RESUME

Full name: David Greenblatt

Web site: www.flowcontrollab.com

ACADEMIC DEGREES

Ph.D., 1995-1999: Department of Fluid Mechanics and Heat Transfer, Tel Aviv University

M.Sc., 1987-1990: School of Mechanical Engineering, University of the Witwatersrand, Johannesburg, South Africa

B.Sc., 1983-1986: School of Mechanical Engineering, University of the Witwatersrand, Johannesburg, South Africa

ACADEMIC APPOINTMENTS

2019- : Professor, Faculty of Mechanical Engineering, Technion, Haifa

2012-2019: Associate Professor with Tenure, Faculty of Mechanical Engineering, Technion, Haifa

2007-2012: Senior Lecturer, Faculty of Mechanical Engineering, Technion, Haifa

2005-2007: Senior Scientist, Institute of Fluid Mechanics and Acoustics, Technical University of Berlin, Germany

2001-2004: Honorary Research Fellow, University of the Witwatersrand, South Africa

2001-2002: Adjunct Lecturer, Department of Fluid Mechanics and Heat Transfer, Tel Aviv University

2000-2002: Post-Doctoral Fellow, Tel Aviv University

2000-2001: Senior Research Associate, Illinois Institute of Technology, Chicago IL, USA

1995-2000: Teaching Assistant, Department of Fluid Mechanics and Heat Transfer, Tel Aviv University

PROFESSIONAL EXPERIENCE

2002-2005: NRC Research Associate, Flow Physics and Control Branch, NASA Langley Research Center (LaRC), Hampton VA, USA. PI (675,000 project); Co-PI with A. Washburn and N. Schaeffler (\$630,000 project)

1994-1995: Software Developer, B. A. Intelligence Networks, Ra'anana, Israel

1988-1994: Technical Specialist, Council for Scientific and Industrial Research (CSIR), South Africa

RESEARCH INTERESTS

Active and passive flow control, unsteady aerodynamics, wind energy

Turbomachinery flows, jet noise, combustion and mixing

Turbulence modeling, transition and relaminarization

High-lift and high-alpha aerodynamics

TEACHING EXPERIENCE

Introduction to Aerodynamics (undergraduate course), Tel Aviv University (2001-2002)

Thermodynamics I (undergraduate course: 034035), Technion

Fluid Mechanics I (undergraduate course: 034013), Technion

Introduction to Experimental Methods (undergraduate course: 034038), Technion

Fluid Mechanics II (undergraduate course: 035035), Technion

Laboratory in Experimental Methods (undergraduate course: 034039), Technion

Design of New Technion Course

Flow Control (graduate/undergraduate course: 036064), Technion (2008, taught 8 times)

2017-3000: Turbomachinery Fluid Mechanics and Thermodynamics (undergraduate course: 035028), Technion (2017, taught twice)

2018-3000: Advanced Laboratory in Fluid Mechanics (to be submitted to the Undergraduate Committee, together with Prof. René van Hout)

TECHNION ACTIVITIES

2017-2018: Member of the Committee for Academic Development

DEPARTMENTAL ACTIVITIES

2007- : Founder and Director of the Technion's *Flow Control Laboratory* www.flowcontrollab.com

2013-2014: Vice-Dean for Undergraduate Studies, Faculty of Mechanical Engineering

Administrative Duties

2008- : Liaison with the Technion Aerospace Faculty

2008-2013: Foreign Students Coordinator

2010-2012: International and School Visitor Coordinator

2011- : Faculty Liaison with Industry

2012-2013: Responsible for Faculty Seminars

PUBLIC PROFESSIONAL ACTIVITIES

Journal Associate Editor

2017-2018: AIAA Journal Special Issue on Flow Control (guest editor with I. Wygnanski, University of Arizona and E. Whalen, Boeing)

Journal Editorial Boards

2010-2015: Editorial Board: *International Journal of Flow Control* www.multi-science.co.uk/ijfc.htm

2010-2014: Editorial Board: *International Journal of Fluid Dynamics and Aerospace Engineering* www.ijfdae.org/

Journals Reviewer

Reviewer for the following International Journals: AIAA Journal, Flow Turbulence and Combustion, AIAA Journal of Aircraft, International Journal of Heat and Fluid Flow, Experiments in Fluids, Journal of the American Helicopter Society, Physics of Fluids, International Journal of Flow Control, Journal of Fluid Mechanics, Industrial & Engineering Chemistry Research, Journal of Fluids Engineering, Experimental Thermal and Fluid Science, Aerospace Science and Technology Journal, International Journal of Fluid Dynamics and Aerospace Engineering, Journal of Aerospace Engineering, IMechE, Part G, Journal of Fluids and Structures, Computers and Fluids, Wind Energy, Renewable Energy, Renewable & Sustainable Energy Reviews.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

AIAA Associate Fellow (since 2015, member since 1992)

European Wind Energy Association Member (2013-2014)

Euromech Member (2013-)

American Physical Society Member (2004-2005)

Registered Mechanical Engineer since 1994 (Israel)

HONORS & AWARDS

2016: Window on Science (WOS) Program Recipient, United States Air Force Research Laboratory (AFRL), Wright-Patterson Air Force Base, Dayton, Ohio, USA*

2016: AIAA Ground Testing Technical Committee Best Ground Testing Paper: "Unsteady Low-Speed Wind Tunnel Design," AIAA Paper No. 2015-2861, 31st AIAA Aerodynamic Measurement Technology and Ground Testing Conference, 2015

2012: First Prize Winner in the Renewable Energy Category at the First Israel National Conference for Sustainable Growth

2008: Sanford Kaplan Prize for Creative Management of 21st Century High Technology, with MBA students Daniel Keidar, Ori Shen and Dan Nacht (Faculty of Industrial Engineering and Management, Technion)

2004: NASA AAAC Team Award (CFD Validation Workshop), USA

2002, 2003, 2004-2005: NRC Associateship Award, NASA Langley Research Center, USA

1995-1999: Hammerly Family Scholarship, Israel

1987-1988: Senior Scholarship, University of the Witwatersrand, SA

VISITING FELLOWS

2014-2015: Professor James W. Gregory, Fulbright Scholar

2017-2018: Professor Anya R. Jones, Fulbright Scholar

2019 : Prof. dr. ing. Tim De Troyer

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^{*}The WOS program facilitates technical interactions on fundamental research via direct contact between distinguished foreign researchers and Air Force Research Laboratory scientists and engineers.

POST-DOCTORAL FELLOWS

2017-2019: Dr. Srimanta Santra, Technion Post-Doctoral Fellow

GRADUATE STUDENTS[†]

Completed PhD. Theses: Technion

1. Hanns Müller-Vahl, "Wind turbine blade dynamic stall and its control," June 2015 (coadvisor: C.O. Paschereit, Joint PhD program at Technion and TU Berlin). http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28151 (See Publications: J46, J51, J53, J55, J56, J61 and B6).

