Sails

2024 – *present* Aidan Westdal – MASc, Queen's University
Yaw Effects on Wind Turbine Loading and Power Production

2024 – *present* Supun Pieris – Postdoc, Queen's University
Aerodynamic Performance and Flow Physics of Rotor Sails at High Reynolds numbers

ADVISOR

2025 Katrina Reimer – BASc, Queen's University
NSERC USRA: *Tabletop Wind Generating Facility Development and Construction*

2025 Divine Nduka – BASc, Queen's University
Queen's Summer Research Fellow (USSRF): *Aerodynamic Demonstrations for Educational Outreach*

2025 Tyler Galley – BASc, Queen's University
Summer Research Assistant: *Design and Development of a Large-Scale Wind Tunnel for Aerodynamics Research*

2025 Katie Coope-Gray – BASc, Queen's University (co-supervised with Prof. B. da Silva)
Thesis Research Project: *Empirically Corrected Potential Flow Modelling of a Rotor Sail*

2025 Justin Sandrasagra – BASc, Queen's University (co-supervised with Prof. B. da Silva)
Thesis Research Project: *Detached Eddy Simulations of a Rotor Sail*

2024 – 2025 BASc students (x10), Queen's University
Capstone Project*: Laboratory Wind Generator for Replication of Real-World Wind Conditions*

2024 Aidan Westdal – BASc, Queen's University
Capstone Project: *Inhalation Screens for the Ontario Harm Reduction Distribution Program*

2024 Adnan El Makdah, Queen's University
OTTER Lab Research Assistant

2019 – 2021 Connor Toppings – MASc, University of Waterloo
Laminar Separation Bubble Dynamics on a Finite Wing

2015 – 2017 Mark Istvan – MASc, University of Waterloo
Effects of Free-stream Turbulence Intensity on Laminar Separation Bubbles

2017 Marcus Lela – Intern, University of Waterloo
Wind Tunnel Test Section Design, Manufacturing and Construction

2017 Susanne Vanicat – Intern, University of Waterloo
Test Section Design for Re-circulating Low Turbulence Wind Tunnel

TEACHING

2024 – *present* Queen's University, Mechanical and Materials Engineering
MECH 241: Fluid Mechanics I *(Head Instructor)*
MECH 460 & 462: Team Project *(Advisor to course projects)*
MECH 461: Research Project *(Advisor to course projects)*
MECH 398: Mechanical and Materials Engineering Laboratory I *(Lab Advisor)*

2014 – 2020 University of Waterloo, Mechanical and Mechatronics Engineering

ME 562: Experimental Methods in Fluids *(Head Instructor x1 and Teaching Assistant x3)*
ME 362: Fluid Mechanics II *(Teaching Assistant)*
Teaching Assistantship Training (Workshop Facilitator)

2019 Fundamentals of University Teaching Certificate
University of Waterloo, Centre for Teaching Excellence

PROFESSIONAL ACTIVITIES

2024 – *present* Organizing Committee Member
1000 Islands Fluid Dynamics Conference

2025 Organizing Committee Member
6th International Conference on Experimental Fluid Mechanics (ICEFM)

2024 – *present* Reviewer
Journal of Fluid Mechanics, Experiments in Fluids, Experimental Thermal and Fluid Science

2015 – *present* Professional Memberships
American Physical Society, American Institute of Aeronautics and Astronautics

SERVICE

2024 – *present* Queen's University, Department of Mechanical and Materials Engineering
Smith Engineering Transformation: MECHMania 2.0 *(Committee Member & Instructor)*

2024 – *present* PhD Dissertation Examiner
Theresa Salomone (2024), Frank Secretain (2024)

AWARDS

2025 Silver Wrench Award for Teaching Excellence
Queen's University, Mechanical and Materials Engineering

2021 – 2023 Postdoctoral Fellowship $90,000
Natural Sciences and Engineering Research Council of Canada

2019 – 2020 Ontario Graduate Scholarship – Doctoral $15,000
Government of Ontario

2019 Canada Graduate Scholarship – Michael Smith Foreign Study Supplement $6,000
Natural Sciences and Engineering Research Council of Canada

2018 – 2019 Canada Graduate Scholarship – Doctoral (upgraded from PGS-D) $35,000
Natural Sciences and Engineering Research Council of Canada

2016 – 2020 President's Graduate Scholarship – Doctoral $25,000
University of Waterloo

2016 – 2018 Postgraduate Graduate Scholarship – Doctoral $42,000
Natural Sciences and Engineering Research Council of Canada

