

## Prof. Deniz ULUSARSLAN

### Personal Information

**Office Phone:** [+90 212 383 2892](tel:+902123832892)

**Email:** [ulusars@yildiz.edu.tr](mailto:ulusars@yildiz.edu.tr)

**Other Email:** [denizulusarslan96@gmail.com](mailto:denizulusarslan96@gmail.com)

**Web:** <https://avesis.yildiz.edu.tr/ulusars>

### International Researcher IDs

ORCID: 0000-0002-3762-658X

ScopusID: 10144136700

Yoksis Researcher ID: 188266

### Education Information

Doctorate, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, Turkey  
1996 - 2003

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Dairesel kesitli plastik borular içinde buz yoğunluğunda küre-su karışım akışının incelenmesi, Yıldız Teknik Üniversitesi, Makine Mühendisliği, Isı Proses, 2003

### Research Areas

Mechanical Engineering, Energy, Fluid Mechanics, Alternative Energy Resources, Solar energy, Thermodynamics, Heat and Mass Transfer, Engineering and Technology

### Academic Titles / Tasks

Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2021 - Continues

Associate Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2014 - 2021

Research Assistant PhD, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2003 - 2014

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 1994 - 2003

## Academic and Administrative Experience

Anket ve Değerlendirme Komisyonu Başkanı, Yıldız Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2021 - Continues  
Proje 1 Disiplinler Arası Proje çalışması Anabilim Dalı Sorumlusu, Yıldız Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2020 - Continues  
Geçiş Komisyonu Başkanı, Yıldız Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2016 - 2020  
Stratejik Planlama Komisyonu Üyesi, Yıldız Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, 2011 - 2016

## Courses

### Doctorate

İleri Isı Transferi, Doctorate, 2020 - 2021

### Postgraduate

Gıda İşleme Teknolojileri, Postgraduate, 2022 - 2023

Güneş Enerjisinden Yararlanma Teknikleri, Postgraduate, 2016 - 2017

### Undergraduate

Güneş Enerjisi Teknolojileri 2, Undergraduate, 2016 - 2017

Proses Tekniği, Undergraduate, 2016 - 2017

Güneş Enerjisi Teknolojileri 1, Undergraduate, 2016 - 2017

Akışkanlar Mekaniği, Undergraduate, 2015 - 2016

Isı Transferi, Undergraduate, 2015 - 2016

İç Hava Kalitesi ve Tesisatta Hijyen, Undergraduate, 2015 - 2016

## Supervised Theses

Ulusarslan D., Amorf Silisyum İnce Film Pillerden PV-T Panel Tasarımı Ve Eğrilik Yarıçapının Soğutma Üzerindeki Etkilerinin İncelenmesi , Doctorate, İ.ARDİÇ(Student), Continues

Ulusarslan D., ZORLANMIŞ TAŞINIMLA SOĞUTULAN SABİT SICAKLIKLIKTAKİ PARALEL LEVHALAR ARASINDAKİ UZAKLIĞIN ISI GEÇİŞİNE ETKİSİNİN İNCELENMESİ, Doctorate, A.E.ÖNDER(Student), Continues

Ulusarslan D., SOĞUTMALI TREYLERDE GÜNEŞ ENERJİSİ DESTEKLİ SOĞUTMANIN TEORİK OLARAK İNCELENMESİ, Postgraduate, Y.Taha(Student), 2024

Ulusarslan D., YATAY HİDROLİK BORULARDA TAŞIYICI SIVI İLE EŞİT YOĞUNLUKLU KÜRESEL KAPSÜL TREN AKIŞI BASINÇ KAYIPLARININ HAD ANALİZİ İLE BELİRLENMESİ, Postgraduate, S.KARAÇAY(Student), 2023

Ulusarslan D., NEMLENDİRME VE NEM ALMA SİSTEMİ ENTEGRE EDİLMİŞ PARABOLİK OLUK KOLEKTÖRLÜ GÜNEŞ DESALİNASYON SİSTEMİ , Postgraduate, M.N.ASLAM(Student), 2022

Ulusarslan D., İstanbul Havalimanı Toplam Enerji Tüketiminin Fotovoltaik Sistemle Karşılanmasının Fizibilite Çalışması, Postgraduate, M.A.ALKAN(Student), 2021

