

OKTAY ÖZCAN RESUME

1. **Name, Surname:** Oktay Özcan

2. **Date of Birth:** January 5th 1954

3. **Title:** Professor

4. **Education:**

Degree	Field	University	Year
B.S	Mechanical Engineering	Istanbul Tech. Univ.(ITU)	1975
M.S.	Mechanical Engineering	Bosphorus University	1977
Ph.D.	Mechanical Engineering	Univ.of California, Berkeley	1982

5. **Academic Titles and Positions**

Postdoctoral Fellow	NASA/Ames Res. Cent.	USA	1982-1983
Assistant Professor	Faculty of Aero.&Astro.	ITU	1984-1987
Associate Professor	Faculty of Aero.&Astro.	ITU	1987-1993
Postdoctoral Fellow	NASA/Ames Res. Cent.	USA	1988-1990
Professor	Faculty of Aero.&Astro.	ITU	1993-2002
Visiting Professor	Tech. Univ. of Denmark	Denmark	1999-2001
Professor	Mechanical Eng.	Yildiz Tech. Univ.	2002- 2011
Professor	Mechatronics Eng	Bahçeşehir Univ.	2011-2015
Professor	Mechanical Eng	Kemerburgaz Univ.	2015- 2017
Professor	Mechanical Eng	Istanbul Aydın Univ.	2017 – 2022
Professor	Aeronautical Eng	Istanbul Gelisim Univ.	2022 -

6. **Publications**

6.1 **Journal publications**

6.1.1 Özcan, O. ve Holt, M. , ``Supersonic Separated Flow Past a Cylinder on a Flat Plate", AIAA Journal , 22, 611-617, 1984, DOI: [10.2514/3.48492](https://doi.org/10.2514/3.48492) .

- 6.1.2 Özcan, O., "Three-Component LDA Measurements in a Turbulent Boundary-Layer", Experiments in Fluids , 6, 327-334, 1988, DOI: [10.1007/BF00538824](https://doi.org/10.1007/BF00538824) .
- 6.1.3 Özcan , O. ve Ölçmen, M. S. , "Measurements of Turbulent Flow Behind a Wing-Body Junction", AIAA Journal, 26, 494-496, 1988, DOI: [10.2514/3.9921](https://doi.org/10.2514/3.9921) .
- 6.1.4 Özcan, O. ve Kaya, M. O. , "Shock-Wave Boundary-Layer Interaction at a Swept Compression Corner", AIAA Journal, 27, 1646-1648, 1989, DOI: [10.2514/3.10314](https://doi.org/10.2514/3.10314).
- 6.1.5 Özcan , O. ve Yüceil, B. , "Cylinder Induced Shock-Wave Boundary-Layer Interaction", AIAA Journal, 30, 1130-1132, 1992, DOI: [10.2514/3.11039](https://doi.org/10.2514/3.11039).
- 6.1.6 Özcan, O., Edis, F.O., Aslan, A.R. ve Pınar, I., "Inverse Solutions of the Prandtl-Meyer Function", Journal of Aircraft, 31, 1422-1424, 1994, DOI: [10.2514/3.46670](https://doi.org/10.2514/3.46670),
- 6.1.7 Özcan, O., Ünal, M.F., Aslan, A.R., Bozkurt, Y. ve Aydın, N.H., "Aerodynamic Characteristics of External Store Configurations at Low-Speeds", Journal of Aircraft, 32, 161-170, 1995, DOI: [10.2514/3.46696](https://doi.org/10.2514/3.46696).
- 6.1.8 Özcan, O., Johnson, D.A. ve Simpson, R.L., "Comment on "Wakes of Three Axisymmetric Bodies at Zero Angle of Attack"." AIAA Journal, 33, 569-570, 1995, DOI: [10.2514/3.12410](https://doi.org/10.2514/3.12410).
- 6.1.9 Wideman, J., Brown, J.L., Miles J.B. ve Özcan, O., "Skin-Friction Measurements in a 3-D, Supersonic Shock-Wave Boundary-Layer Interaction", AIAA Journal, 33, 805-811, 1995, DOI: [10.2514/3.12503](https://doi.org/10.2514/3.12503).
- 6.1.10 Özcan, O., Edis, F.O., Aslan, A. ve Pınar, I., "Reply by the Authors To G. Emanuel", Journal of Aircraft, 32, 1168, 1995, DOI: [10.2514/3.56925](https://doi.org/10.2514/3.56925). .
- 6.1.11 Özcan, O. ve Yüceil, B. , "Comment on Supersonic Separation with Obstructions", AIAA Journal, 35, 1423-1424, 1997, DOI: [10.2514/2.256](https://doi.org/10.2514/2.256).
- 6.1.12 Meyer, K.E., Özcan , O. ve Westergaard, C.H., "Flow Mapping of a Jet in Crossflow with Stereoscopic PIV," Journal of Visualization, 5, 225-231, 2002, DOI: [10.1007/BF03182330](https://doi.org/10.1007/BF03182330) .
- 6.1.13 Özcan, O. ve Larsen P.S., "A Laser Doppler Anemometry Study of a Turbulent Jet in Crossflow," AIAA Journal, 41, 1614-1616, 2003, DOI: [10.2514/2.2119](https://doi.org/10.2514/2.2119) .
- 6.1.14 Ullum, T., Larsen, P.S. ve Özcan, O., "Three-Dimensional flow and turbulence structure in electrostatic precipitator", Experiments in Fluids, 36, 91-99, 2004, DOI: [10.1007/s00348-003-0649-2](https://doi.org/10.1007/s00348-003-0649-2) .
- 6.1.15 Özcan, O. , Meyer, K.E. ve Melikov, A. " A Visual Description of the Convective Flow Field around the Head of a Human," Journal of Visualization, 8, 23-31, 2005, DOI: [10.1007/BF03181599](https://doi.org/10.1007/BF03181599).