2. Oshri Ifergan, "Numerical and Experimental Investigation of Arc Plasma Wind Tunnels," Direct track, June 2019.

https://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=30442 (See Publications: J62, J67).

Completed MSc. Theses: Technion

1. Iliya Romm, "Subcritical pipe flow transition control using dielectric barrier discharge plasma actuators," February 2010.

www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26262 (See Publications: J30).

2. Magen Schulman, "Dynamic stall control on a vertical axis wind turbine using dielectric barrier discharge plasma actuators," August 2011.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26968 (See Publications: J36).

3. Binyamin Sasson, "Vertical axis wind turbine performance improvement via leading-edge slot blowing," March 2012.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26583 (See Publications: J35).

4. Alexander Treizer, "Generation of energy by the active control of flow over a cylindrical pendulum," September 2012.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27173 (See Publications: J39 and J45).

5. Snir Goyta, "Tethered cube stabilization by means of active flow control," (Brakim Student) September 2012.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27648 (See Publications: J41).

6. Amos Ben-Haray, "Optimization of a pulsed-plasma controlled vertical axis wind

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[†] Principal advisor unless otherwise stated.

turbine," September 2012.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28185

(See Publications: J36, J44, J50 and B7).

- 7. Gilad Doron, "A reciprocating wind energy generator driven by flow control," March 2013. http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27794 (See Publications: J45).
- 8. Amit Katz, "Active flow control of vortex induced vibrations of a tethered sphere in a steady fluid flow," (principal advisor: Dr. René van Hout), May 2013. http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26353 (See Publications: J42 and J43).
- 9. Alexander Eidelman, "Development of a reciprocal motion wind-energy generator," October 2013.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27198 (See Publications: J39).

- 10. Alexander Shapira, "Investigation of the turbulent aspects in a pulse tube cryogenic system," September 2013 (principal advisor: Prof. Gershon Grossman). http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27238 (See Publications: J59).
- 11. David Elatov, "Separation control in a centrifugal fan using plasma actuator," (Brakim Student) May 2013. http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28519
- 12. Ronen Lautman, "Combined upwind/downwind plasma-based flow control on a vertical-axis wind turbine," July 2014.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28130 (See Publications: J49 and B7).

13. Yevgeni Furman, "Progress in the development of a low-speed oscillatory-flow wind tunnel," December 2014.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27802

14. Mark Epshtein, "Inlet guide vane separation control using dielectric barrier discharge plasma actuators," October 2015.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=29234

- 15. Ron Danon, "Coandă-based reciprocating wind energy generator," (GTEP Student) May 2016. http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=29286 (See Publications J54).
- 16. Ben Eshel, "Closed-loop control of a plasma-enhanced vertical axis wind turbine," (GTEP Student) June 2016.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=29340 (See Publications B7).

17. Anan Garzozi, "A Pulsed Coandă-Effect Reciprocating Wind Energy Generator," (Grand

Technion Energy Program Student) April 2017. Steven and Beverly Rubenstein Scholar. Degree awarded *cum laude*.

http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=29961 (See Publications: J58).

18. Nadav Itzhak, "Hydrodynamic factors associated with rebreathing in infants," in progress from 2017. Thesis submitted: June 2019. Recipient of the Leonard and Diane Sherman Interdisciplinary Graduate School Fellowship (See Publications J63).

Completed Technion Master of Engineering (ME)

- 1. David Ripa, "Active load control for wind power," ME Project, January 2010.
- 2. Oren Fixel, "Two-dimensional laminar flow simulation over a circular cylinder," Project, June 2011.
- 3. Avi Klein, "Design and manufacture: composite blades for an experimental VAWT," April, 2013.
- 4. Nitzan Cohen, "Semi-empirical theory for Gurney flaps," September 2015.
- 5. Alex Gotlieb, "Design of a wind tunnel plunging mechanism," March 2016.
- 6. Guy-Zvi Loifer, "Combined cycle power station cooling system analysis and performance improvement, September 2016.
- 7. Yan Manashirov, "Characterization of Ablation by Optical Visualization," April 2019.

Completed Dr.-Ing. Theses: TU Berlin

1. Christoph Strangfeld, "Active control of trailing vortices by means of long- and short-wavelength actuation," Research Student, Technion International School, Advisor (coadvisors: C.O. Paschereit and R. Woszidlo), April 2015. (See Publications: J51, J55 and J59).

Completed MSc. or Diploma Theses (MSc. Equivalent): TU Berlin

- 1. Yogesh Singh, "Active management of entrainment and streamwise vortices in an incompressible jet," Thesis Advisor (co-advisors: C.O. Paschereit and D. Das, Indian Institute of Technology), July 2006.
- 2. Chan Yong Schüle, "Dielectric barrier discharge plasma actuation at very low flight Reynolds numbers," Thesis Advisor (co-advisor: C.O. Paschereit), TU-Berlin, May 2007.
- 3. Stefan Vey, "Flap vortex management by active Gurney flaps," Thesis Advisor (coadvisor: C.O. Paschereit), TU-Berlin, July 2007.

- 4. Karthik Depuru Mohan, "Jet control via active flaps and passive tabs," Thesis Advisor, TU-Berlin (co-advisors: C.O. Paschereit and C.N. Nayeri), July 2007.
- 5. Torsten Schneider, "CFD for plasma actuation on micro air vehicles," Thesis Advisor (co-advisor: C.O. Paschereit), June 12, 2007.
- 6. Joel Ramm, "Electric ducted fan transient characterization for active flow control," Research Student, Technion International School, Thesis Advisor (co-advisor: C.O. Paschereit), December 2016.
- 7. Christian Hoffmann, "Unsteady flow visualization using tufts on a stationary Coandă cylinder for quantitative data extraction," Research Student, Technion International School, Thesis Advisor (co-advisor: C.O. Paschereit), January 2017.

Theses in Progress[‡]

PhD Students

- 1. Anan Garzozi, "A 2DOF pulsed Coandă-effect reciprocating wind energy generator," Grand Technion Energy Program, commencement date: November 2017. Past candidacy exam on December 11, 2018. Neubauer Family Foundation Scholarship, February 2019.
- 2. David Keisar, "Optimization of a vertical axis wind turbine and wind-desalination system, using active flow control and reinforcement learning," in progress from 2017, direct track (past candidacy exam on August 1, 2018); expected year of graduation: 2020. (See Publications J60, B8). Awarded Israel Ministry of Energy Scholarship, December 2018.
- 3. Lev Dunaevich, "The transient Coandă effect," commencement date: January 2018, past candidacy exam on February 17, 2019.
- 4. Lior Eshbal, "Measurements of tethered sphere dynamics exposed to a uniform flow: fluid forcing, energy generation and acoustic control," (GTEP Student) in progress from 2016; expected year of graduation: 2019 (principal advisor: Prof. René van Hout), (See Publications J64, J65).

