# <u>RESUME</u>

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 Courses**

Flow Control (graduate/undergraduate course: 036064)

Turbomachinery Fluid Mechanics and Thermodynamics (undergraduate course: 035028)

Advanced Laboratory in Fluid Mechanics (undergraduate course: 034047)

## **TECHNION ACTIVITIES**

2017-2019: Member of the Committee for Academic Development

2020- : Professional Promotion Committee member

## **DEPARTMENTAL ACTIVITIES**

- 2019- : Head of the Energy Academic Track, Faculty of Mechanical Engineering
- 2019- : Head of the Research Center for Energy Engineering and Environmental Preservation, Faculty of Mechanical Engineering

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

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, Journal of Fluid Mechanics, 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, 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, Physical Review Fluids.

# 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; 2020-)

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<sup>\*</sup>

2016: AIAA Ground Testing Technical Committee Best Ground Testing Paper: "Unsteady Low-Speed Wind Tunnel Design," AIAA Paper No. 2015-2861, 31<sup>st</sup> 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 21<sup>st</sup> 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

<sup>\*</sup>The WOS program facilitates technical interactions on fundamental research via direct contact between distinguished foreign researchers and Air Force Research Laboratory scientists and engineers.

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

2019-2019: Prof. dr. ing. Tim De Troyer

### **POST-DOCTORAL FELLOWS**

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

2022-2023: Dr. David Keisar, Technion Post-Doctoral Fellow

#### **GRADUATE STUDENTS<sup>†</sup>**

#### **Completed PhD. Theses: Technion**

- 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). <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28151</u>. (See Publications: J46, J51, J53, J55, J57, J61, J82 and B6). Winner of the David and Olga Pnueli Prize.
- Oshri Ifergan, "Numerical and Experimental Investigation of Arc Plasma Wind Tunnels," Direct track, June 2019. <u>https://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=30442</u>. (See Publications: J62, J67, J75). Winner of the Arie and Rebecca Shostakovsky Prize.
- 3. Lior Eshbal, "Measurements of tethered sphere dynamics exposed to a uniform flow: fluid forcing, energy generation and acoustic control," June 2020, GTEP Student (co-advisor: Prof. René van Hout), (See Publications J64, J65).
- 4. Anan Garzozi, "Wind-Driven Piston-Pump for Water Desalination," Grand Technion Energy Program, June, 2022 (See Publications J58, J78, J81). Winner of the Nuebauer Family scholarship and the Steven and Beverly Rubenstein Charitable Foundation scholarship.
- David Keisar, "Dynamic-Stall-Driven Wind Turbine for Urban Applications and Direct Wind-Powered Desalination," October 2022. (See Publications J60, J69, J74, J77, J79, J81, B9). Winner of the Israel Ministry of Energy Scholarship, December 2018. Best Technion PhD Poster Award.
- 6. Lev Dunaevich, "Stability and Transition of Steady and Impulsively Started Coandă Flows," December 2023. (See Publications J70).

#### **Completed MSc. Theses: Technion**

1. Iliya Romm, "Subcritical pipe flow transition control using dielectric barrier discharge

<sup>&</sup>lt;sup>†</sup> Principal advisor unless otherwise stated.

plasma actuators," February 2010. www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26262. (See Publications: J30).

- Magen Schulman, "Dynamic stall control on a vertical axis wind turbine using dielectric barrier discharge plasma actuators," August 2011. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26968</u>. (See Publications: J36).
- Binyamin Sasson, "Vertical axis wind turbine performance improvement via leadingedge slot blowing," March 2012. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26583</u> (See Publications: J35).
- Alexander Treizer, "Generation of energy by the active control of flow over a cylindrical pendulum," September 2012. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27173</u> (See Publications: J39 and J45).
- Snir Goyta, "Tethered cube stabilization by means of active flow control," (Brakim Student) September 2012. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27648</u> (See Publications: J41).
- Amos Ben-Harav, "Optimization of a pulsed-plasma controlled vertical axis wind turbine," September 2012. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28185</u> (See Publications: J36, J44, J50 and B7).
- Gilad Doron, "A reciprocating wind energy generator driven by flow control," March 2013. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27794</u> (See Publications: J45).
- 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. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=26353</u> (See Publications: J42 and J43).
- Alexander Eidelman, "Development of a reciprocal motion wind-energy generator," October 2013. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27198</u> (See Publications: J39).
- Alexander Shapiro, "Investigation of the turbulent aspects in a pulse tube cryogenic system," September 2013 (principal advisor: Prof. Gershon Grossman). <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27238</u> (See Publications: J59).
- 11. David Elatov, "Separation control in a centrifugal fan using plasma actuator," (Brakim Student) May 2013. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28519</u>

