

# Prof. Mustafa Özdemir

## Personal Information

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## Education Information

Doctorate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makina Mühendisliği (Dr), Turkey 1990 - 1996

Postgraduate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Turkey 1987 - 1990

Undergraduate, İstanbul Teknik Üniversitesi, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, Turkey 1983 - 1987

## Foreign Languages

English

## Research Areas

Technical Sciences, Mechanical Engineering, Thermodynamics, Heat and Mass Transfer, Heating, Refrigerating and Air Conditioning, Thermal Systems

## Academic Titles / Tasks

Professor, Istanbul Technical University, Makina, Makina Mühendisliği, 2014 - Continues

Associate Professor, Istanbul Technical University, Makina, Makina Mühendisliği, 2008 - 2014

Assistant Professor, Istanbul Technical University, Makina, Makina Mühendisliği, 1999 - 2008

Research Assistant, Istanbul Technical University, Makina, Makina Mühendisliği, 1988 - 1999

## Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Makine Fakültesi, Makine Mühendisliği Bölümü, 2013 - 2014

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Experimental study on laminar air flow and heat transfer through a spiral channel filled with steel balls**  
Gökaslan M. Y. , Özdemir M., Kuddusi L.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.172, 2022 (Journal Indexed in SCI)
- II. **Experimental study on laminar air flow through spiral channel packed with steel balls**  
Gökaslan M. Y. , Özdemir M., Kuddusi L.

HEAT AND MASS TRANSFER, 2021 (Journal Indexed in SCI)

- III. **Determination of Saturation versus Centrifugal Dewatering for a Multilayer Porous Cotton Textile**  
Kasap F., Özdemir M.  
AATCC JOURNAL OF RESEARCH, vol.5, no.1, pp.21-28, 2018 (Journal Indexed in SCI)
- IV. **Comfort properties of socks from seacell fibers**  
AVCI H., Özdemir M., Iridag B. Y. , Duru C. S. , Candan C.  
JOURNAL OF THE TEXTILE INSTITUTE, vol.109, no.3, pp.419-425, 2018 (Journal Indexed in SCI)
- V. **Influence of pore density on thermal development in open-cell metal foam**  
Arbak A., Dukhan N., Bagci O., Özdemir M.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.86, pp.180-188, 2017 (Journal Indexed in SCI)
- VI. **Experimental heat transfer due to oscillating water flow in open-cell metal foam**  
Bagci O., Dukhan N., Özdemir M., KAVURMACIOGLU L. A.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.101, pp.48-58, 2016 (Journal Indexed in SCI)
- VII. **Thermal development in open-cell metal foam: An experiment with constant wall heat flux**  
Dukhan N., BAGCI O., Özdemir M.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.85, pp.852-859, 2015 (Journal Indexed in SCI)
- VIII. **Characteristics of oscillating liquid flow in foam-like highly-porous media: An experimental study**  
Bagci O., Dukhan N., Özdemir M.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.60, pp.96-105, 2015 (Journal Indexed in SCI)
- IX. **Metal foam hydrodynamics: Flow regimes from pre-Darcy to turbulent**  
Dukhan N., BAGCI O., Özdemir M.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.77, pp.114-123, 2014 (Journal Indexed in SCI)
- X. **Experimental flow in various porous media and reconciliation of Forchheimer and Ergun relations**  
Dukhan N., BAGCI O., Özdemir M.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.57, pp.425-433, 2014 (Journal Indexed in SCI)
- XI. **Flow Regimes in Packed Beds of Spheres from Pre-Darcy to Turbulent**  
Bagci O., Dukhan N., Özdemir M.  
TRANSPORT IN POROUS MEDIA, vol.104, no.3, pp.501-520, 2014 (Journal Indexed in SCI)
- XII. **The effect of sparger geometry on gas holdup and regime transition points in a bubble column equipped with perforated plate spargers**  
Sal S., GUL O. F. , Özdemir M.  
CHEMICAL ENGINEERING AND PROCESSING, vol.70, pp.259-266, 2013 (Journal Indexed in SCI)
- XIII. **Heat transfer in porous media of steel balls under oscillating flow**  
Pamuk M. T. , Özdemir M.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.42, pp.79-92, 2012 (Journal Indexed in SCI)
- XIV. **Friction factor, permeability and inertial coefficient of oscillating flow through porous media of packed balls**  
Pamuk M. T. , Özdemir M.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.38, pp.134-139, 2012 (Journal Indexed in SCI)
- XV. **A Comparative Study of Some Comfort-related Properties of Socks of Different Fiber Types**  
Cimilli S., NERGİS B. U. , Candan C., Özdemir M.  
Textile Research Journal, vol.80, no.10, pp.948-957, 2010 (Journal Indexed in SCI Expanded)
- XVI. **Correlation to predict heat transfer of an oscillating loop heat pipe consisting of three interconnected columns**  
Arslan G., Özdemir M.  
ENERGY CONVERSION AND MANAGEMENT, vol.49, no.8, pp.2337-2344, 2008 (Journal Indexed in SCI)
- XVII. **Heat removal from oscillating flow in a vertical annular channel**  
Akdag U., Özdemir M., OZGUC A. F.  
HEAT AND MASS TRANSFER, vol.44, no.4, pp.393-400, 2008 (Journal Indexed in SCI)
- XVIII. **Kontrol hacmi yaklaşımı ile salınımlı akışta ısı geçişinin deneysel ve teorik olarak incelenmesi**  
Özdemir M.