MSc Students

- 1. Ahmad Zidane, "Inlet guide vane active separation control using dielectric barrier discharge plasma actuators," in progress from 2016; expected year of graduation: 2019.
- 2. David Hasin, "Active flow control on low aspect ratio wings," in progress from July 2018.

[‡] Single advisor unless otherwise stated.

EXTERNAL RESEARCH GRANTS

Technion Research Projects

- R1. 2010-2011: Mitchell Entrepreneurial Program (Industrial Fan Performance Enhancement Using Dielectric Barrier Discharge Plasma Actuators), \$40,000 (PI).
- R2. 2011-2015: Israel Science Foundation **ISF** (Experimental Investigation of Airfoil Dynamic Stall and its Control), 936,000NIS (PI).
- R3. 2011-2012: Intel Corporation (Advanced Fan Characterization), \$13,000 (PI).
- R4. 2012-2013: Nevet Grand Technion Energy Program (Horizontal Axis Wind Turbine), \$30,000 (PI).
- R5. 2012-2013: Teva Pharmaceuticals (Reactions in Turbulent Flows), 48,000 NIS (PI).
- R6. 2013-2016: Germany-Israel Foundation **GIF** (Load control on a horizontal axis wind turbines), €90,371 (Co-PI with C.O. Paschereit, TU Berlin).
- R7. 2013-2017: US-Israel Binational Science Foundation **BSF** (Dynamic stall control computation and experiment) \$170,800 (Co-PI with Dr. Christopher Rumsey, NASA Langley Research Center).
- R8. 2015-2016: Israel Ministry of Defense (Hot Plasma Wind Tunnel Characterization), 160,000NIS (PI).
- R9. 2016-2017: Israel Ministry of Defense (Separation Control on a Hermes 900 V-Tail Element using DBD Plasma Actuation), 200,000 NIS (PI).
- R10. 2016-2018: Israel Ministry of Defense (Unsteady Aerodynamics of Low Aspect Ratio Wings), 223,000NIS (PI).
- R11. 2017-2018: Israel Ministry of Defense (Hot Plasma Wind Tunnel Characterization), 255,000NIS (PI).
- R12. 2018-2020: Israel Ministry of Energy (Pulsed Coandă-Effect-Based Desalination), 500,000NIS (PI).
- R13. 2018-2019: SPIRA Fund for Applied Research in the Field of Energy (Quantum Leap in Water-Desalination Energy Efficiency), \$20,000 (PI).

PUBLICATIONS

Theses

- T1. 1987-1989: "Pipe flow relaminarization by temporal acceleration," M.Sc., Thesis, School of Mechanical Engineering, University of the Witwatersrand, SA (advisor: Prof. E.A. Moss)
- T2. 1995-1999: "Dynamic stall control by oscillatory excitation," Ph.D. Thesis, Department of Fluid Mechanics and Heat Transfer, Tel Aviv University (advisor: Prof. I. Wygnanski)

Refereed papers in Professional Journals§

- J1. Greenblatt, D., "The construction and evaluation of a low-cost isokinetic knee exerciser," *The South African Journal of Physiotherapy*, Vol. 48, No. 2, pp. 15-22, 1992.
- J2. Greenblatt, D., "Computing the combined effect of wake-passing and free-stream turbulence on gas turbine blade boundary layers," *Quaestiones Mathematicae*, Vol. 15, No. 3, pp. 261-278, 1992.
- J3. Greenblatt, D. and Damelin, S. B., "Laminar boundary layers subjected to high-frequency traveling-wave fluctuations," *AIAA Journal*, Vol. 31, No. 5, pp. 957-959, 1993.
- J4. Greenblatt, D., "The effects of wake-passing and free-stream turbulence on laminar gas turbine blade boundary layers," *ASME Journal of Turbomachinery*, Vol. 116, No. 3, pp. 384-391, 1994.
- J5. Greenblatt, D., Diesel, W. and Noakes. T. D., "Clinical evaluation of the low-cost VariCom isokinetic knee exerciser," *Journal of Medical Engineering & Physics*, Vol. 19, Issue 3, pp. 275-280, 1997.
- J6. Greenblatt, D., "Hybrid turbulence model for unsteady boundary layers," *AIAA Journal*, Vol. 36, No. 3, pp. 481-484, 1998.
- J7. Seifert, A., Eliahu, S., Greenblatt, D. and Wygnanski, I., "Use of piezoelectric actuators for airfoil separation control," *AIAA Journal*, Vol. 36, No. 8, pp. 1535-1537, 1998.
- J8. Greenblatt, D. and Moss, E. A., "Pipe-flow relaminarization by temporal acceleration," *Physics of Fluids*, Vol. 11, No. 11, pp. 3478-3481, 1999.
- J9. Greenblatt, D., Neuburger, D., Wygnanski, I., "Dynamic stall control by intermittent periodic excitation," *AIAA Journal of Aircraft*, Vol. 38, No. 1, 2001, pp. 188-190.
- J10. Greenblatt, D. and Wygnanski, I., "Use of periodic excitation to enhance airfoil performance at low Reynolds numbers," *AIAA Journal of Aircraft*, Vol. 38, No. 2, 2001, pp. 190-192.

[§] Technion student names underlined.

- J11. Greenblatt, D. and Wygnanski, I., "Dynamic stall control by periodic excitation. Part 1: NACA 0015 Parametric Study," *AIAA Journal of Aircraft*, Vol. 38, No. 3, 2001, pp. 430-438.
- J12. Greenblatt, D., Nishri, B., Darabi, A. and Wygnanski, I., "Dynamic stall control by periodic excitation. Part 2: Mechanisms," *AIAA Journal of Aircraft*, Vol. 38, No. 3, 2001, pp. 439-447.
- J13. Greenblatt, D. and Wygnanski, I., "Effect of leading-edge curvature on airfoil separation control," *AIAA Journal of Aircraft*, Vol. 40, No. 3, 2003, pp. 473-481.
- J14. Greenblatt, D. and Moss, E. A. "Rapid transition to turbulence in pipe-flows accelerated from rest," *Journal of Fluids Engineering*, Vol. 125, November 2003, pp. 1072-1075.
- J15. Greenblatt, D. and Moss, E. A. "Rapid temporal acceleration of a turbulent pipe flow," *Journal of Fluid Mechanics*, Vol. 514, 2004, pp. 65-75.
- J16. Margalit, S., Greenblatt, D., Seifert, A. and Wygnanski, I., "Delta wing stall and roll control using segmented piezoelectric fluidic actuators," *AIAA Journal of Aircraft*, Vol. 42, No. 3, 2005, pp. 698-709.
- J17. Naughton, J., Viken, S. and Greenblatt, D., "Skin-friction measurements on the NASA hump model," *AIAA Journal*, Vol. 44, No. 6, 2006, pp. 1255-1265.
- J18. Greenblatt, D., Paschal, K., Yao, C., Harris, J., Schaeffler, N., and Washburn, A., "Experimental investigation of separation control Part 1: baseline and steady suction," *AIAA Journal*, Vol. 44, No. 12, 2006, pp. 2820-2830.
- J19. Greenblatt, D., Paschal, K., Yao, C., Harris, J., "Experimental investigation of separation control Part 2: zero mass-flux oscillatory blowing," *AIAA Journal*, Vol. 44, No. 12, 2006, pp. 2831-2845.
- J20. Greenblatt, D., "Managing flap vortices via separation control," *AIAA Journal*, Vol. 44, No. 11, 2006, pp. 2755-2764.
- J21. Naim, A., Greenblatt, D., Seifert, A. and Wygnanski, I., "Active control of a circular cylinder flow at transitional Reynolds numbers," *Flow, Turbulence & Combustion*, Vol. 78, Nos. 3-4, June, 2007, pp. 383-407.
- J22. Greenblatt, D., "Dual location separation control on a semispan wing," *AIAA Journal*, Vol. 45, No. 8, 2007, pp. 1848-1860.
- J23. Greenblatt, D., Göksel, B., Rechenberg, I., Schüle, C., Romann, D. and Paschereit, C.O., "Dielectric barrier discharge flow control at very low flight Reynolds numbers," *AIAA Journal*, Vol. 46, No. 6, 2008, pp. 1528-1541.