- Ronen Lautman, "Combined upwind/downwind plasma-based flow control on a verticalaxis wind turbine," July 2014. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=28130</u> (See Publications: J49 and B7).
- 13. Yevgeni Furman, "Progress in the development of a low-speed oscillatory-flow wind tunnel," December 2014. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=27802</u>
- 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
- Ron Danon, "Coandă-based reciprocating wind energy generator," (GTEP Student) May 2016. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=29286</u> (See Publications J54).
- 16. Ben Eshel, "Closed-loop control of a plasma-enhanced vertical axis wind turbine," (GTEP Student) June 2016. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=29340</u> (See Publications B7).
- 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*. <u>http://www.graduate.technion.ac.il/Theses/Abstracts.asp?Id=29961</u> (See Publications: J58).
- 18. Nadav Itzhak, "Hydrodynamic factors associated with rebreathing in infants," in progress from 2017. June 2019. Recipient of the Leonard and Diane Sherman Interdisciplinary Graduate School Fellowship (See Publications J63). https://intranet.dp.technion.ac.il/grad/Theses/Abstracts.asp?Id=32348.
- 19. Nir Bratman, "Design and evaluation of a supersonic nozzle for a hot plasma facility," February 2021. https://intranet.dp.technion.ac.il/grad/Theses/Abstracts.asp?Id=33852.
- David Hasin, "Active flow control on low aspect ratio wings," May 2021. (See Publications J79). Degree awarded *cum laude*. https://intranet.dp.technion.ac.il/grad/Theses/Abstracts.asp?Id=33176.

## **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. Stefan Vey, "Low aspect ratio wing flow control at low Reynolds numbers," Advisor (coadvisors: C.O. Paschereit), November 2013. (See Publications: J29).
- 2. Christoph Strangfeld, "Active control of trailing vortices by means of long- and shortwavelength 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<sup>‡</sup>

#### PhD Students

1. Konstantin Kosmenko, "Hypersonic transition control on a generic hypervelocity model using DBD plasma actuators," expected graduation date: 2026.

### MSc Students

- 1. Mordechai Garcia, "Separation control on a two-element medium-altitude longendurance UAV airfoil," expected year of graduation: March 2024.
- 2. Idan Arava, "Slotted vertical axis wind turbine," expected year of graduation: March 2024.
- 3. Yair Reingewirtz, "Characterization of a dynamic-stall-driven turbine flowfield," expected year of graduation: 2024.
- 4. Aviv Rosenberg, "Short-term and long-term energy storage from a vertical axis wind pump," expected year of graduation: 2024.

## 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).

<sup>&</sup>lt;sup>‡</sup> Single advisor unless otherwise stated.

- 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).
- R14. 2020-2023: Israel Science Foundation **ISF** (Experimental and Computational Study of the Unsteady Coandă Effect), 1,200,000NIS (First PI with Prof. Steven Frankel).
- R15. 2021-2022: Israel Ministry of Defense (Rotor Noise Reduction), 180,000NIS (PI).
- R16. 2022-2023: Israel Ministry of Defense (Hypersonic Transition), 450,000NIS (PI).
- R17. 2022-2023: Israel Ministry of Defense (Flight-Experiments of a Mini UAV with DBD-Plasma-Based Flow Control), 217,000 NIS (PI).
- R18. 2023-2024: Noga Electrical System Management Ltd. (Combined cycle start-up for improved HRSG reliability, reduced fuel consumption and NOx emissions reduction), 250,000 NIS (PI with Mr. Boris Lasch).
- R19. 2024-2026: Israel Ministry of Energy (Direct Vertical-Axis-Wind-Turbine-Powered Desalination), 449,728 NIS (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<sup>§</sup>**