2016 Sanford Fleming Teaching Award
University of Waterloo

2016 Fluid Mechanics Award
University of Waterloo

2015 – 2016 Ontario Graduate Scholarship – Master's $15,000

	Government of Ontario	
2014 – 2016	President's Graduate Scholarship – Master's University of Waterloo	$20,000
2014 – 2015	Canada Graduate Scholarship – Master's Natural Sciences and Engineering Research Council of Canada	$15,000
2014 – 2017	Teaching Assistant Excellence Award *(x3)* University of Waterloo	
2007	President's Scholarship – Bachelor's University of Waterloo	$2,000

PUBLICATIONS

JOURNAL PUBLICATIONS (*supervised HQP underlined*)

13. **Kurelek, J. W.**, Michelis, T., Kotsonis, M., & Yarusevych, S. (2025). Growth of spanwise disturbance modes in a laminar separation bubble. *Journal of Fluid Mechanics*. **(In Preparation)**
12. **Kurelek, J. W.**, Pieris, S. Upfal, I. L. M., Heck, K. S., Piqué, A., Hultmark, M., & Howland, M. F. (2025). Full dynamic similarity experiments and modeling reveal rotor aerodynamics under arbitrary control. *Proceedings of the National Academy of Sciences*. **(In Preparation)**
11. Wei, N. J., Fleisher, A. Y., **Kurelek, J. W.**, & Hultmark, M. (2025). Effects of thrust, tip-speed ratio, and time variations on wind turbine wakes at high Reynolds numbers. *Journal of Fluid Mechanics*. **(Submitted)**
10. **Kurelek, J. W.**, Piqué, A., & Hultmark, M. (2023). Performance of the porous disk wind turbine model at a high Reynolds number: Solidity distribution and length scales effects. *Journal of Wind Engineering and Industrial Aerodynamics*, *237*, 105377. https://doi.org/10.1016/j.jweia.2023.105377
9. **Kurelek, J. W.**, Kotsonis, M., & Yarusevych, S. (2023). Superposition of AC-DBD plasma actuator outputs for three-dimensional disturbance production in shear flows. *Experiments in Fluids*, *64*(4), 84. https://doi.org/10.1007/s00348-023-03616-9
8. Shah, Y., **Kurelek, J. W.**, Peterson, S. D., & Yarusevych, S. (2021). Experimental investigation of indoor aerosol dispersion and accumulation in the context of COVID-19: Effects of masks and ventilation. *Physics of Fluids*, *33*(7), 073315. https://doi.org/10.1063/5.0057100
7. Toppings, C. E., **Kurelek, J. W.**, & Yarusevych, S. (2021). Laminar Separation Bubble Development on a Finite Wing. *AIAA Journal*, *59*(8), 2855–2867. https://doi.org/10.2514/1.J060258
6. **Kurelek, J. W.**, Tuna, B. A., Yarusevych, S., & Kotsonis, M. (2021). Three-Dimensional Development of Coherent Structures in a Two-Dimensional Laminar Separation Bubble. *AIAA Journal*, *59*(2), 493–505. https://doi.org/10.2514/1.J059700
5. Tuna, B. A., **Kurelek, J. W.**, & Yarusevych, S. (2019). Surface-Pressure-Based Estimation of the Velocity Field in a Separation Bubble. *AIAA Journal*, *57*(9), 3825–3837. https://doi.org/10.2514/1.J058026
4. **Kurelek, J. W.**, Yarusevych, S., & Kotsonis, M. (2019). Vortex merging in a laminar separation bubble under natural and forced conditions. *Physical Review Fluids*, *4*(6), 063903. https://doi.org/10.1103/PhysRevFluids.4.063903
3. **Kurelek, J. W.**, Kotsonis, M., & Yarusevych, S. (2018). Transition in a separation bubble under tonal and broadband acoustic excitation. *Journal of Fluid Mechanics*, *853*, 1–36. https://doi.org/10.1017/jfm.2018.546
2. Istvan, M. S., **Kurelek, J. W.**, & Yarusevych, S. (2018). Turbulence Intensity Effects on Laminar Separation Bubbles Formed over an Airfoil. *AIAA Journal*, *56*(4), 1335–1347. https://doi.org/10.2514/1.J056453

1. **Kurelek, J. W.**, Lambert, A. R., & Yarusevych, S. (2016). Coherent Structures in the Transition Process of a Laminar Separation Bubble. *AIAA Journal*, *54*(8), 2295–2309. https://doi.org/10.2514/1.J054820