- J24. Greenblatt, D., Kastantin, Y., Nayeri, C.N. and Paschereit, C.O., "Delta-wing flow control using dielectric barrier discharge actuators," *AIAA Journal*, Vol. 46, No.6, 2008, pp. 1554-1560.
- J25. Greenblatt, D. and Washburn, A.E., "Influence of finite span and sweep on active flow control efficacy," *AIAA Journal*, Vol. 46, No. 7, 2008, pp. 1675-1694.
- J26. Greenblatt, D., "Active control of tip-flap loads," *AIAA Journal*, Vol. 47, No. 3, 2009, pp. 783-788.
- J27. Lacarelle, A., Faustmann, T., Greenblatt, D., Paschereit, C.O., Lehmann, O., Luchtenburg, D.M. and Noack, B.R., "Spatio-temporal characterization of a conical swirler flow field under strong forcing," *ASME Journal of Engineering for Gas Turbines and Power*, Vol. 131, Issue 3, 2009, 031504 (12 pages).
- J28. Rumsey, C.L. and Greenblatt, D., "Flow control predictions using URANS modeling: A parametric study," *AIAA Journal*, Vol. 47, No. 9, 2009, pp. 2259-2262.
- J29. Greenblatt, D., Vey, S., Paschereit, C., Meyer, R., "Flap vortex management using active Gurney flaps," *AIAA Journal*, Vol. 47, No. 12, 2009, pp. 2845-2856.
- J30. Romm, I., Greenblatt, D. and Ishay, M., "Subcritical pipe flow transition control using dielectric barrier discharge plasma actuators," *International Journal of Flow Control*, Vol. 1, No. 4, 2009, pp. 239-254.
- J31. Greenblatt, D. and <u>Arzuan, G.</u>, "Active control of flow separation in a radial blower," *Journal of Fluids Engineering*, Vol. 132, Issue 5, 2010, 051202 (6 pages).
- J32. Greenblatt, D., "Active control of leading-edge dynamic stall," *International Journal of Flow Control*, Vol. 2, No. 1, 2010, pp. 21-38.
- J33. Schüle, C.Y. and Greenblatt, D., "Combined plasma and Gurney flap flow control at very low flight Reynolds numbers," *AIAA Journal*, Vol. 48, No. 11, 2010, pp. 2714-2718.
- J34. Greenblatt, D., "Application of large Gurney flaps on low Reynolds number fan blades," *Journal of Fluids Engineering*, Vol. 133, 2011, 021102-1-8 (DOI: 10.1115/1.4003301).
- J35. <u>Sasson, B.</u> and Greenblatt, D., "Effect of leading-edge slot blowing on a vertical axis wind turbine," *AIAA Journal*, Vol. 49, No. 9, 2011, pp. 1932-1942. DOI: 10.2514/1.J050851.
- J36. Greenblatt, D., <u>Schulman, M.</u> and <u>Ben-Harav, A.</u>, "Vertical axis wind turbine performance enhancement using plasma actuators," *Renewable Energy*, Vol. 37, 2012, pp. 345-354. http://dx.doi.org/10.1016/j.renene.2011.06.040.
- J37. Greenblatt, D., "Fluidic control of a wingtip vortex," *AIAA Journal*, Vol. 50, No. 2, 2012, pp. 375-386. DOI: 10.2514/1.57285.

- J38. Greenblatt, D., <u>Avraham, T.</u> and <u>Golan, M.</u>, "Computer fan performance enhancement via acoustic perturbations," *International Journal of Heat and Fluid Flow*, Vol. 34, 2012. pp. 28-35. http://dx.doi.org/10.1016/j.ijheatfluidflow.2011.12.003.
- J39. Greenblatt, D., <u>Treizer, A.</u>, <u>Eidelman, A.</u> and <u>Mueller-Vahl, H.</u>, "Flow-control-induced vibrations using pulsed DBD plasma actuators," *Journal of Fluids & Structures*, Vol. 34, 2012, pp. 170-189.
- J40. Greenblatt, D., Schneider, T. and Schüle, C.Y., "Mechanism of flow separation control using Plasma Actuation," *Physics of Fluids*, Vol. 24, 077102, 2012. dx.doi.org/10.1063/1.4733399 (26 pages).
- J41. <u>Goyta, S., Mueller-Vahl, H.</u> and Greenblatt, D., "Tethered cube stabilization by means of leading-edge DBD plasma actuation," *Experiments in Fluids*, Vol. 54, No. 1, 2013, pp. 1-16. DOI 10.1007/s00348-012-1446-6.
- J42. van Hout, R., <u>Katz, A.</u> and Greenblatt, D., "Acoustic control of vortex-induced vibrations of a tethered sphere," *AIAA Journal*, 2013, Vol. 51, No. 3, 2013, pp. 754-757.
- J43. van Hout, R., <u>Katz, A.</u> and Greenblatt, D., "Time-resolved PIV measurements of vortex and shear layer dynamics in the near wake of a tethered sphere," *Physics of Fluids*, Vol. 25, 077102, 2013. dx.doi.org/10.1063/1.4812181 (19 pages).
- J44. Greenblatt, D., <u>Ben-Harav, A.</u> and <u>Mueller-Vahl, H.</u>, "Dynamic stall control on a vertical-axis wind turbine using plasma actuators," *AIAA Journal*, Vol. 52, No. 2, 2014, pp. 456-462, DOI: 10.2514/1.J052776.
- J45. Greenblatt, D., <u>Doron, G.</u> and <u>Treizer, A.</u>, "Wind-energy generation by active flow control," *International Journal of Flow Control*, Vol. 6, No. 2, 2014, pp. 105-124.
- J46. Mueller-Vahl, H., Strangfeld, C., Nayeri, C.N., Paschereit, C.O and Greenblatt, D., "Control of thick airfoil deep dynamic stall using steady blowing," *AIAA Journal*, Vol. 53, No. 2, 2015, pp. 277-295.
- J47. <u>Mueller-Vahl, H.</u>, Paschereit, C.O and Greenblatt, D., "Mixing enhancement of an axisymmetric jet using flaplets with zero mass-flux excitation," *Experiments in Fluids*, Vol. 56:38, Issue 2, 2015, pp. 1-22. DOI 10.1007/s00348-014-1889-z.
- J48. Depuru Mohan, N.K., Greenblatt, D., Nayeri, C.N., Paschereit, C.O. and Panchapakesan, N.R., "Vortex-enhanced mixing through active and passive flow control," *Experiments in Fluids*, Vol. 56:51, Issue 3, 2015, pp. 1-16. DOI 10.1007/s00348-015-1916-8.
- J49. Greenblatt D. and <u>Lautman</u>, R., "Inboard/outboard plasma actuation on a vertical-axis wind turbine" *Renewable Energy*, Vol. 83, 2015, pp. 1147-1156.