- 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. <u>https://doi.org/10.4102/sajp.v48i2.741</u>.
- 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. https://doi.org/10.1080/16073606.1992.9631691.
- J3. Greenblatt, D. and Damelin, S. B., "Laminar boundary layers subjected to highfrequency traveling-wave fluctuations," *AIAA Journal*, Vol. 31, No. 5, pp. 957-959, 1993. <u>https://doi.org/10.2514/3.11711</u>.
- 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. <u>https://doi.org/10.1115/1.2929425</u>.
- 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. <u>https://doi.org/10.1016/s1350-4533(96)00065-3</u>.
- J6. Greenblatt, D., "Hybrid turbulence model for unsteady boundary layers," *AIAA Journal*, Vol. 36, No. 3, pp. 481-484, 1998. <u>https://doi.org/10.2514/2.391</u>.
- 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. <u>https://doi.org/10.2514/2.549</u>.
- J8. Greenblatt, D. and Moss, E. A., "Pipe-flow relaminarization by temporal acceleration," *Physics of Fluids*, Vol. 11, No. 11, pp. 3478-3481, 1999. <u>https://doi.org/10.1063/1.870205</u>.
- 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. https://doi.org/10.2514/2.2751.
- 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. <u>https://doi.org/10.2514/2.2752</u>.
- 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. <u>https://doi.org/10.2514/2.2810</u>.

<sup>§</sup> Technion student names <u>underlined</u>.

- 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. <u>https://doi.org/10.2514/2.2811</u>.
- 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. https://doi.org/10.2514/2.3142.
- 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. <u>https://doi.org/10.1115/1.1624423</u>.
- 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. <u>https://doi.org/10.1017/S0022112004000114</u>.
- 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. <u>https://doi.org/10.2514/1.6904</u>.
- 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. <u>https://doi.org/10.2514/1.14192</u>.
- 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. <u>https://doi.org/10.2514/1.13817</u>.
- 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. <u>https://doi.org/10.2514/1.19324</u>.
- J20. Greenblatt, D., "Managing flap vortices via separation control," *AIAA Journal*, Vol. 44, No. 11, 2006, pp. 2755-2764. <u>https://doi.org/10.2514/1.19664</u>.
- 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. <u>https://doi.org/10.1007/s10494-007-9068-4</u>.
- J22. Greenblatt, D., "Dual location separation control on a semispan wing," *AIAA Journal*, Vol. 45, No. 8, 2007, pp. 1848-1860. <u>https://doi.org/10.2514/1.27757</u>.
- 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. <u>https://doi.org/10.2514/1.33388</u>.
- 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. <u>https://doi.org/10.2514/1.33808</u>.

- 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. <u>https://doi.org/10.2514/1.33809</u>.
- J26. Greenblatt, D., "Active control of tip-flap loads," *AIAA Journal*, Vol. 47, No. 3, 2009, pp. 783-788. <u>https://doi.org/10.2514/1.37407</u>.
- 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). <u>https://doi.org/10.1115/1.2982139</u>.
- 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. https://doi.org/10.2514/1.41855.
- 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. https://doi.org/10.2514/1.41767.
- J30. <u>Romm, I.</u>, Greenblatt, D. and <u>Ishay, M.</u>, "Subcritical pipe flow transition control using dielectric barrier discharge plasma actuators," *International Journal of Flow Control*, Vol. 1, No. 4, 2009, pp. 239-254. <u>http://dx.doi.org/10.1260/1756-8250.1.4.239</u>.
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- 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," 35<sup>th</sup> Israeli Conference on Mechanical Engineering – ICME 2018, Beer-Sheva, 9-10 October 2018, in honor of the 70<sup>th</sup> 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, 2<sup>nd</sup> 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 2<sup>nd</sup> International Conference on Jets, Wakes and Separated Flows, ICJWSF-2008, Technical University Berlin, September 16-19, 2008, Berlin, Germany.

2014: Scientific Committee: The 4<sup>th</sup> 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 5<sup>th</sup> International Conference on Experimental Fluid Mechanics, Universität der Bundeswehr, July 2-4, 2018, Munich, Germany.