ARTICLES IN REFEREED CONFERENCE PROCEEDINGS (*supervised HQP underlined*)

10. Pieris, S., Rius-Vidales, A. F., Rijkens, A. A. K., **Kurelek, J. W.**, & Hultmark, M. (2025). Aerodynamic loading on rotor sails: Reynolds number, velocity ratio, and tip effects. *6th International Conference on Experimental Fluid Mechanics*. Niagara-on-the-Lake, CA, May 20–22

9. Bedenik, G., Morales, T., Pieris, S., da Silva, B., **Kurelek, J. W.**, & Robertson, M. (2025). Bistable SMA-driven engine for pulse-jet locomotion in soft aquatic robots. *IEEE - RAS International Conference on Soft Robotics*. Lausanne, CH, Apr 23–26.

8. **Kurelek, J. W.**, Michelis, T., Kotsonis, M., & Yarusevych, S. (2024). LSB Flow Conditioning Using Spanwise Modulated Disturbances: HWA and Tomo-PIV Measurements. *13th International Symposium on Turbulence and Shear Flow Phenomena*. Montreal, CA, Jun 25--28.

7. **Kurelek, J. W.**, Yarusevych, S., & Kotsonis, M. (2019). The effect of three-dimensional forcing on flow development with a laminar separation bubble. *11th International Symposium on Turbulence and Shear Flow Phenomena*. Southampton, UK, July 30--Aug 2.

6. **Kurelek, J. W.**, Yarusevych, S., & Kotsonis, M. (2018). An Assessment of Flow Development in a Separation Bubble Subjected to Spanwise Modulated Disturbances using Particle Image Velocimetry. *48th AIAAA Fluid Dynamics Conference*. Atlanta, GA, June 25--29. https://doi.org/10.2514/6.2018-3733

5. **Kurelek, J. W.**, Tuna, B. A., & Yarusevych, S. (2017). Three-Dimensional Vortex Development in a Laminar Separation Bubble formed over an Airfoil. *47th AIAA Fluid Dynamics Conference*. Denver, CO, June 5--9. https://doi.org/10.2514/6.2017-3642

4. **Kurelek, J. W.**, & Yarusevych, S. (2017). Merging of coherent structures in a separation bubble. *10th International Symposium on Turbulence and Shear Flow Phenomena*. Chicago, IL, July 6--9.

3. **Kurelek, J. W.**, & Yarusevych, S. (2016). The effect of acoustic excitation on the later stages of transition in a laminar separation bubble. *46th AIAA Fluid Dynamics Conference*. Washington, DC, July 13--17. https://doi.org/10.2514/6.2016-3948

2. Istvan, M. S., **Kurelek, J. W.**, & Yarusevych, S. (2016). The effect of free-stream turbulence on the structure of laminar separation bubbles. *46th AIAA Fluid Dynamics Conference*. Washington, DC, July 13--17. https://doi.org/10.2514/6.2016-3946

1. **Kurelek, J. W.**, Lambert, A., & Yarusevych, S. (2015). Development of coherent structures within the laminar separation bubble of a NACA0018 airfoil. *45th AIAA Fluid Dynamics Conference*. Dallas, TX, June 22-26. https://doi.org/10.2514/6.2015-2627

CONFERENCE PRESENTATIONS AND POSTERS (*supervised HQP underlined*)

30. Wei, N. J., Fleisher, A. Y., **Kurelek, J. W.**, & Hultmark, M. (2025). Time-varying wind-turbine wakes at high Reynolds numbers. *Wind Energy Science Conference*. Nantes, FR, June 24–27**.**

29. Rius-Vidales, A. F., Pieris, S., Rijkens, A. A. K., **Kurelek, J. W.**, & Hultmark, M. (2025). Aerodynamic testing of rotor sails: A scaling challenge. *XI International Conference on Computational Methods in Marine Engineering*. Edinburgh, UK, June 23–25.

28. Pieris, S. Upfal, I. L. M., Heck, K. S., Hultmark, M., **Kurelek, J. W.**, & Howland, M. F. (2025). On yaw-misaligned wind turbine aerodynamics at full dynamic similarity – A coupled experimental and momentum-blade theory approach. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 25–27.

27. Westdal, A., Pieris, S., & **Kurelek, J. W.** (2025). Experimental design for unsteady aerodynamic wind turbine research in a towing tank. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 25–27.

26. Sandrasagra, J., **Kurelek, J. W.** & da Silva, B. L. (2025). Detached eddy simulation of flow past a two-dimensional rotating cylinder at subcritical Reynolds numbers. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 25–27.

