

**Asst. Prof. Dr. Emrah ÖZAHİ, PhD.**  
University of Gaziantep  
Faculty of Engineering  
Department of Mechanical Engineering



## PERSONAL DETAILS

Address	University of Gaziantep, Mechanical Engineering Department, 27310, Gaziantep / Turkey
Tel	+ 90 342 317 25 17
Fax	+ 90 342 360 11 04
E-mail	ozahi@gantep.edu.tr
Marital Status	Married, one child
Nationality	Turkish Republic
Date of birth	03.09.1979
Place of birth	Gaziantep / Turkey

## EDUCATION

PhD	University of Gaziantep, Institute of Natural and Applied Sciences 2007- 2011 <b>PhD Thesis Topic:</b> Analysis of Laminar-Turbulent Transition in Time-Dependent Pipe Flows
MSc	University of Gaziantep, Institute of Natural and Applied Sciences 2003-2006 <b>MSc Thesis Topic:</b> An Experimental Study on Flow Dynamics through Packed Beds
BSc	University of Gaziantep, Department of Mechanical Engineering 1997-2002

## EMPLOYMENT HISTORY

2011-	University of Gaziantep, Department of Mechanical Engineering / Turkey Position : Asst. Prof. Dr.
2005- 2011	University of Gaziantep, Department of Mechanical Engineering / Turkey Position : Research assistant
2003- 2005	Super Film Packaging Company / Turkey Position : Project Engineer

## FOREIGN LANGUAGE KNOWLEDGE

Examination	Interuniversity Board Foreign Language Examination (ÜDS)
Examination Date	March 2010
Foreign Language	English
Score	85/100 (Upper Intermediate level)
Test Field	Natural Sciences

## RESEARCH INTERESTS AND EXPERIENCE

Flow Dynamics in Packed Beds  
Steady and Time-Dependent Pipe Flows  
Laminar to Turbulent Transition in Time-Dependent Pipe Flows  
Boundary Layer Flows  
Two-Phase Flow Fields  
Pulsatile Flow Dynamics  
HVAC Systems  
Flow Measurements and Calibrations  
Pneumatic Conveying Pipeline Systems  
Pipeline Engineering  
Thermodynamics  
Insulation  
Renewable Energy  
Hybrid Renewable Energy Systems  
Fuel Cells  
Fluidized Bed Drying

## AWARDS AND HONOURS

National TEV High Honour Award

Several honour and high honour awards in BSc and MSc in University of Gaziantep

Incentive Awards for International Scientific Publications by The Scientific and Technological Research Council of Turkey

Certificate from The Summer Academy in İzmir, 2001 organized by Friedrich-Alexander Universität Erlangen-Nürnberg, Technische Universität Darmstadt, Middle East Technical University, İzmir Institute of Technology

## INTERNATIONAL PUBLICATIONS

1) M.Ö.Çarpınlioğlu, **E. Özahi**, An Updated Portrait of Transition to Turbulence in Laminar Pipe Flows with Periodic Time Dependence (A Correlation Study), *Flow Turbulence and Combustion*, Vol. 89, No.4, pp. 691-711, (2012).

2) **E. Özahi**, M.Ö.Çarpınlioğlu, Determination of Transition Onset in Laminar Pulsatile Pipe Flows, *Isı Bilimi ve Tekniği Dergisi-Journal of Thermal Science and Technology*, Accepted, In Press, (2012).

3) M. Ö. Çarpınlioğlu, **E. Özahi**, Laminar Flow Control via Utilization of Pipe Entrance Inserts (A Comment on Entrance Length Concept), *Flow Measurement and Instrumentation*, Vol. 22, pp. 165-174, (2011).

4) **E. Özahi**, M. Ö. Çarpınlioğlu, M. Y. Gündoğdu, Simple Methods for Low Speed Calibration of Hot-Wire Anemometers, *Flow Measurement and Instrumentation*, Vol. 21, No. 2, pp. 166-170, (2010).

5) M. Ö. Çarpınlioğlu, **E. Özahi**, M. Y. Gündoğdu, Determination of Laminar and Turbulent Flow Ranges Through Vertical Packed Beds in Terms of Particle Friction Factors, *Advanced Powder Technology*, Vol. 20, No. 6, pp. 515-520, (2009).

6) **E. Özahi**, M. Y. Gündoğdu, M. Ö. Çarpınlioğlu, A Modification on Ergun's Correlation for Use in Cylindrical Packed Beds with Non-spherical Particles, *Advanced Powder Technology*, Vol.19, No.4, pp.369-381, (2008).