#### Local Committees

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

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

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

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

2018-2019: Program Committee, 59<sup>th</sup> 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, 17<sup>th</sup> 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, 30<sup>th</sup> 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, 31<sup>st</sup> 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, 4<sup>th</sup> 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, 4<sup>th</sup> AIAA/USAF/NASA/OIA Symposium on Multidisciplinary Analysis and Optimisation, pp. 226-233, 1992.
- C17. Greenblatt, D. "Numerical computation of unsteady fully developed turbulent pipeflow," 3<sup>rd</sup> 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," 40<sup>th</sup> 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, 1<sup>st</sup> 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," 14<sup>th</sup> 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, 45<sup>th</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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," 47<sup>th</sup> 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, 25<sup>th</sup> 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, 25<sup>th</sup> 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," 11<sup>th</sup> 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," 5<sup>th</sup> 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.
- C49. Mohan, N.K.D., Greenblatt, D., Nayeri, C.N., Paschereit, C.O. Ramamurthi, P.N.,
  "Active and passive flow control of an incompressible axisymmetric jet," Proceedings of ASME Turbo Expo 2008: Power for Land, Sea and Air, Paper GT2008-50484, June 9-13, 2008, Berlin, Germany.
- C50. Bachmann, M., Utehs, S., Vey, S., Paschereit, C.O. and Greenblatt, D., "Plasmabased active flow control on low Reynolds number airfoils," 49<sup>th</sup> Israel Annual Conference on Aerospace Sciences, 4-5 March 4, Tel Aviv, Haifa, 2009.
- C51. Singh, Y., Greenblatt, D., Nayeri, C.N. and Paschereit, C.O., "Active control of an incompressible axisymmetric jet using flaps," Proceedings of the Sixth International Symposium on Turbulence and Shear Flow Phenomena (TSFP6), June 22-24, 2009, Seoul, South Korea.
- C52. Vey, S., Nayeri, C.N. and Paschereit, C.O. and Greenblatt, D., "Plasma flow control on low aspect ratio wings at low Reynolds numbers," AIAA paper 2010-1222, 48<sup>th</sup> AIAA Aerospace Sciences Meeting Including the New Horizons Forum and Aerospace Exposition, Orlando, Florida, Jan. 4-7, 2010.
- C53. Sasson, B. and Greenblatt, D., "Blowing and pulsed blowing flow control performance prediction on a vertical axis wind turbine," 50<sup>th</sup> Israel Annual Conference on Aerospace Sciences, February 2010.
- C54. Sasson, B. and Greenblatt, D., "Effect of steady and unsteady slot blowing on a vertical axis wind turbine," AIAA Paper 2010-4406, 28<sup>th</sup> AIAA Applied Aerodynamics Conference, Chicago, Illinois, 28 June - 1 July 2010, Chicago, Illinois.
- C55. Singh, Y., Mueller-Vahl, H., Nayeri, C.N., Paschereit, C.N., "Active control of an incompressible axisymmetric jet using flaps and zero mass-flux excitation," AIAA Paper 2010-4417, 5th Flow Control Conference, 28 June - 1 July 2010, Chicago, Illinois.

- C56. Vey, S., Greenblatt, D., Nayeri, C.N. and Paschereit, C.O., "Leading edge and wing tip flow control on low aspect ratio wings," AIAA Paper 2010-4865, 40th Fluid Dynamics Conference and Exhibit, 28 June 1 July 2010, Chicago, Illinois.
- C57. Vey, S., Nayeri, C.N., Paschereit, C.O., Greenblatt, D., "Frequency scaling of the active leading edge and wing tip forcing of low aspect ratio wings at low Reynolds numbers," 8<sup>th</sup> Euromech Fluid Mechanics Conference, Technische Universitaet Muenchen, Bad Reichenhall, Germany, September 13-16, 2010.
- C58. Mueller-Vahl, H., Singh, Y., Greenblatt, D., Nayeri, C.N. and Paschereit, C.O., "Active control of an incompressible axisymmetric jet using flaps and zero mass-flux excitation," Int. Conf. on Jets, Wakes and Separated Flows, ICJWSF-2010, Sept. 27-30, 2010, Cincinnati, Ohio USA.
- C59. Goyta, S. and Greenblatt, D., "Stabilization of a tethered cube using dielectric barrier discharge plasma actuation," 51<sup>st</sup> Israel Annual Conference on Aerospace Sciences, February 23-24, 2011.
- C60. Greenblatt, D., Treizer, A., Eidelman A., and Mueller-Vahl, H., "Flow-controlinduced vibrations using dielectric barrier discharge actuators," 50<sup>th</sup> AIAA Aerospace Sciences Meeting, Nashville, Tennessee, 2012.
- C61. Goyta, S., Mueller-Vahl, H. and Greenblatt, D., "Tethered cube stabilization by means of active flow control" 50<sup>th</sup> AIAA Aerospace Sciences Meeting, Nashville, Tennessee, 2012.
- C62. Greenblatt, D., Ben Harav, A. and Schulman, M., "Dynamic stall control on a vertical axis wind turbine using plasma actuators," 50<sup>th</sup> AIAA Aerospace Sciences Meeting, Nashville, Tennessee, 2012.
- C63. Vey, S., Nayeri, C.N., Paschereit, C.O. and Greenblatt, D., "On the frequency scaling of the forced flow above a low aspect ratio wing," AIAA-2012-317, 50th AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition, Nashville, Tennessee, Jan. 9-12, 2012.
- C64. Greenblatt, D., Ben Harav, A. and Mueller-Vahl, H., "Mechanism of dynamic stall control on a vertical axis wind turbine," AIAA Paper 2013-0851, 51<sup>st</sup> AIAA Aerospace Sciences Meeting and Aerospace Exposition, Grapevine, Texas, 7-10 January 2013.
- C65. Mueller-Vahl, H., Strangfeld, C., Nayeri, C.N., Paschereit, C.O. and Greenblatt, D., Thick airfoil deep dynamic stall and its control," AIAA paper 2013-0854, 51<sup>st</sup> AIAA Aerospace Sciences Meeting and Aerospace Exposition, Grapevine, Texas, 7-10 January 2013.
- C66. Furman, Y., Müller-Vahl, H.F. Greenblatt, D., "Development of a low-speed oscillatory-flow wind tunnel," AIAA paper 2013-0505, 51<sup>st</sup> AIAA Aerospace Sciences Meeting and Aerospace Exposition, Grapevine, Texas, 7-10 January 2013.