- J50. <u>Ben-Harav, A.</u> and Greenblatt, D., "Feed-forward dynamic stall control on a vertical axis wind turbine," *Wind Energy*, Vol. 19, Issue 1, 2016, Pages 3-16. DOI: 10.1002/we.1814.
- J51. Strangfeld, C., <u>Müller-Vahl, H.F.</u>, Nayeri, C.N., Paschereit, C.O. and Greenblatt, D., "Airfoil in a high amplitude oscillating stream," *Journal of Fluid Mechanics*, Vol. 793, 2016, pp. 79-108.
- J52. Greenblatt, D., "Unsteady low-speed wind tunnels," *AIAA Journal*, Vol. 54, No. 6, June 2016, pp. 1817-1830.
- J53. <u>Müller-Vahl, H.</u>, Nayeri, C.N., Paschereit, C.O and Greenblatt, D., "Dynamic stall control via adaptive blowing," *Renewable Energy*, Vol. 97, 2016, pp. 47-64.
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- J66. Greenblatt, D., Whalen, E.A. Wygnanski, I.J., "Introduction to the Flow Control Virtual Collection," AIAA Journal, Vol. 57, No. 8, 2019, pp. 3111-3114. https://doi.org/10.2514/1.J058507
- J67. Greenblatt, D. and van Rensburg, R., "Anisokinetics: Novel isokinetics-alternative for developing countries," *Journal of Novel Physiotherapies* (in press).

Submitted Papers

- J68. <u>Ifergan, O.</u>, Berreby M. and Greenblatt, D., "Simultaneous Voltage and Heat Transfer Measurements along an Arc Plasma Wind Tunnel Constrictor," Submitted to the *AIAA Journal of Themophysics and Heat Transfer*.
- J69. <u>Müller-Vahl, H.F.</u>, Strangfeld, C., Nayeri, C.N., Paschereit, C.O. and Greenblatt, D., "Dynamic stall under combined pitching and surging," *Experiments in Fluids*, 2019.

Review Papers

- J70. Greenblatt, D. and Wygnanski, I., "The control of separation by periodic excitation," *Progress in Aerospace Sciences*, Volume 36, Issue 7, 2000, pp. 487-545.
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Book Chapters & Encyclopedia Chapters**

- B1. Göksel, B., Greenblatt, D., Rechenberg, I. Kastantin, Y., Nayeri, C.N. and Paschereit, C.O., "Pulsed plasma actuators for active flow control at MAV Reynolds Numbers," Ed. R. King, *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, Vol. 95, pp. 42-55, 2007.
- B2. Greenblatt, D., Kastanin, Y., Singh, Y., Nayeri, C.N. Paschereit, C.O., "Active management of entrainment and streamwise vortices in an incompressible jet," Ed. R. King, *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, Vol. 95, pp. 281-292, 2007.

^{**} Technion student names underlined.

- B3. Greenblatt, D. and Wygnanski, I., "Chapter 2: Physical concepts underlying the application of modern flow control," in *Fundamentals and Applications of Modern Flow Control*, eds. R.D. Joslin and D. Miller, Progress in Astronautics and Aeronautics Series, 231, Published by AIAA, 2009, ISBN-10: 1-56347-983-4, ISBN-13: 978-1-56347-983-0, pp. 21-57.
- B4. Nayeri, C.N., Haff, J. Greenblatt, D., Loefdahl, L., Paschereit, C.O., "Drag reduction on a generic tractor-trailer using active flow control in combination with solid flaps," Eds. F. Browand, R. McCallen, J. Ross, The Aerodynamics of Heavy Vehicles II: Trucks, Buses, and Trains, Vol. 41, 2009, pp. 179-191.
- B5. Greenblatt, D., Rumsey, C. and Wygnanski, I., "Active control of aerodynamic flows," in Encyclopedia of Aerospace Engineering, Eds. R. Blockley and W. Shyy, 2010, John Wiley & Sons, Ltd. ISBN: 978-0-470-75440-5.
- B6. Mueller-Vahl, H., Strangfeld, C., Nayeri, C.N., Paschereit, C.O. and Greenblatt, D., "Thick airfoil dynamic stall," in "Wind Energy Impact of Turbulence," Eds. M. Hölling, J. Peinke and S. Ivanell, Springer, pp. 35-40, 2013.
- B7. Greenblatt, D., <u>Müller-Vahl, H., Lautman, R., Ben-Harav A.</u> and <u>Eshel, B.,</u> "DBD plasma-based flow control on a vertical axis wind turbine," Active Flow and Combustion Control 2014, Ed. R. King, 2015, pp. 71-86, Springer, ISBN: 978-3-319-11967-0.
- B8. Greenblatt, D., <u>Keisar, D.</u> and <u>Hasin, D.</u>, "Transitioning plasma actuators to flight applications," In: King R. (eds) Active Flow and Combustion Control 2018. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, Vol. 141, Springer, Cham. https://doi.org/10.1007/978-3-319-98177-2_7. (Publication date (online): 5 August 2018)

Patents

- P1. Wygnanski, I., Greenblatt, D. and Seifert, A., "Airfoil with dynamic stall control by oscillatory forcing," US Patent No. 6,267,331, July 31, 2001.
- P2. Seifert, A., Greenblatt, D. and Wygnanski, I., "An aerial vehicle controlled and propelled by oscillatory momentum generators and method of flying a vehicle," US Patent No. 6,751,530, June 15, 2004. Israeli Patent No. 165553.
- P3. Greenblatt, D., "Vortex control for rotor blade devices," US Patent No. 7,467,921, December 23, 2008.
- P4. Greenblatt, D., "Simultaneous multiple-location separation control," US Patent No. 7,537,182, May 26, 2009.
- P5. Greenblatt, D., "Aerodynamic performance enhancements using discharge plasma actuators," US Patent No. 8,708,651, April 29, 2014

- P6. Greenblatt, D., "Gurney fan and propeller performance enhancements using outsized Gurney flaps," US Patent No. 8,764,403, July 1, 2014.
- P7. Greenblatt, D., <u>Sasson, B.</u> and <u>Schulman, M.</u>, "Flow control on a vertical axis wind turbine (VAWT)," US Patent No. 9,279,412, March 8, 2016.
- P8. Greenblatt, D, "Energy conversion from fluid flow," US Patent No. 9,841,000, December 12, 2017.

