

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 - |

6. **Publications**

6.1 **Journal publications**

Kaya, K. and Özcan , O., ``A numerical investigation on aerodynamic characteristics of an air cushion vehicle," Journal of Wind Engineering and Industrial Aerodynamics 120, 70-80, (2013).

Kürekçi, N.A. and 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).

Meyer, K.E., Pedersen, J.M. and Özcan , O., ``Turbulent jet in crossflow analysed with proper Orthogonal Decomposition," *Journal of Fluid Mechanics*, 583, 199-228 (2007).

Özcan, O. , Meyer, K.E. and Larsen, P.S. ``Measurement of Mean Rotation and Strain-rate Tensors by Using Stereoscopic PIV," *Experiments in Fluids*, 39, 771-783 (2005).

Özcan, O. , Meyer, K.E. and Melikov, A. ``A Visual Description of the Convective Flow Field around the Head of a Human," *Journal of Visualization*, 8, 23-31 (2005).

Ullum, T., Larsen, P.S. and Özcan, O., ``Three-Dimensional flow and turbulence structure in electrostatic precipitator", *Experiments in Fluids*, 36, 91—99 (2004).

Özcan, O. and Larsen P.S., ``A Laser Doppler Anemometry Study of a Turbulent Jet in Crossflow," *AIAA Journal*, 41, 1614-1616 (2003).

Meyer, K.E., Özcan , O. and Westergaard, C.H., ``Flow Mapping of a Jet in Crossflow with Stereoscopic PIV," *Journal of Visualization*, 5, 225—231 (2002).

Özcan, O. and Yüceil, B. , ``Comment on Supersonic Separation with Obstructions", *AIAA Journal*, 35, 1423—1424 (1997).

Özcan, O., Johnson, D.A. and Simpson, R.L., ``Comment on ``Wakes of Three Axisymmetric Bodies at Zero Angle of Attack"." *AIAA Journal*, 33, 569—570 (1995).

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 Journal*, 33, 805—811 (1995).

Özcan, O., Edis, F.O., Aslan, A. and Pınar, I., ``Reply by the Authors To G. Emanuel", *Journal of Aircraft*, 32, 1168 (1995).

Özcan, O., Edis, F.O., Aslan, A. and Pınar, I., ``Inverse Solutions of the Prandtl--Meyer Function", *Journal of Aircraft*, 31, 1422—1424 (1994).

Özcan , O. and Yüceil, B. , ``Cylinder Induced Shock-Wave Boundary-Layer Interaction", *AIAA Journal*, 30, 1130—1132 (1992).

Özcan, O. and Kaya, M. O. , ``Shock-Wave Boundary-Layer Interaction at a Swept Compression Corner", *AIAA Journal*, 27, 1646-1648 (1989).

Özcan , O. and Ölçmen, M. S. , ``Measurements of Turbulent Flow Behind a Wing-Body Junction", *AIAA Journal*, 26, 494-496 (1988).

Özcan, O., ``Three-Component LDA Measurements in a Turbulent Boundary-Layer'', Experiments in Fluids , 6, 327-334 (1988).

Özcan, O. and Ölçmen, M. S. , ``Measurements in the Wake of a Wing-Body Junction'', Bulletin of the Technical University of Istanbul, 40, 537-549 (1987).

Özcan, O. and Johnson, D. A. , ``A Three-Component LDA System for Turbulence and Mean Velocity Measurements'', Bulletin of the Technical University of Istanbul, 38, 409-419 (1985).

Özcan, O. and Holt, M. , ``Supersonic Separated Flow Past a Cylinder on a Flat Plate'', AIAA Journal , 22, 611-617 (1984).

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, Göttingen, 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

Number of Citations (Web of Science) : 150

Number of Citations (Google Scholar) : 430