- C67. Mueller-Vahl, Furman, Y. and Greenblatt, D., "Development and commissioning of an unsteady-flow wind tunnel," 53<sup>rd</sup> Israel Annual Conference on Aerospace Sciences, March 7, 2013 - Technion Campus, Haifa, Israel.
- C68. Lautman, R. and Greenblatt, D., "Combined upwind/downwind plasma-based flow control on a vertical-axis wind turbine," AIAA paper No. 2014-2846, 32<sup>nd</sup> AIAA Applied Aerodynamics Conference, 2014.
- C69. Mueller-Vahl, H., Nayeri, C.N., Paschereit, C.O. and Greenblatt, D., "Control of unsteady aerodynamic loads using adaptive blowing," AIAA paper No. 2014-2562, 32<sup>nd</sup> AIAA Applied Aerodynamics Conference, 2014.
- C70. Strangfeld, C., Müller-Vahl, H.F., Greenblatt, D., Nayeri, C.N. and Paschereit, C.O., "Airfoil subjected to high-amplitude free-stream oscillations: theory and experiments," AIAA paper No. 2014-2926, 7<sup>th</sup> AIAA Theoretical Fluid Mechanics Conference, 2014.
- C71. Strangfeld, C., Rumsey, C.L., Müller-Vahl, H.F., Greenblatt, D., Nayeri, C.N. and Paschereit, "Unsteady thick airfoil aerodynamics: experiments, computation, and theory," AIAA paper No. 2015-3071, 45<sup>th</sup> AIAA Fluid Dynamics Conference, 2015.
- C72. Williams, D.R., Reissner F., Greenblatt, D., Müller-Vahl and Strangfeld, C.,
  "Modeling lift hysteresis with a modified Goman-Khrabrov model on pitching airfoils," AIAA paper No. 2015-2631, 45<sup>th</sup> AIAA Fluid Dynamics Conference, 2015.
- C73. Strangfeld, C., Müller-Vahl, H.F., Greenblatt, D., van der Wall, B.G., Nayeri, C.N., Paschereit, C.O., "Pitching airfoil subjected to high amplitude free stream oscillations," 41<sup>st</sup> European Rotorcraft Forum, Munich, Germany, Sept. 1-3, 2015.
- C74. Greenblatt, D., "Unsteady low-speed wind tunnel design," AIAA Paper No. 2015-2861, 31<sup>st</sup> AIAA Aerodynamic Measurement Technology and Ground Testing Conference, 2015.
- C75. Greenblatt, D., Mueller-Vahl, H., Williams, D.R. and Reissner, F., "Goman-Khrabrov model on a pitching airfoil with flow control," AIAA paper No. 2016-4240, 8<sup>th</sup> AIAA Flow Control Conference, 2016.
- C76. Greenblatt, D., Mueller-Vahl, H., Strangfeld, C., Ol, M.V., Granlund, K.O., "High advance-ratio airfoil streamwise oscillations: wind tunnel vs. water tunnel," AIAA Paper No. 2016-1356, 54<sup>th</sup> AIAA Aerospace Sciences Meeting, 2016.
- C77. Saverin, J., Peukert, J., Marten, D., Pechlivanoglou, G., Paschereit, C.O. and Greenblatt, D., "Aeroelastic simulation of multi-MW wind turbines using a free vortex model coupled to a geometrically exact beam model,"*Journal of Physics: Conference Series*, Vol. 753, No. 8, p. 082015. IOP Publishing, 2016. <u>https://iopscience.iop.org/article/10.1088/1742-6596/753/8/082015</u>.