CONFERENCES

Keynote Lectures

- K1. Greenblatt, D., "Case 3: Separation control over a wall-mounted hump," Langley Research Center Workshop on CFD Validation of Synthetic Jets and Turbulent Separation Control, Williamsburg, Vol.1, pp. 3.1.1-3.1.5, VA, March 29-31, 2004. https://cfdval2004.larc.nasa.gov/case3.html
- K2. Greenblatt, D., "Flow control on wind turbine blades: from conventional to radical," 14th World Wind Energy Conference and Exhibition, 26-28 October, 2015. Jerusalem, Israel.
- K3. Greenblatt, D., "Wind turbine testing in low-speed wind tunnels," First Conference on Test Engineering, Azrieli College of Engineering, Jerusalem, 14 April 2016.
- K4. Greenblatt, D., "DBD plasma flow control on wind turbine blades," World Congress and Exhibition on Wind Energy, July 28-30, 2016 Berlin, Germany.
- K5. Greenblatt, D., "Adaptive slot blowing for wind turbine blade load control," World Wind Energy Conference, WWEC2017 Malmö, Sweden, June 12-14, 2017.

Invited Lectures (No Paper)^{††}

- Greenblatt, D., "Dynamic stall management by oscillatory forcing," Euromech Colloquium 361: Active Control of Turbulent Shear Flows, Technical University of Berlin, Berlin, Germany, 1997.
- I2. Greenblatt, D., "Test case 11.1: Wall-mounted two-dimensional hump with oscillatory zero-mass-flux jet or suction through a slot," 11th ERCOFTAC/IAHR/Cost Workshop on Refined Turbulence Modelling, Chalmers University of Technology, Göteborg, Sweden, April 7-8, 2005. www.tfd.chalmers.se/~gujo/WS11_2005. Invited representation for the ERCOFTAC CFD Validation Workshop.
- I3. Greenblatt, D., "The team approach to a CFD validation experiment," Flow Control Open Forum, 25th AIAA Applied Aerodynamics Conference, 25-28, Miami, FL, June 2007.

^{††} Presenter unless stated otherwise.

- I4. Greenblatt, D., "Active control of airflow on wind turbine blades," Technion CleanTech Seminar, Water Technology and Renewable Energy Symposium, Grand Water Research Institute, Technion, April 2, 2009.
- I5. Greenblatt, D., "Swirl-induced transition control in subcritical pipe flows," Global Flow Instability and Control Symposium—IV, Creta Maris, Hersonissos, Crete, September 28 October 2, 2009, (V. Theofilis, T. Colonius, A. Seifert eds.), ISBN-13: 978-84-692-6247-4.
- I6. Greenblatt, D., "Solar and wind energy: innovative training courses," German-Israeli Conference, Green Technologies: Initial and Further Training in the Field of Solar and Wind Energy, EnergieForum Berlin, 30 November 2009.
- I7. Greenblatt, D., Pechlivanoglou, G. and Greenblatt, D., "Research in dynamic stall and unsteady aerodynamics," Advances in Rotor Blades for Wind Turbines, 2nd International Conference, Park Hotel Bremen, Germany, 25-27 February 2013.
- I8. Greenblatt, D., "Unsteady wind tunnel for rotor blade development & testing," 4th International Conference on Advances in Rotor Blades for Wind Turbines, 24-26 February 2015, Bremen, Germany.
- I9. Greenblatt, D., "Wind Turbine Flow Control Development is an unsteady wind tunnel," International Scientific Meeting: On Shear Flows and their Control, honoring Prof. Israel Wygnanski's 80th Birthday, 3-4 June, 2015.
- I10. Greenblatt, D., "Targeted experiments for CFD validation of separated and unsteady turbulent flows," CFD Impact Conference, June 30th, 2015, Haifa, Israel.
- III. Greenblatt, D. and Ol, M.V., "Large-amplitude surge-pitch for gust-response modeling," in ET-154 Incompressible Aerodynamics of Large Gust Encounters for Rigid Bodies, Prague, AVT-36th Panel Meeting, NATO Science and Technology Organization (STO), presented by M.V. Ol.
- I12. Greenblatt, D., "Adaptive slot blowing for VAWT blade load control," Euromech Colloquium 583: Scientific and Technological Challenges in Offshore Vertical Axis Wind Turbines, 7 September 9 September 2016, Delft, The Netherlands.
- I13. Greenblatt, D., "Surging airfoil with flow control," Special Session on Surging Airfoils, AIAA Scitech Conference 2018, Kissimmee, Florida.
- I14. Greenblatt, D. and Garzozi, A., "Desalination wind-pump driven by flow control," to be presented at the 35th Israeli Conference on Mechanical Engineering ICME 2018, Beer-Sheva, 9-10 October 2018, in honor of the 70th birthday of Dr. Moshe Zilberman (Head of Mechanical Engineering, Azrieli College of Engineering Jerusalem).

Participation in Organizing Conferences

Conference Chairmanship

2013: Conference Co-chairman: Advances in Rotor Blades for Wind Turbines, 2nd International Conference, 25-27 February 2013, Park Hotel Bremen, Germany. (Co-chairman with Dr. Lars Fuglsang, LM Wind Power Group, Denmark).

International & Scientific Committees

2008: International Advisory Board: The 2nd International Conference on Jets, Wakes and Separated Flows, ICJWSF-2008, Technical University Berlin, September 16-19, 2008, Berlin, Germany.

2014: Scientific Committee: The 4th International Conference on Experimental Fluid Mechanics, Beijing University of Aeronautics and Astronautics (BUAA), August 12-15, 2014, China.

2014: Proposal Funding Evaluation: U.S. Army Research Office U.S. Army Research Office, Fluid Dynamics program.

2018: Scientific Committee: The 5th International Conference on Experimental Fluid Mechanics, Universität der Bundeswehr, July 2-4, 2018, Munich, Germany.

Local Committees

2015-2016: Program Committee, 56th Israel Annual Conference on Aerospace Sciences, March 9-10, 2016, Tel Aviv and Haifa.

2015: International Program Committee, 14th World Wind Energy Conference and Exhibition, 26-28 October 2015, Jerusalem.

2016-2017: Program Committee, 57th Israel Annual Conference on Aerospace Sciences, March 15-16, 2017, Tel Aviv and Haifa.