6.1.16 Özcan, O. , Meyer, K.E. ve Larsen, P.S. ``Measurement of Mean Rotation and Strain-rate Tensors by Using Stereoscopic PIV," Experiments in Fluids, 39, 771-783, 2005, DOI: [10.1007/s00348-005-0010-z](https://doi.org/10.1007/s00348-005-0010-z) .

6.1.17 Meyer, K.E., Pedersen, J.M. ve Özcan , O., ``Turbulent jet in crossflow analysed with proper Orthogonal Decomposition," Journal of Fluid Mechanics, 583, 199-228, 2007, DOI: [10.1017/S0022112007006143](https://doi.org/10.1017/S0022112007006143)

6.1.18. Kürekçi, N.A. ve Özcan , O., ``An Experimental and Numerical Study of Laminar Natural Convection in a Differentially-Heated Cubical Enclosure," Journal of Thermal Science and Technology , 32, 1-8, (2012)

6.1.19. Kaya, K. ve Özcan , O., ``A Numerical Investigation on Aerodynamic Characteristics of an Air Cushion Vehicle," Journal of Wind Engineering and Industrial Aerodynamics 120, 70-80, (2013), DOI: [10.1016/j.jweia.2013.06.012](https://doi.org/10.1016/j.jweia.2013.06.012)

6.1.20. Kaya, K. ve Özcan , O., `` An approximate analytic solution of uniform laminar flow in a circular open channel," Journal of the Brazilian Society of Mechanical Sciences and Engineering, 43, 328-330, (2021), DOI: [10.1007/s40430-021-03037-x](https://doi.org/10.1007/s40430-021-03037-x)

6.2 Conference Publications

Özcan , O. , ``Description and Measurement Accuracy of a 3D LDA System" , ASME Fluid Measurements and Instrumentation Forum , Cincinnati , Ohio , U.S.A., June 14-18 , 1987 .

Özcan , O. and Ölçmen , M. S. , ``Measurements of Turbulent Flow Behind a Wing-Body Junction" , 6th Symposium on Turbulent Shear Flows", Toulouse, France , September 7-9 , 1987.

Özcan , O. , ``Measurements in a Three-Dimensional Turbulent Boundary-Layer", 6th Symposium on Turbulent Shear Flows", Toulouse, France , September 7-9 , 1987.

Özcan , O. , ``Measurement Errors in Three-Component Laser Anemometry", Symposium on Experimental Uncertainty in Fluid Measurements, ASME Winter Annual Meeting , Boston , U.S.A. , December 14-18 , 1987.

Brown , J. L. and Özcan , O. , ``A 3-D Laser Velocimeter for Supersonic Turbulent Flows", Measurements and Instrumentation Workshop, NASA-Ames Research Center, Moffett Field, U.S.A., July 1989.

Özcan, O. , Kaya , M. O. And Ünalmış , H. , ``Supersonic Separated Flow over a Swept Compression Corner", 10 th Australasian Fluid Mechanics Conference, Melbourne, Australia, December 11-15, 1989.

Özcan, O., Ünal, M.F., Aslan, A.R., Bozkurt, Y. and Aydın, N.H., ``Aerodynamic Characteristics of an External Store Carriage: Part A" AIAA Paper 93--3507, 11th Applied Aerodynamics Conference, Monterey, California, August 9--11, 1993.

Özcan, O., Ünal, M.F., Bozkurt, Y. and Doğan, A., ``Aerodynamic Characteristics of an External Store Carriage: Part B" AIAA Paper 94--0289, 32nd Aerospace Sciences Meeting, Reno, Nevada, January 10--13, 1994.