- C78. Puri, K., Laufer, M., Müller-Vahl, H., Greenblatt, D. and Frankel, S.H.,
  "Computations of active flow control via steady blowing over a NACA-0018 airfoil: implicit LES and RANS validated against experimental data," AIAA Paper No. 2018-0792, AIAA SciTech Forum, Kissimmee, Florida, January, 2018.
- C79. Keisar, D., Hasin, D. and Greenblatt, D., "Stall control on a UAS V-tail panel using DBD plasma actuators," 58<sup>th</sup> Israel Annual Conference on Aerospace Sciences, March 14-15, 2018 – Tel Aviv and Technion Campus, Haifa, Israel.
- C80. Hasin, D., Keisar, D. and Greenblatt, D., "Take-off Performance Enhancement via Stall Control of a Full-Scale Aircraft Tail," 59<sup>th</sup> Israel Annual Conference on Aerospace Sciences, March 6-7, 2019 – Tel Aviv and Technion Campus, Haifa, Israel.
- C81. Ifergan, O., Berreby, M. and Greenblatt, D., "Simultaneous Voltage and Heat Transfer distribution Measurements on an Arc Plasma Wind Tunnel Constrictor," AIAA Paper No. 2020-0981, AIAA SciTech Forum, 6-10 January 2020, Orlando, FL.
- C82. Keisar, D., De Troyer, T. and Greenblatt, D., "Atypical Aerodynamics of Large Chord/Radius Vertical Axis Wind Turbines," AIAA paper No. AIAA 2020-1491, AIAA SciTech Forum, 6-10 January 2020, Orlando, FL.
- C83. Garzozi, A., Dunaevich, L. and Greenblatt, D., "High-torque oscillating wind energy generator," Journal of Physics: Conference Series, Vol. 1618, No. 4, p. 042004, 2020. https://doi.org/10.1088/1742-6596/1618/4/042004.
- C84. De Troyer, T., Csurcsia, P.Z., Greenblatt, D., "Nonlinear system identification of a pitching wing in a surging flow," International Conference on Noise and Vibration Engineering, Paper No. 336, 7-9 September, 2020.
- C85. Laufer, M., Frankel, and Greenblatt, D., "GPU-Accelerated Implicit Large Eddy Simulation of a NACA 0018 Airfoil with Active Flow Control," AIAA Paper 2022-0471, AIAA SciTech Forum, January 3-7, San Diego, CA, 2022. <u>https://doi.org/10.2514/6.2022-0471</u>.
- C86. Regev, T., Nestmann, J., Garzuzi, A., Greenblatt, D. and Frankel, S., "GPU-Accelerated High-Fidelity Implicit Large Eddy Simulations of Coandă Cylinder Flow Instabilities," AIAA Paper No. 2023-0272, AIAA Scitech 2023 Forum, 23-27 January 2023, National Harbor, MD. <u>https://doi.org/10.2514/6.2023-0272</u>.
- C87. Polonsky, D., Oksana, S. and Greenblatt, D., "Battery-Powered Helicopter Hover Performance Enhancement using DBD Plasma Actuator," AIAA Paper 2013-4308, AIAA Aviation Forum, 2003, San Diego, CA. <u>https://doi.org/10.2514/6.2023-4308</u>.
- C88. Garcia, M. and Greenblatt, D., "Mini UAV with DBD-Plasma-Based Flow Control," AIAA Paper 2013-4306, AIAA Aviation Forum, 2003, San Diego, CA. https://doi.org/10.2514/6.2023-4306.