Ulusarslan D., Kule Tipi Yoğunlaştırılmış Güneş Enerjili Santrali Destekli Güç Çevrimlerinin Araştırılması, Postgraduate, K.GÜL(Student), 2019

Ulusarslan D., SOLAR PARABOLİK ÇANAK SİSTEMDE ALÜMİNYUM METALİNİN ERİTİLMESİNİN TERMAL VE MATEMATİKSEL ANALİZİ, Postgraduate, C.COŞKUN(Student), 2019

## Jury Memberships

Doctorate, Doctorate, Yıldız Teknik Üniversitesi, February, 2022

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, January, 2022

Associate Professor Exam, Associate Professor Exam, Atılım Üniversitesi, September, 2021

## Designed Lessons

### Postgraduate

Ulusarslan D., Gıda İşleme Teknolojileri, Postgraduate, 2022 - 2023

Ulusarslan D., Güneş Enerjisinden Yararlanma Teknikleri, Postgraduate, 2015 - 2016

### Undergraduate

Ulusarslan D., Güneş Enerjisi Teknolojileri 2, Undergraduate, 2016 - 2017

Ulusarslan D., Proses Tekniği, Undergraduate, 2014 - 2015

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

- I. **Numerical determination of the distance between the GPUs where effective cooling is made in computers used in coin mining**  
Onder A. E., ULUSARSLAN D.  
NUMERICAL HEAT TRANSFER PART A-APPLICATIONS, vol.82, no.1-2, pp.1-7, 2022 (SCI-Expanded)
- II. **Experimental investigation of the effect of diameter ratio on velocity ratio and pressure gradient for the spherical capsule train flow**  
Ulusarslan D.  
EUROPEAN JOURNAL OF MECHANICS B-FLUIDS, vol.37, pp.42-47, 2013 (SCI-Expanded)
- III. **Analysis of the Pressure Gradients According to Capsule Flow Mechanism**  
ULUSARSLAN D.  
PARTICLE & PARTICLE SYSTEMS CHARACTERIZATION, vol.29, no.3, pp.167-177, 2012 (SCI-Expanded)
- IV. **Effect of Capsule Density and Concentration on Pressure Drops of Spherical Capsule Train Conveyed by Water**  
ULUSARSLAN D.  
JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME, vol.132, no.1, 2010 (SCI-Expanded)
- V. **Effect of Diameter Ratio on Loss Coefficient of Elbows in the Flow of Low-Density Spherical Capsule Trains**  
ULUSARSLAN D.  
PARTICULATE SCIENCE AND TECHNOLOGY, vol.28, no.4, pp.348-359, 2010 (SCI-Expanded)
- VI. **Currency of district cooling systems and alternative energy sources**  
Ulusarslan D., Gemici Z., Teke İ.  
ENERGY EDUCATION SCIENCE AND TECHNOLOGY PART A-ENERGY SCIENCE AND RESEARCH, vol.23, pp.31-53, 2009 (SCI-Expanded)
- VII. **Relation Between the Friction Coefficient and Re Number for Spherical Capsule Train-Water Flow in Horizontal Pipes**  
Ulusarslan D., Teke İ.  
Particulate Science And Technology, vol.27, no.5, pp.488-495, 2008 (SCI-Expanded)
- VIII. **Comparison of experimental pressure gradient and experimental relationships for the low density spherical capsule train with slurry flow relationships**  
ULUSARSLAN D.  
POWDER TECHNOLOGY, vol.185, no.2, pp.170-175, 2008 (SCI-Expanded)
- IX. **Comparison of Pressure Gradient Correlations about the Spherical Capsule Trains Flow in Horizontal Pipes**  
Ulusarslan D., Teke İ.  
Particulate Science And Technology, vol.26, no.3, pp.285-295, 2008 (SCI-Expanded)
- X. **Determination of the loss coefficient of elbows in the flow of low-density spherical capsule train**

ULUSARSLAN D.

EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.32, no.2, pp.415-422, 2007 (SCI-Expanded)

- XI. **Mathematical expression of pressure gradient in the flow of spherical capsules less dense than water**

Teke I., Ulusarslan D.

INTERNATIONAL JOURNAL OF MULTIPHASE FLOW, vol.33, no.6, pp.658-674, 2007 (SCI-Expanded)

- XII. **An experimental determination of pressure drops in the flow of low density spherical capsule train inside horizontal pipes**

ULUSARSLAN D., Teke I.

EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.30, no.3, pp.233-241, 2006 (SCI-Expanded)

- XIII. **An experimental investigation of the capsule velocity, concentration rate and the spacing between the capsules for spherical capsule train flow in a horizontal circular pipe**

ULUSARSLAN D., Teke I.

POWDER TECHNOLOGY, vol.159, no.1, pp.27-34, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Research of Spherical Capsule Feeding System in Hydraulic Pipelines**

Ulusarslan D.

International Journal of Engineering and Technology, vol.13, no.3, pp.98-103, 2021 (Peer-Reviewed Journal)

- II. **SOLAR PARABOLİK ÇANAK SİSTEMDE ALÜMİNYUM METALİNİN ERİTİLMESİNİN TERMAL VE MATEMATİKSEL ANALİZİ**

Ulusarslan D., Coşkun C.

Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.24, no.2, pp.299-310, 2019 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **Theoretical Investigation of Solar Energy Assisted Cooling in Refrigerated Trailers**

İsmailoğlu Y. T., Ulusarslan D.

14th INTERNATIONAL EXERGY, ENERGY, AND ENVIRONMENT SYMPOSIUM, İstanbul, Turkey, 24 - 27 December 2023, pp.279-282

- II. **YATAY HİDROLİK BORULARDA TAŞIYICI SIVI İLE EŞİT YOĞUNLUKLU KÜRESEL KAPSÜL TREN AKIŞI BASINÇ KAYIPLARININ HAD ANALİZİ İLE BELİRLENMESİ**

Karaçay S., Ulusarslan D.

7. ULUSLARARASI MÜHENDİSLİK VE TEKNOLOJİ YÖNETİMİ KONGRESİ, İstanbul, Turkey, 16 - 18 April 2022, pp.1-10

- III. **NEMLENDİRME VE NEM ALMA SİSTEMİ ENTEGRE EDİLMİŞ PARABOLİK OLUK KOLEKTÖRLÜ GÜNEŞ DESALİNASYON SİSTEMİ**

Aslam M. N., Ulusarslan D.

7. ULUSLARARASI MÜHENDİSLİK VE TEKNOLOJİ YÖNETİMİ KONGRESİ, İstanbul, Turkey, 16 - 18 April 2022, pp.1-10

- IV. **ANTALYA'DA BULUNAN BİR BİNANIN SICAK KULLANIM SUYU VE ISITMA-SOĞUTMA İHTİYACINI KARŞILAYACAK OLAN SU SOĞUTMALI FOTOVOLTAİK/TERMAL HİBRİT (PV/T) SİSTEMİN TASARIMI**

Karadağ U., Ulusarslan D.

Uluslararası Katılımlı 23. Isı Bilimi ve Tekniği Kongresinin, Gaziantep, Turkey, 8 - 10 September 2021, pp.1-10

- V. **PARABOLİK OLUK KOLEKTÖR İLE ÇALIŞAN ABSORPSİYONLU SOĞUTMA SİSTEMİNİN ANALİZİ VE DÜZLEM KOLEKTÖRLÜ SİSTEMLERLE KARŞILAŞTIRILMASI**

Özbek Z. E., Ulusarslan D.

Uluslararası Katılımlı 23. Isı Bilimi ve Tekniği Kongresinin, Gaziantep, Turkey, 8 - 10 September 2021, pp.1-12

