

## Asst. Prof. Hatice MERCAN

### Personal Information

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### Education Information

Doctorate, Boğaziçi Üniversitesi, Muhendislik Fakültesi, Makina Muhendisligi, Turkey 2006 - 2012

Post Graduate, Boğaziçi Üniversitesi, Muhendislik Fakültesi, Makina Muhendisligi, Turkey 2003 - 2006

### Dissertations

Doctorate, Numerical investigation of isothermal and non-isothermal viscoelastic flow in lid-driven polar cavity , Boğaziçi Üniversitesi, Makina Muhendisligi, Makina Muhendisligi, 2012

Post Graduate, Numerical analysis of newtonian and non-newtonian lid-driven cavity flow in plane and curved geometries, Boğaziçi Üniversitesi, Makina Muhendisligi, Makina Muhendisligi, 2006

### Research Areas

Mechanical Engineering, Thermodynamics, Computational fluid dynamics, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechatronics Engineering, 2018 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechatronics Engineering, 2015 - 2018

### Jury Memberships

Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, August, 2021

Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, August, 2021

Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, December, 2019

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, October, 2019

Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, September, 2019

Post Graduate, Post Graduate, Boğaziçi Üniversitesi, July, 2019

Post Graduate, Post Graduate, Boğaziçi Üniversitesi, July, 2019

Post Graduate, Post Graduate, Boğaziçi Üniversitesi, July, 2019

Post Graduate, Post Graduate, Boğaziçi Üniversitesi, July, 2019

Post Graduate, Post Graduate, Boğaziçi Üniversitesi, July, 2019

Post Graduate, Post Graduate, Boğaziçi Üniversitesi, July, 2019

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2019

Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, July, 2018

Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, January, 2018  
Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, January, 2018  
Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, June, 2017  
Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, June, 2017  
Doctoral Examination, Doctoral Examination, Boğaziçi Üniversitesi, June, 2017

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

- I. **Optimization of the finned double-pipe heat exchanger using nanofluids as working fluids**  
DALKILIÇ A. S. , MERCAN H., Ozcelik G., Wongwises S.  
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, 2020 (Journal Indexed in SCI)
- II. **An experimental investigation on heat transfer characteristics of graphite-SiO<sub>2</sub>/water hybrid nanofluid flow in horizontal tube with various quad-channel twisted tape inserts**  
Dalkılıç A. S. , Türk O. A. , Mercan H., Nakkaew S., Wongwises S.  
International Communications in Heat and Mass Transfer, vol.107, pp.1-13, 2019 (Journal Indexed in SCI)
- III. **Isothermal and Non Isothermal Viscoelastic Flow of PTT Fluid in a Lid Driven Polar Cavity**  
MERCAN H., ATALIK S. K.  
Korea-Australia Rheology Journal, vol.24, pp.277-286, 2012 (Journal Indexed in SCI Expanded)
- IV. **Flow structure for Power-Law fluids in lid-driven arc-shape cavities**  
Mercan H., Atalik K.  
Korea Australia Rheology Journal, vol.23, no.2, pp.71-80, 2011 (Journal Indexed in SCI)
- V. **Vortex formation in lid-driven arc-shape cavity flows at high Reynolds numbers**  
Mercan H., Atalik K.  
European Journal of Mechanics, B/Fluids, vol.28, no.1, pp.61-71, 2009 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Artificial Neural Network Techniques for the Determination of Condensation Nusselt Number in Horizontal Smooth Tubes**  
Sevindir M. K. , Gönül A., Çebi A., Mercan H.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, no.3, pp.871-877, 2019 (National Refreed University Journal)
- II. **Numerical investigation of blood flow features in intracranial saccular aneurysms**  
Mercan H., Atalik K.  
Journal of Thermal Engineering, vol.4, pp.1867-1878, 2018 (Journal Indexed in ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **EXPERIMENTAL AND NUMERICAL INVESTIGATION OF TUNED LIQUID DAMPERS**  
Mercan H., Colakoglu G.  
ICAME 2019, İstanbul, Turkey, 17 - 19 December 2019, vol.1, no.1, pp.1829-1837
- II. **EXPERIMENTAL INVESTIGATION OF THE EFFECT OF SCREEN MESHES ON LONGITUDINAL TURBULENCE IN BURET WIND TUNNEL**  
Nabati M., Shafiei H., MERCAN H., BEDİR H., ANLAŞ G.  
4th International Conference on Advances in Mechanical Engineering 2018, İstanbul, Turkey, 19 - 21 December 2018, vol.1
- III. **3-Dimensional Numerical Simulation of Helical Coil Heat Exchangers**  
Gönül A., Mercan H., Dalkılıç A. S.

4TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING ISTANBUL 2018, İstanbul, Turkey, 19 - 21 December 2018, vol.1, pp.1097

- IV. **Determination of Design Parameters Effects on the Cost of a Double-Pipe Heat Exchanger**  
Dalkılıç A. S. , Mercan H., Özçelik G.  
3rd INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING ISTANBUL 2017, İstanbul, Turkey, 19 - 21 December 2017, pp.1-15
- V. **SAKKÜLER ANEVİRİZMANIN 2 BOYUTLU SAYISAL MODELLEMESİ- DUVAR KAYMA GERİLMESİ ANALİZİ**  
ATALIK S. K. , MERCAN H.  
20. Ulusal Mekanik Kongresi, Bursa, Turkey, 5 - 09 September 2017
- VI. **Numerical Simulation of 3 D Film Blowing Process Under Thermal and Crystallinity Effects**  
MERCAN H.  
NRC-NPD-2016, 30 May - 01 June 2016
- VII. **DÖKME POLİMER İNCE TABAKALARININ ÜRETİM SÜRECİNİN KRİSTALİZASYON VE ISIL ETKİLER ALTINDA SAYISAL İNCELENMESİ**  
MERCAN H.  
19. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015
- VIII. **Small and Large Amplitude Oscillatory Shear Response in Non Isothermal Flow of a PTT Fluid in Lid Driven Polar Cavity**  
MERCAN H., ATALIK S. K.  
21. Nordic Rheology Conference, Oslo, Norway, 13 - 15 June 2012, vol.20, pp.105-112
- IX. **Flow Induced Crystallization of Film Blowing Process**  
MERCAN H., PETERS G. W. M. , ANDERSON P.  
8th Annual European Rheology conference, Leuven, Belgium, 2 - 05 April 2013
- X. **Isothermal and non Isothermal Flow of PTT Fluid in Lid Driven Polar Cavity**  
MERCAN H., ATALIK S. K.  
20 th Nordic Rheology Conference, Helsinki, Finland, 8 - 10 June 2011, vol.19, pp.53-60
- XI. **Üs Kanun Akışkanları için Yarım Daire Biçimli Eğrisel Oyuklarda Kapak Tahrikli Akış Yapısı**  
MERCAN H., ATALIK S. K.  
16. Ulusal Mekanik Kongresi, Kayseri, Turkey, 22 - 26 June 2009, pp.863-873
- XII. **Kapak Tahrikli Eğrisel Oyuk Akışlarında Yüksek Reynolds Sayıları için Girdap Oluşumu ve Gelişimi**  
MERCAN H., ATALIK S. K.  
15. Ulusal Mekanik Kongresi, Isparta, Turkey, 3 - 07 September 2007, pp.605-615

## Supported Projects

MERCAN H., Other Supported Projects, Numerical Investigation of crystallinity of polymer melts, 2012 - 2015

## Activities in Scientific Journals

Journal of Thermal Sciences, Assistant Editor, 2019 - Continues

## Scientific Refereeing

JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, SCI Journal, May 2020

## **Edit Congress and Symposium Activities**

ICAME 2019, Moderator, İstanbul, Turkey, 2019

ICAME 2018, Moderator, İstanbul, Turkey, 2018

## **Citations**

Total Citations (WOS):70

h-index (WOS):4