2017-2018: Program Committee, 58th Israel Annual Conference on Aerospace Sciences, March 14-15, 2018, Tel Aviv and Haifa.

2018-2019: Program Committee, 59th Israel Annual Conference on Aerospace Sciences, March 6-7, 2019, Tel Aviv and Haifa.

Invited Conference Papers (presenter in bold font)

C1. Greenblatt, D., Darabi, A., Nishri, B. and **I. Wygnanski**, "Separation control by periodic addition of momentum with particular emphasis on dynamic stall," Vol. 98, pp. 3-4. 1998. Presented by I. Wygnanski at Heli Japan 98: AHS International Meeting on Advanced Rotorcraft Technology and Disaster Relief, April 21-23, 1998, Nagarafukumitsu, Gifu, Japan.

- C2. **Greenblatt, D.** and Wygnanski, I., "Parameters affecting dynamic stall control by oscillatory excitation," AIAA Paper 99-3121, 17th AIAA Applied Aerodynamics Conference, Norfolk, VA, 28 June 1 July 1999.
- C3. **Greenblatt, D.**, Darabi, A., Nishri, B. and Wygnanski, I., "Some factors affecting stall control with particular emphasis on dynamic stall," AIAA Paper 99-3504, 30th AIAA Fluid Dynamics Conference, Norfolk, VA, 28 June 1 July, 1999.
- C4. **Nagib, H.**, Kiedaisch, J., Greenblatt, D., Wygnanski, I. and Hassan, A., "Effective flow control for rotorcraft applications at flight mach numbers," AIAA Paper 2001-2974, 31st AIAA Fluid Dynamics Conference & Exhibit, Anaheim, CA, June 2001.
- C5. Nishri, B., Greenblatt, D., and **Wygnanski, I.J.**, "The evolution of a boundary layer over a flat plate in the presence of a strong adverse pressure gradient and periodic excitation," Aeromems Brite-Euram: TAU Final Report, Manchester 2001.
- C6. **Greenblatt, D.**, "Management of vortices tailing flapped wings via separation control," AIAA Paper 2005-0061, 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, Jan. 2005. *Voted by the AIAA Applied Aerodynamics Technical Committee as one of its best papers and invited for representation at the CEAS Aerodynamics Conference*, 20-22 June 2005, Bremen, Germany.
- C7. **Nayeri, C.N.**, Greenblatt, D., Haff, J., Paschereit, C.O. and Loefdahl, L., Drag reduction on a generic tractor-trailer using active flow control in combination with segmented base flaps," The Aerodynamics of Heavy Vehicles II: Trucks, Buses and Trains, 26-31 August, 2007, Granlibakken Conference Center, Lake Tahoe, CA.
- C8. **Greenblatt, D.**, Yao, C., Vey, S., Paschereit, C., Meyer, R., "Active management of flap-edge trailing vortices," AIAA Paper 2008-4186, 4th AIAA Flow Control Conference, Seattle, Washington, June 23-26, 2008.
- C9. **Greenblatt, D.**, "Subcritical pipe flow transition control using dielectric barrier discharge plasma actuators," International Conference on Active Flow Control II, May 26-28, 2010, Berlin, Germany.
- C10. **Greenblatt, D.**, <u>Müller-Vahl, H.</u>, <u>Lautman, R.</u>, <u>Ben-Harav A.</u> and <u>Eshel, B.</u>, "DBD Plasma-based flow control on a vertical axis wind turbine," Conference on "Active Flow and Combustion Control 2014," Berlin, Germany, September 10-12, 2014 (see printed version above under Book & Encyclopedia Chapters).
- C11. **Greenblatt, D.**, <u>Keisar, D.</u> and <u>Hasin, D.</u>, "Transitioning plasma actuators to flight applications," Conference on "Active Flow and Combustion Control 2018," Berlin, Germany, September 18-21, 2018 (printed version to appear under Book & Encyclopedia Chapters).

General Conference Papers

- C12. Greenblatt, D. and Moss, E. A., "A numerical investigation into temporally accelerated turbulent pipe flow," Proceedings of the South African Symposium on CFD, Paper 5.4, 1988.
- C13. Greenblatt, D., da Silva D. F. and Moss, E. A., "A numerical and experimental investigation of temporally accelerated turbulent pipe flow," Numerical Methods in Laminar and Turbulent Flow, Eds. C. Taylor et al. Vol. 6, Part 1, pp. 365-375, 1989.
- C14. Greenblatt, D. and Bruneau, P. R. P. "The prediction of heat transfer to convectively cooled turbine blading," 2nd National Symposium on Computational Fluid Dynamics, pp. 62-76, 1991.
- C15. Greenblatt, D., "The combined effect of unsteady turbulence on heat transfer to gas turbine blades," 10th International Symposium on Air-Breathing Engines, Nottingham UK, Ed. F. S. Billig, Vol. 2, pp. 1285-1290, 1991.
- C16. Greenblatt, D., Kirsten, T. J., Senatore, P. Louw, W. J. and Dedekind, M. O. "Life assessment of an impingement-cooled gas turbine blade," AIAA-92-4716-CP, 4th AIAA/USAF/NASA/OIA Symposium on Multidisciplinary Analysis and Optimisation, pp. 226-233, 1992.
- C17. Greenblatt, D. "Numerical computation of unsteady fully developed turbulent pipe-flow," 3rd South African CFD Conference, Stellenbosch, pp. 83-95, 1993.
- C18. Greenblatt, D. "The effects of wake-passing and free-stream turbulence on laminar gas turbine blade boundary layers," ASME Paper 93-GT-204, 1993.
- C19. Greenblatt, D. and Wygnanski, I., "Dynamic stall control by oscillatory forcing," AIAA Paper 98-0676, 36th Aerospace Sciences Meeting and Exhibit, Reno, NV, Jan. 12-15, 1998.
- C20. Greenblatt, D., Kiedaisch, J. and Nagib, H. "Unsteady-pressure corrections in highly attenuated measurements at moderate Mach numbers," AIAA Paper 2001-2983, 31st AIAA Fluid Dynamics Conference & Exhibit, Anaheim, CA, June 2001.
- C21. Greenblatt, D. and Wygnanski, I., "Effect of leading-edge curvature on separation control: A comparison of two NACA airfoils," 40th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, Jan. 2002.
- C22. Cullen, L. M., Nishri, B., Greenblatt, D. and Wygnanski, I., "The influence of curvature on the flow over the Stratford ramp," 40th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, Jan. 2002.
- C23. Greenblatt, D. and Wygnanski, I., "Control of NACA 0012 dynamic stall by periodic excitation," AIAA Paper 2002-3271, 1st AIAA Flow Control Conference, St. Louis, Missouri, 24-27 Jun 2002.