- VI. **GÜNEŞ ENERJİSİ DESTEKLİ UÇURTMA TİPİ RÜZGAR TÜRBİNİ TASARIMI VE MALİYET ANALİZİ**  
Kahvecioğlu H., Ulusarslan D.  
Uluslararası Katılımlı 23. Isı Bilimi ve Tekniği Kongresinin, Gaziantep, Turkey, 8 - 10 September 2021, pp.1-4
- VII. **İSTANBUL HAVALİMANI TOPLAM ENERJİ TÜKETİMİNİN FOTOVOLTAİK SİSTEMLE KARŞILANMASININ FİZİBİLİTE ÇALIŞMASI**  
Alkan M. A., Ulusarslan D.  
Uluslararası Lisansüstü Çalışmalar Kongresi, Balıkesir, Turkey, 17 - 20 June 2021, pp.1-5
- VIII. **ZORLANMIŞ TAŞINIMLA SOĞUTULAN SABİT SICAKLIKTAKİ PARALEL LEVHALAR ARASINDAKİ UZAKLIĞIN ISI GEÇİŞİNE ETKİSİNİN İNCELENMESİ**  
Önder A. E., Ulusarslan D.  
7. ULUSLARARASI MUHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, İstanbul, Turkey, 21 - 22 May 2021, pp.472-481
- IX. **Thermal Performance Analysis and Improvement Methods of Tower Type Concentrated Solar Power Plants**  
Gül K., Ulusarslan D.  
International Engineering and Science Symposium, Siirt, Turkey, 20 - 22 June 2019, pp.1-2
- X. **Theoretical Investigation of Melting of Aluminum in Solar Parabolic Dish System**  
Coşkun C., Ulusarslan D.  
4TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING , İstanbul, Turkey, 19 - 21 December 2018, pp.154-161
- XI. **The Effect of Diameter Ratio on Pressure Gradient and Froude Number in Hydraulic Capsule Pipeline**  
Ulusarslan D.  
15th International Freight Pipeline Society Symposium, Prague, CZECH REPUBLIC, Praha, Czech Republic, 24 - 26 June 2014, pp.3-12
- XII. **NUMERICAL SOLUTION APPROACH IN CAPSULE FLOW**  
Ulusarslan D.  
16th International Conference on TRANSPORT AND SEDIMENTATION OF SOLID PARTICLES, Rostock, Germany, 18 - 20 September 2013, pp.1-10
- XIII. **Experimental study on the effect of diameter ratio on velocity for the low density spherical capsule train flow**  
Ulusarslan D.  
7th International Conference for Conveying and Handling of Particulate Solids, Stuttgart, Germany, 10 - 13 September 2012, pp.1-9
- XIV. **The effect of the flow regimes on mathematical expression of pressure gradient in the low density spherical capsule train flow**  
Ulusarslan D.  
14th International Freight Pipeline Society Symposium, Madrid, Spain, 28 June - 01 July 2011, pp.2-13
- XV. **An Experimental Investigation of the Transport by Water of Capsule Train with Density Equal to that of the Water**  
Ulusarslan D.  
12th International Freight Pipeline Society Symposium, İstanbul, Turkey, 29 - 30 May 2009, pp.1-10
- XVI. **Comparison of Mathematical Expressions and Experimental Findings for Pressure Drops in the Flow of Low Density Spherical Capsule Train with General Expressions Regarding Spherical Capsule Flows**  
Ulusarslan D., Teke İ.  
The 5th International Conference for Conveying and Handling of Particulate Solids, Naples, Italy, 27 - 31 August 2006, pp.1-12
- XVII. **Experimental Set-Up and Capsule Feeding System Designed for Spherical Capsule Train Flows**  
Ulusarslan D., Teke İ.  
The 5th International Conference for Conveying and Handling of Particulate Solids, Naples, Italy, 27 - 31 August 2006, pp.1-8

## **XVIII. TECHNOLOGY AND BENEFITS OF USING SPHERICAL ICE CAPSULES IN DISTRICT COOLING SYSTEMS**

Ulusarslan D., Gemici Z., Teke İ.

Second International Green Energy Conference - IGEC-2, Oshawa, Canada, 25 - 29 June 2006, pp.1206-1215

## **XIX. Comparison of Empirical Expression and Experimental Findings in the Flow of Low Density Spherical Capsule Train with Pressure Gradient Expressions Developed for the Flow Of Slurry**

Ulusarslan D.

International Symposium on Underground Freight Transportation by Capsule Pipelines and other Tube/Tunnel Systems, Shanghai, China, 20 - 21 October 2005, pp.1-12

## **Supported Projects**

Ulusarslan D., Teke İ., Bölge Kalkınma İdaresi Başkanlığı Projesi, Dairesel Kesitli Plstik Borular İçinde Değişik Yoğunlukta Küresel Kapsül-Su Karışım Akışının İncelenmesi, 2005 - 2008

Ulusarslan D., Teke İ., Project Supported by Higher Education Institutions, Dairesel Kesitli Plastik Borular içinde Buz/Su Karışımı Akışının İncelenmesi, 2001 - 2003