25. Paterson, K., Smyth, L., Carlton, O., Delage, M., Nyeboer, C., Pilkey, K., da Silva, B. L., & **Kurelek, J. W.** (2025). Table-Top Fan Array Wind Generator for Educational Outreach and Larger Scale Design Validation. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 25–27.

24. Cooper-Gray, K., da Silva, B. L., & **Kurelek, J. W.** (2025). Examining Rotor Sail Performance Using Empirically Corrected Potential Flow Modelling. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 25–27.

23. **Kurelek, J. W.**, Piqué, A., Heck, K. S., Hultmark, M., & Howland, M. F. (2024). Horizontal Axis Wind Turbines under Yaw-Misalignment at High Reynolds Numbers: Experimental and Model Performance Predictions. *77th Annual Meeting of the APS Division of Fluid Dynamics*. Salt Lake City, UT, Nov 24–26.

22. Pieris, S., Rius-Vidales, A. F., Rijkens, A. A. K., **Kurelek, J. W.**, & Hultmark, M. (2024). Experimental investigation of aerodynamic loading on rotor sails at full dynamic similarity. *77th Annual Meeting of the APS Division of Fluid Dynamics*. Salt Lake City, UT, Nov 24–26.

21. Wei, N. J., Fleisher, A. Y., **Kurelek, J. W.**, & Hultmark, M. (2024). Traveling waves in the wakes of dynamically controlled wind turbines. *77th Annual Meeting of the APS Division of Fluid Dynamics*. Salt Lake City, UT, Nov 24–26.

20. Fleisher, A. Y., Wei, N. J., **Kurelek, J. W.**, & Hultmark, M. (2024). Wake Dynamics of a Wind Turbine with an Oscillating Rotation Rate at High Reynolds Numbers. *77th Annual Meeting of the APS Division of Fluid Dynamics*. Salt Lake City, UT, Nov 24–26.

19. Pieris, S., **Kurelek, J. W.**, & Hultmark, M. (2024). Setup design and experiments of rotor sails at high Reynolds numbers. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, May 10–12.

18. **Kurelek, J. W.**, Michelis, T., Kotsonis, M., & Yarusevych, S. (2024). Manipulating Vortex Development in a Laminar Separation Bubble using Spanwise Modulated Disturbances. *3rd Direct In-Person Colloquium on Vortex Dominated Flows (DisCoVor)*. Delft, NL, Apr 16–19.

17. **Kurelek, J. W.**, Piqué, A., Heck, K. S., Gayme, D. F., Howland, M. F., & Hultmark, M. (2023). Combined Experimental-Analytical Predictions of Thrust, Power and Wake Development of a Yaw-Misaligned Horizontal Axis Wind Turbine at High Reynolds numbers. *76th Annual Meeting of the APS Division of Fluid Dynamics*. Washington, DC, Nov 19–21.

16. Malarczyk, V. M., **Kurelek, J. W.**, & Hultmark, M. (2023). Characterizing Dynamic Stall at High Reynolds number using a Variable Pressure Wind Tunnel. *76th Annual Meeting of the APS Division of Fluid Dynamics*. Washington, DC, Nov 19–21.

15. **Kurelek, J. W.**, Piqué, A., Heck, K. S., Gayme, D. F., Howland, M. F., & Hultmark, M. (2023). A Combined Experimental-Analytical Study of a Yaw-Misaligned Wind Turbine: Thrust, Power and Wake Predictions. *North American Wind Energy Academy (NAWEA) / WindTech*. Denver, CO, Oct 30–Nov 3.

14. **Kurelek, J. W.**, Piqué, A., & Hultmark, M. (2023). Solidity and Length Scale Effects on Porous Disk Wind Turbine Wake Characteristics. *2nd Direct In-Person Colloquium on Vortex Dominated Flows (DisCoVor)*. Breckenridge, CO, May 16–19.

13. Malarczyk, V. M., **Kurelek, J. W.**, & Hultmark, M. (2023). Experimental Investigations into the Onset of Dynamic Stall. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 26–28.

12. **Kurelek, J. W.**, Piqué, A., & Hultmark, M. (2023). Improvements to the Porous Disk Wind Turbine Model: Solidity, Length Scale and Reynolds Number Effects. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 26–28.

