

## Res. Asst. Mehmet Oruç

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, Turkey 2021 - Continues

Postgraduate, Van Yüzüncü Yıl University, Fen Bilimleri Enstitüsü, Makine Mühendisliği, Turkey 2017 - 2020

Undergraduate, Iskenderun Technical University, Faculty Of Mechanical Engineering, Petrol Ve Doğalgaz Mühendisliği, Turkey 2011 - 2015

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Postgraduate, Experimental and Numerical Analysis of The Treatment System Designed With cCoalescing Plates, Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2020

### Research Areas

Mechanical Engineering, Energy, Fluid Mechanics, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2016 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. Experimental Investigation and Optimization Analysis of a Designed Wastewater Treatment System**  
Oruç M., Yayla S.  
Journal of Environmental Engineering (United States), vol.149, no.7, 2023 (SCI-Expanded)
- II. Experimental Investigation of the Effect of a Wastewater System Designed for Treatment Capacity**

Oruç M., Yayla S.

JOURNAL OF ENVIRONMENTAL ENGINEERING, vol.149, no.7, pp.1-10, 2023 (SCI-Expanded)

III. **EXPERIMENTAL INVESTIGATION OF OIL-IN WATER SEPARATION USING CORRUGATED PLATES AND OPTIMIZATION OF SEPARATION SYSTEM**

Oruç M., Yayla S.

SEPARATION SCIENCE AND TECHNOLOGY, vol.57, no.5, pp.788-800, 2022 (SCI-Expanded)

IV. **A case study on piezoelectric energy harvesting with using vortex generator plate modeling for fluids**

Yayla S., Ayca S., Oruç M.

RENEWABLE ENERGY, vol.157, pp.1243-1253, 2020 (SCI-Expanded)

## Articles Published in Other Journals

I. **Effects of Corrugated Plates on Separation Performance**

Oruç M., Yayla S.

Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.27, no.2, pp.286-302, 2022 (Peer-Reviewed Journal)

II. **Vortex generator design for electrical energy harvesting with piezoelectric in rivers**

Yayla S., Ayca S., Oruç M.

JOURNAL OF POLYTECHNIC-POLITEKNİK DERGİSİ, vol.24, no.3, pp.771-777, 2021 (ESCI)

III. **Petrol-Su Ayrışma Sistemlerindeki Birleştirilmiş Plakaların Ayrışma Verimliliği Üzerindeki Etkisinin Deneysel Olarak İncelenmesi**

Oruç M., Yayla S.

Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.7, no.Özel Sayı, pp.163-174, 2020 (Peer-Reviewed Journal)

IV. **Hesaplamalı Akışkanlar Dinamiği Kullanılarak Çeşitli Jet Hızları Ve Ayrıcı Açılar İçin Bir Pelton Türbin Kepçesine Etki Eden Kuvvetlerin Belirlenmesi**

Yayla S., Abdullah A., Oruç M.

DSİ Teknik Bülteni, no.128, pp.11-21, 2018 (Peer-Reviewed Journal)

V. **Two Phase Flow Separation in a Horizontal Separator by Inlet Diverter Plate in Oilfield Industries**

Yayla S., Kamal K., Bayraktar S., Oruç M.

International Journal of Mechanical And Production Engineering, vol.5, no.10, pp.97-100, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

I. **NUMERICAL INVESTIGATION OF HEAT TRANSFER MECHANISM ON TRIANGULAR FIN AND OPEN CELL TITANIUM METAL FOAM**

Yayla S., Gül A., Oruç M.

12th International Istanbul Scientific Research Congress on Life, Engineering, and Applied Sciences, İstanbul, Turkey, 21 - 23 January 2023, vol.1, no.1, pp.19-33

II. **AN EXPERIMENTAL STUDY ON THE TREATMENT OF WASTE WATER BY GRAVITATIONAL METHOD**

Oruç M., Yayla S.

II. INTERNATIONAL ISTANBUL CONGRESS (2.ULUSLARARASI İSTANBUL MULTİDİSİPLİNER BİLİMSEL ARAŞTIRMALAR KONGRESİ), İstanbul, Turkey, 28 - 29 September 2022, pp.617-624

III. **AN EXPERIMENTAL AND NUMERICAL STUDY FOR ENERGY HARVESTING WITH PIEZOELECTRICITY IN RIVERS**

Yayla S., Ayca S., Oruç M.

TOPICAL PROBLEMS OF FLUID MECHANICS, Praha, Czech Republic, 16 - 18 February 2022, vol.8, no.1, pp.208-215

IV. **EXPERIMENTAL ANALYSIS OF TREATMENT PERFORMANCE BY OPTIMIZATION OF EFFECTIVE**

## PARAMETERS ON CORRUGATED PLATES USED IN TREATMENT SYSTEMS

Oruç M., Yayla S.

Topical Problems of Fluid Mechanics , Praha, Czech Republic, 16 - 18 February 2022, vol.8, no.1, pp.143-150

### V. AN EXPERIMENTAL AND NUMERICAL CASE STUDY ON COALESCING PLATES USED IN OIL-WATER SEPARATION

Oruç M., Yayla S.

15th INTERNATIONAL COMBUSTION SYMPOSIUM, Kayseri, Turkey, 17 - 19 September 2020, pp.360-368

### VI. Cfd Simulation of Impact the Inlet Diverter Plate Location on Efficiency of Horizontal Separator

Yayla S., kamal K., Oruç M.

22nd Congress on Thermal Science and Technology (CTST 2019), Kocaeli, Turkey, 11 - 14 September 2019, pp.28-38

### VII. AKARSULARDA PİEZOELEKTRİK İLE ELEKTRİK ENERJİSİ HASADI İÇİN GİRDAP ÜRETİCİ TASARIMI

Yayla S., Ayça S., Oruç M.

22nd Congress on Thermal Science and Technology (CTST 2019), Kocaeli, Turkey, 11 - 14 September 2019, pp.17-27

### VIII. Electrical Energy Harvesting with Piezoelectric

Oruç M., Yayla S.

International Conference on Engineering Technologies (ICENTE'18), Konya, Turkey, 26 - 28 October 2018, pp.558-562

### IX. Numerical Simulation of the Coalescing Oil/Water Separator

Yayla S., Oruç M.

International Conference on Engineering Technologies (ICENTE'18), Konya, Turkey, 26 - 28 October 2018, pp.553-557

### X. Numerical Investigation of Cavitation on Different Venturi Shapes by CFD

Yayla S., Oruç M., YASEEN S.

19th International Conference on Mechanical and Aerospace Engineering- ICMAE 2017, Paris, France, 19 October - 20 September 2017, pp.1-115

### XI. Two Phase Flow Separation in a Horizontal Separator by Inlet Diverter Plate in Oilfield Industries

Yayla S., kamal K., BAYRAKTAR S., Oruç M.

International Conference on Science and Innovative Engineering (ICSIE), Barselona, Spain, 24 - 25 August 2017, pp.1-10

## Supported Projects

Yayla S., TUBITAK Project, Atık Suyun Ve Petrol-Su Karışımının Ayrıştırılması Sistemlerinde Kullanılacak Eğimli Birleştirilmiş Plaka Setlerinin Tasarımı Ve Sayısal Olarak İncelenmesi, 2021 - 2023

Yayla S., Oruç M., Project Supported by Higher Education Institutions, PetrolSu Ayrışma Sisteminin Tasarımı, 2019 - 2020

## Metrics

Publication: 21

Citation (WoS): 14

Citation (Scopus): 26

H-Index (WoS): 1

H-Index (Scopus): 2