ISI BİLİMİ VE TEKNİĞİ DERGİSİ, vol.28, no.1, pp.23-31, 2008 (Journal Indexed in SCI Expanded)

**XX. The experimental and theoretical investigation of heat transfer in oscillating flow by control volume approach**

AKDAĞ Ü., ÖZGÜC A. F., ÖZDEMİR M.

ISI BİLİMİ VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.28, no.1, pp.23-31, 2008 (Journal Indexed in SCI)

**XX. An experimental study on an oscillating loop heat pipe consisting of three interconnected columns**  
Özdemir M.

HEAT AND MASS TRANSFER, vol.43, no.6, pp.527-534, 2007 (Journal Indexed in SCI)

**XXI. Heat transfer in an oscillating vertical annular liquid column open to atmosphere**

Akdag U., Ozdemir M.

HEAT AND MASS TRANSFER, vol.42, no.7, pp.617-624, 2006 (Journal Indexed in SCI)

**XXII. A simple mathematical model to analyse a fluidyne heat machine**

Ozdemir M., ÖZGÜC A.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART A-JOURNAL OF POWER AND ENERGY, vol.217, pp.91-100, 2003 (Journal Indexed in SCI)

**XXIII. Porosity variation and determination of REV in porous medium of screen meshes**

Ozdemir M., ÖZGÜC A.

INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.24, no.7, pp.955-964, 1997 (Journal Indexed in SCI)

**XXIV. Forced convective heat transfer in porous medium of wire screen meshes**

Ozdemir M., ÖZGÜC A.

HEAT AND MASS TRANSFER, vol.33, pp.129-136, 1997 (Journal Indexed in SCI)

## Articles Published in Other Journals

**I. EXPERIMENTAL FULLY-DEVELOPED THERMAL CONVECTION FOR NON-DARCY WATER FLOW IN METAL FOAM**

Dukhan N., Bağcı O., Özdemir M., Kavurmacıoğlu L.

JOURNAL OF THERMAL ENGINEERING, vol.2, no.2, pp.677-682, 2016 (Journal Indexed in ESCI)

**II. Various Flow Regimes and Permeabilities for Packed Spheres Porous Media**

Bağcı Ö., Dukhan N., ÖZDEMİR M.

Defect and Diffusion Forum, vol.364, pp.1-8, 2015 (Refereed Journals of Other Institutions)

## Supported Projects

Özdemir M., Project Supported by Higher Education Institutions, HEAT TRANSFER DUE TO TURBULENT FLOW WATER IN METAL FOAM, 2015 - 2018

Özdemir M., Project Supported by Higher Education Institutions, Ayrık Düşey Kanatlarda Sınır Tabaka Oluşumu ve Doğal Taşınımın Isı Geçişine Etkisinin Deneysel Olarak İncelenmesi, 2015 - 2015

Özdemir M., Project Supported by Higher Education Institutions, Binalarda Enerji Analizinin Dinamik Olarak İncelenmesi, 2010 - 2015

Özdemir M., Project Supported by Higher Education Institutions, GÖZENEKLİ ORTAM İÇİNDE TİTREŞİMLİ AKIŞTA ISI VE KÜTLE GEÇİŞİ, 2010 - 2015

Özdemir M., Project Supported by Higher Education Institutions, Üç Kolonlu Titreşimli Isı Borusunun Deneysel Analizi ve Matematik Modellenmesi, 2006 - 2007

Özdemir M., Project Supported by Higher Education Institutions, Gözenekli Ortamda Doğal Isı Taşınımı; I Isı İletim ve Dispersiyon Katsayılarının Tespiti; II.Gözene, 2000 - 2001

## Citations

Total Citations (WOS):393

h-index (WOS):11