11. **Kurelek, J. W.**, & Piqué, A. (2022). Improvements to the Actuator Disk Concept for Modelling Horizontal Axis Wind Turbines. *75th Annual Meeting of the APS Division of Fluid Dynamics*. Indianapolis, IN, Nov 20–22.
10. **Kurelek, J. W.**, Piqué, A., & Hultmark, M. (2021). A Comparison of Wind Turbine and Porous Disk Wakes at High Reynolds Numbers. *74th Annual Meeting of the APS Division of Fluid Dynamics*. Pheonix, AZ, Nov. 21–23.
9. **Kurelek, J. W.**, Kotsonis, M., & Yarusevych, S. (2019). Vortex Development in a Laminar Separation Bubble measured via Tomographic Particle Image Velocimetry. *72nd Annual Meeting of the APS Division of Fluid Dynamics*. Seattle, WA, Nov 23–26.
8. **Kurelek, J. W.**, Kotsonis, M., & Yarusevych, S. (2019). Three-Dimensional Disturbance Production using AC-DBD Plasma Actuation and the Effect on Transition in a Separation Bubble. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 26–28.
7. **Kurelek, J. W.**, Yarusevych, S., & Kotsonis, M. (2018). The effect of spanwise modulated DBD plasma forcing on flow development in a laminar separation bubble. *71st Annual Meeting of the APS Division of Fluid Dynamics*. Atlanta, GA, Nov 18–20.
6. **Kurelek, J. W.**, Yarusevych, S., & Kotsonis, M. (2017). The effects of tonal and broadband acoustic excitation on the transition process within a laminar separation bubble. *70th Annual Meeting of the APS Division of Fluid Dynamics*. Denver, CO, Nov 19–21.
5. **Kurelek, J. W.**, Tuna, B. A., & Yarusevych, S. (2017). A volumetric reconstruction of separation bubble flow over a NACA 0018 airfoil. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 21–23.
4. Tuna, B. A., **Kurelek, J. W.**, & Yarusevych, S. (2017). Sensor-based estimation of the velocity field in a separation bubble. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 21–23.
3. **Kurelek, J. W.**, & Yarusevych, S. (2016). Transition in a Laminar Separation Bubble and the Effect of Controlled Acoustic Disturbances. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, Apr 22–24.
2. **Kurelek, J. W.**, & Yarusevych, S. (2015). An investigation of natural and forced transition in a laminar separation bubble via time-resolved Particle Image Velocimetry. *68th Annual Meeting of the APS Division of Fluid Dynamics*. Boston, MA, Nov 22–24.
1. **Kurelek, J. W.**, Lambert, A. R., & Yarusevych, S. (2015). Investigation of Roll-Up Vortices within the Laminar Separation Bubble of a NACA 0018 Airfoil. *1000 Islands Fluid Dynamics Meeting*. Gananoque, ON, May 1–3.

Invited Talks

8. **Kurelek, J. W.** (2024). Wind Turbine Testing and Development in High Pressure Facilities. *Max Planck Institute for Dynamics and Self-Organization*. Göttingen, DE, Apr 23.
7. **Kurelek, J. W.** (2024). The Pressure is On: Wind Turbine Testing and Development at Extreme Pressures. *Delft University of Technology, Faculty of Aerospace Engineering*. Delft, NL, Apr 15.
6. **Kurelek, J. W.** (2023). Wind Turbine Modelling Improvements. *Queen's University, Department of Mechanical and Materials Engineering*. Kingston, ON, Jun 16.
5. **Kurelek, J. W.** (2023). Advancements in Wind Turbine Testing: Towards More Efficient and Quieter Wind Farms. *University of Calgary, Department of Mechanical and Manufacturing Engineering*. Calgary, AB, Apr 5.
4. **Kurelek, J. W.** (2023). Advancements in Wind Turbine Testing: Towards More Efficient and Quieter Wind Farms. *Syracuse University, Department of Mechanical and Aerospace Engineering*. Syracuse, NY, Dec 14.

3. **Kurelek, J. W.** (2022). Progress in Wind Turbine Experiments: Wake Modelling and Blade Aerodynamics. *University of Ottawa, Department of Mechanical Engineering*. Ottawa, ON, Oct 27.

2. **Kurelek, J. W.** (2022). Plasma Actuators: Toward Robust Devices for Applied Aerodynamic Control. *University of Michigan, Department of Mechanical Engineering*. Ann Arbor, MI, Apr 25.

1. **Kurelek, J. W.**, Kotsonis, M., & Yarusevych, S. (2020). Laminar Separation Bubble Bursting and Low Frequency Modulations: Prior Work and Recent Developments. *AIAA SciTech Forum and Exposition*. Orlando, FL, Jan 6–10.