7) M.Ö.Çarpınlioğlu, **E. Özahi**, A Simplified Correlation for Fixed Bed Pressure Drop, *Powder Technology*, Vol. 187, No. 1, pp. 94-101, (2008).

## COMMUNICATIONS PRESENTED AND PUBLISHED IN A BOOK IN THE INTERNATIONAL SCIENTIFIC MEETINGS

1) M. Ö. Çarpınlioğlu, **E. Özahi** and H. Kareem, A Theoretical Approach for the Thermodynamic Analysis of Absorption Refrigeration Systems through a Case Study. *European Conference and Workshop on Renewable Energy Systems*, September 17-28, Antalya, Turkey, (2012).

- 2) **E. Özahi**, M. Ö. Çarpınlioğlu and H. Demir, Recent Developments on Fluidized Bed Drying of Particles. *CHOPS 2012 7th International Conference for Conveying and Handling of Particulate Solids*, September 10-13, Friedrichshafen, Germany, (2012).
- 3) M. Ö. Çarpınlioğlu, **E. Özahi** and M. Yıldırım, An Analysis on Pressure Drop Measurements through Fixed and Rotary Beds of Cracked Particles of Natural Zeolite. *CHOPS 2012 7th International Conference for Conveying and Handling of Particulate Solids*, September 10-13, Friedrichshafen, Germany, (2012).
- 4) **E. Özahi** and M. Ö. Çarpınlioğlu, An Experimental Research Project on Sinusoidal Pulsatile Pipe Flows Part 1: Presentation of Software Programming Utilized for Measurements and Data Acquisition. *Proceedings of the 3rd International Conference on Fluid Mechanics and Heat and Mass Transfer (Fluids-Heat'12)*, ISBN 978-1-61804-078-7, pp.39-44, Vouliagmeni Beach, March 7-9, Athens, Greece, (2012).
- 5) M. Ö. Çarpınlioğlu and **E. Özahi**, An Experimental Research Project on Sinusoidal Pulsatile Pipe Flows Part 2: Influence of Oscillation Frequency and Amplitude on Onset of Transition to Turbulence. *Proceedings of the 3rd International Conference on Fluid Mechanics and Heat and Mass Transfer (Fluids-Heat'12)*, ISBN 978-1-61804-078-7, pp.45-50, Vouliagmeni Beach, March 7-9, Athens, Greece, (2012).
- 6) A. Tozlu, **E. Özahi**, A. İ. Kutlar and M. Ö. Çarpınlioğlu, Modes of Flow in Pneumatic Conveying Systems. *Proceedings of the 3rd International Conference on Fluid Mechanics and Heat and Mass Transfer (Fluids-Heat'12)*, ISBN 978-1-61804-078-7, pp.51-56, Vouliagmeni Beach, March 7-9, Athens, Greece, (2012).
- 7) **E. Özahi** and M. Ö. Çarpınlioğlu, Periodic Flow as an Alternative for Pneumatic Conveying Pipelines (Presentation of an Experimental Test Case). *IFPSS2011 Proceedings*, ISBN 978-84-96398511, pp.56-64, *14th Inter. Freight Pipeline Society Symp.*, 28 June-01 July, Madrid-Spain, (2011).
- 8) M.Ö. Çarpınlioğlu and **E. Özahi**, Transitional Characteristics of Pulsatile Pipe Flows as a Control and Modelling Tool for Pneumatic Transport of Solid Particles. *IFPSS2011 Proceedings*, ISBN 978-84-96398511, pp.47-55, *14th Inter. Freight Pipeline Society Symp.*, 28 June-01 July, Madrid-Spain, (2011).

9) **E. Özahi**, M.Ö.Çarpınlioğlu, “A Brief Review on Laminar to Turbulent Transition in Time-Dependent Pipe Flows”, *The First International Engineering Sciences Conference*, Aleppo University, Syria, November 2-4, (2008).

### **TEACHING EXPERIENCE**

ME 204 Thermodynamics I  
ME 303 Thermodynamics II  
ME 372 Fluid Mechanics II  
ME 437 Insulation  
ME 582 Turbulence  
ME 525 Boundary Layer Theory II  
ME 499 Graduation Projects  
Summer Training Courses in Motor, Welding and Machining Workshop  
Experimental Courses for Radial, Axial Flow Pumps and Turbines, Flow and Pressure Measurements and Calibrations in Fluid Mechanics Laboratory