Wideman, J., Brown, J.L., Miles J.B. and Özcan, O., ``Skin—Friction Measurements in a 3--D, Supersonic Shock--Wave Boundary—Layer Interaction," AIAA Paper 94--0314, 32nd Aerospace Sciences Meeting, Reno, Nevada, January 10--13, 1994.

Meyer, K.E., Özcan, O., Larsen, P.S., Gjelstrup, P. and Westergaard, C.H., ``Point and planar LIF for velocity-concentration correlations in a jet in crossflow," In Laser Techniques for Fluid Mechanics: Selected Papers from the 10th International Symposium, Lisbon, July 10--13, 2000 (ed. R.J. Adrian, D.F.G. Durao, M.V. Heitor), pp.437-448, Springer.

Özcan, O., Meyer, K.E., Larsen, P.S., Gjelstrup P. and Westergaard, C.H., ``Simultaneous measurement of velocity and concentration in a jet in crossflow," Forum on ``Fluid Mechanics of Mixing Phenomena: Fundamentals and Industrial Applications," ASME Fluids Eng. Div. Summer Meeting, New Orleans, Louisiana, May 29-June 1, 2001.

Meyer, K.E., Özcan, O., Larsen, P.S. and Westergaard, C.H., ``Stereoscopic PIV measurements in a jet in crossflow," Second International Symposium on Turbulence and Shear Flow Phenomena, Stockholm, June 27-29, 2001.

Meyer, K.E., Özcan, O. and Westergaard, C.H., ``Flow Mapping of a Jet in Crossflow with Stereoscopic PIV," Fourth International Symposium on Particle Image Velocimetry, Gottingen, Germany, September 17-19, 2001.

Ullum, T., Larsen, P.S. and Özcan, O., ``Three-Dimensional Flow and Turbulence Structure in Electrostatic Precipitator", 11th International Symposium on ``Applications of Laser Techniques to Fluid Mechanics", Lisbon, July 8--11, 2002.

Özcan, O., Meyer, K.E. and Melikov, A. ``Turbulent and Stationary Convective Flow Field around the Head of a Human", in Turbulence, Heat and Mass Transfer 4, Begell House, Inc., New York, pp.1147-1154, Edited by K. Hanjalic, Y. Nagano and M.J. Tummers, Proceedings of the Fourth International Symposium on Turbulence, Heat and Mass transfer, Antalya, Turkey, 12-17 October, 2003.

Özcan, O., Meyer, K.E. and Larsen, P.S. ``Measurement of rotation-- and strain—rate tensors by using stereoscopic PIV", 12th International Symposium on Applications of Laser Techniques to Fluid Mechanics, Lisbon, Portugal, 12-15 July, 2004.

6.3 Other Publications

Özcan, O., “A Hot-Wire Method for Three-Dimensional Flows”, Master Thesis, Bosphorus University, Thesis Advisor: Sedat Biringen, 1977.

Özcan, O., “An Experimental Investigation of Three-Dimensional Supersonic Flow Past a Circular Cylinder on a Flat Plate”, Ph. D. Thesis, University of California, Berkeley, Thesis Advisor: Maurice Holt, 1982.

Wideman, J., Brown, J.L., Miles J.B. and Özcan, O., “Surface Documentation of a 3-D, Supersonic Shock-Wave Boundary-Layer Interaction,” NASA Technical Memorandum TM-108824, June 1994.

Larsen, P.S., Ullum, T. and Özcan, O. “Electrostatic Precipitation-Reduction of Emissions and Energy Consumption”, EFP-2000, Dept. of Mechanical Engineering, Tech. Univ. of Denmark, 2002.

Özcan, O. and Larsen, P.S., “An Experimental Study of a Turbulent Jet in Cross-Flow by Using LDA”, MEK-FM 2001-02, Dept. of Mechanical Engineering, Tech. Univ. of Denmark, June 2001.

7. Courses Given

- a) Introduction to Fluid Mechanics and Heat Transfer
- b) Computer-Aided Technical Drawing
- c) Introduction to Computational Fluid Dynamics
- d) Computational Methods in Engineering
- e) Pipeline Engineering
- f) Vehicle Aerodynamics
- g) Fluid Mechanics
- h) Heat Transfer
- i) Thermodynamics
- j) Aerodynamics
- k) Probability and Statistics
- l) Dynamics
- m) Advanced Fluid Mechanics (Graduate)
- n) Boundary-Layer Flows (Graduate)
- o) Compressible Flows (Graduate)
- p) Turbulent Flows (Graduate)

8. Other

Number of Master Students: 20

Number of Ph.D. Students: 2

Google Citation: Atif: 706, h-index: 11

Web of Science: Atif: 473, h-index: 10

ORCID: <https://orcid.org/0000-0002-6836-3831>

ResearcherID: <http://www.researcherid.com/rid/V-9638-2017>