- C24. Margalit, S., Greenblatt, D., Seifert, A. and Wygnanski, I., "Active Flow control of a delta wing at high incidence using segmented piezoelectric actuators," AIAA Paper 2002-3270, 1st AIAA Flow Control Conference, St. Louis, Missouri, 24-27 Jun 2002.
- C25. Naim, A., Seifert, A., Greenblatt, D. and Wygnanski, I., "Active control of cylinder flow with and without a splitter plate using piezoelectric actuators" AIAA Paper 2002-3070, 1st AIAA Flow Control Conference, St. Louis, Missouri, 24-27 Jun 2002.
- C26. Nagib, H., Kiedaisch, J., and Greenblatt, D., "Active control of separation," 14th USNCTAM, Blacksburg, Virginia, 23-28 June, 2002.
- C27. Greenblatt, D., Paschal, K., Yao, C., Harris, J., Schaeffler, N., and Washburn, A., "A separation control CFD validation test case part 1: baseline & steady suction," AIAA Paper 2004-2220, 2nd AIAA Flow Control Conference, Portland, Oregon, 28 June 1 July 2004.
- C28. Naughton, J., Viken, S. and Greenblatt, D., "Wall shear stress measurements on the NASA hump model for CFD validation," AIAA Paper 2004-2607, 34th AIAA Fluid Dynamics Conference and Exhibit, Portland, Oregon, 28 June 1 July 2004.
- C29. Greenblatt, D., Paschal, K., Yao, C., Harris, J., "A separation control CFD validation test case part 2: zero efflux oscillatory blowing," AIAA Paper 2005-0485, 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, Jan. 2005.
- C30. Greenblatt, D., Melton, L., Yao, C., Harris, J., "Control of a wing tip vortex" AIAA Paper 2005-4851, 23rd AIAA Applied Aerodynamics Conference, Westin Harbour Castle, Toronto, Ontario, 6-9 June 2005.
- C31. Greenblatt, D., "Dual location separation control," AIAA Paper 2005-5085, 23rd AIAA Applied Aerodynamics Conference, Westin Harbour Castle, Toronto, Ontario, 6-9 June 2005.
- C32. Greenblatt, D., "Control of flap vortices," Aerodynamics Session, 45th Israel Annual Conference on Aerospace Sciences, Dan Panorama Hotel, Tel Aviv and Technion Campus, Haifa 23-24 February, 2005.
- C33. Göksel, B., Greenblatt, D., Rechenberg, I. Kastantin, Y., Nayeri, C.N. and Paschereit, C.O., "Pulsed plasma actuators for active flow control at MAV Reynolds Numbers," Proceedings of the 1st Conference on Active Flow Control, September 27-29, 2006, Berlin, Germany.
- C34. Greenblatt, D., Kastanin, Y., Singh, Y., Nayeri, C.N. Paschereit, C.O., "Active management of entrainment and streamwise vortices in an incompressible jet," Proceedings of the 1st Conference on Active Flow Control, September 27-29, 2006, Berlin, Germany.
- C35. Göksel, B., Greenblatt, D., Rechenberg, I., Nayeri, C.N. and Paschereit, C.O., "Steady and unsteady plasma wall jets for separation and circulation control," AIAA Paper

- 2006-3686, 3rd AIAA Flow Control Conference, 5-8 June 2006, San Francisco, California, USA.
- C36. Göksel, B., Greenblatt, D., Rechenberg, I., Singh, Y., Nayeri, C.N. and Paschereit, C.O., "Pulsed plasma actuators for separation flow control," Conference on Turbulence and Interactions, 2006, May 29 June 2, 2006, Porquerolles, France.
- C37. Greenblatt, D., Göksel, B. Schüle, C.Y. and Paschereit, C.O., "Dielectric barrier discharge flow control at very low flight Reynolds numbers," 47th Israel Annual Conference on Aerospace Sciences, Dan Panorama Hotel, Tel Aviv and Technion Campus, Haifa, February 21-22, 2007.
- C38. Greenblatt, D. and Washburn, A., "Influence of finite span and sweep on active flow control efficacy," AIAA Paper 2007-4275, 25th AIAA Applied Aerodynamics Conference, 25-28, Hyatt Regency Miami, Miami, FL, June 2007.
- C39. Greenblatt, D., Kastantin, Y. and Paschereit, C.O., "Delta wing flow control using dielectric barrier discharge actuators," AIAA paper 2007-4277, 25th AIAA Applied Aerodynamics Conference, 25-28, Hyatt Regency Miami, Miami, FL, June 2007.
- C40. Lacarelle, A, Paschereit, C.O., Greenblatt, D. and Gutmark, E., "Experimental investigation of the effect of strong forcing on the cold flow of a swirl burner," 11th Euromech European Turbulence Conference, University of Porto, Portugal, 25-28 June 2007.
- C41. Nagib, H., Kiedaisch, J., Greenblatt, D., Wygnanski, I., Hassan, A., "Flow control for rotorcraft applications at flight Mach numbers," IUTAM Symposium on Unsteady Separated Flows and their Control, Corfu, Greece, June 2007.
- C42. Rumsey, C.L. and Greenblatt, D., "flow control predictions using URANS modeling: A parametric study," 5th International Symposium on Turbulence and Shear Flow Phenomena, TU Munich, 27-29 August 2007.
- C43. Vey, S., Greenblatt, D. Paschereit, C.O. and Meyer, R., "Flap vortex management by active gurney flaps," 46th AIAA Aerospace Sciences Meeting and Exhibit, 7-10 January 2008, Reno NV.
- C44. Lacarelle, A., Faustmann, T., Greenblatt, D., Paschereit, C. O., Lehmann, O. Luchtenburg, D. M. and Noack, B. R., "Spatio-temporal characterization of a conical swirler flow field under strong forcing," ASME GT2008-50970.
- C45. Schüle, C.Y., Greenblatt, D. and Paschereit, C.O., "Combined plasma and Gurney flap flow control at very low flight Reynolds numbers," 2nd International Conference on Jets, Wakes and Separated Flows, Technical University Berlin, September 16–19 2008, Berlin, Germany.
- C46. Schneider, T. Schüle, C.Y. Greenblatt, D. Nayeri, C.N. and Paschereit, C.O., "Experimental and computational investigation of active flow control with DBD plasma actuators at low Reynolds numbers," 2nd International Conference on Jets,

- Wakes and Separated Flows, Technical University Berlin, September 16–19 2008, Berlin, Germany.
- C47. Vey, S. Paschereit, C., Ntontoros, C., Nayeri, C., Greenblatt, D., "Plasma actuators as a means to enhance sailboat wing performance," European Drag Reduction and Flow Control Meeting (EDRFCM), 8-11 September 2008, Ostritz, St. Marienthal, Germany.
- C48. Singh, Y., Greenblatt, D., Nayeri, C.N. Paschereit, O. and Mohan, N.K.D., "Active control of an incompressible axisymmetric jet," ESDA 2008-59509, 9th Biennial ASME Conference on Engineering Systems Design and Analysis, 2008, Haifa, Israel.
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