## **Memberships / Tasks in Scientific Organizations**

International Freight Pipeline Society , Member, 2005 - Continues

## **Peer Reviews in Scientific Publications**

Journal of Thermal Engineering, Journal Indexed in ESCI, October 2021

Journal of Thermal Engineering, Journal Indexed in ESCI, January 2021

JOURNAL OF THERMAL ENGINEERING, SCI Journal, October 2019

CANADIAN JOURNAL OF CHEMICAL ENGINEERING, Journal Indexed in SCI-E, March 2015

JOURNAL OF THERMAL ENGINEERING, Journal Indexed in SSCI, July 2014

JOURNAL OF THERMAL ENGINEERING, Journal Indexed in SSCI, June 2014

Solids Transport Formula in Predictive Model for Pipe Flow of Slurry above Deposit, PARTICULATE SCIENCE AND TECHNOLOGY, SCI Journal, March 2010

Predictive model for frictional pressure drop in settling-slurry pipe with stationary deposit, POWDER TECHNOLOGY, SCI Journal, August 2008

Experimental investigation of ice slurry flow pressure drop in horizontal tubes, EXPERİMENTAL THERMAL AND FLUID SCIENCE, SCI Journal, June 2008

Dense-Phase Pneumatic Conveying of Slush Ice Through Plastic Pipes, PARTICULATE SCIENCE AND TECHNOLOGY, SCI Journal, March 2007

## **Scientific Consultations**

DEKA High Tech, Project Consultancy, Yıldız Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, Turkey, 2018 - 2018

## **Tasks In Event Organizations**

Ulusarslan D., DEMİRKOL M., 6th International Conference on Advances in Mechanical Engineering, Scientific Congress, İstanbul, Turkey, Ekim 2021

Ulusarslan D., 23. ISI BİLİMİ VE TEKNİĞİ KONGRESİ (ULIBTK 2021), Scientific Congress, Gaziantep, Turkey, Eylül 2021

Ulusarslan D., Camcı M., Kırkar Ş. M., 5TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING , Scientific Congress, İstanbul, Turkey, Aralık 2019

Başhan V., Sadıkoğlu H., Özsarı İ., Ulusarslan D., World Energy Strategies Congress and Exhibition, Scientific Congress, İstanbul, Turkey, Ağustos 2019

Ulusarslan D., 4TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING , Scientific Congress, İstanbul, Turkey, Aralık 2018

## Metrics

Publication: 34

Citation (WoS): 149

Citation (Scopus): 172

H-Index (WoS): 7

H-Index (Scopus): 8

## Congress and Symposium Activities

6th International Conference on Advances in Mechanical Engineering, Session Moderator, İstanbul, Turkey, 2021

23. Isı Bilimi ve Tekniği Kongresi, Session Moderator, Gaziantep, Turkey, 2021

5th International Conference on Advances in Mechanical Engineering , Session Moderator, İstanbul, Turkey, 2019

World Energy Strategies Congress and Exhibition 2019 , Session Moderator, İstanbul, Turkey, 2019

4th International Conference on Advances in Mechanical Engineering -İstanbul 2018, Session Moderator, İstanbul, Turkey, 2018

15th International Freight Pipeline Society Symposium, Prague, Czech Republic , Working Group, Praha, Czech Republic, 2014

The 16th International Conference on Transport and Sedimentation of Solid Particles, 18-20 September, Rostock, Germany, , Working Group, Rostock, Germany, 2013

The 7th International Conference for Conveying and Handling of Particulate Solids, Friedrichshafen, Germany, Working Group, Stuttgart, Germany, 2012

14th International Freight Pipeline Society Symposium, Madrid, Spain, Working Group, Madrid, Spain, 2011

12th International Freight Pipeline Society Symposium, Istanbul, Turkey, Working Group, İstanbul, Turkey, 2009

The 5th International Conference for Conveying and Handling of Particulate Solids, 27-31 August, Sorrento, Italy, (2006), Session Moderator, Salerno, Italy, 2006

The 5th International Conference for Conveying and Handling of Particulate Solids, Sorrento, Italy, Moderator, Naples, Italy, 2006

The 2nd International Green Energy Conference, Oshawa, Ontario, Canada, Working Group, Oshawa, Canada, 2006

International Symposium on Underground Freight Transportation by Capsule Pipelines and other Tube/Tunnel Systems, Shanghai, China , Working Group, Shanghai, China, 2005

## Invited Talks

“Global Summit and Expo on Mechanical and Mechatronics Engineering, Conference, Global Summit and Expo on, Portugal, September 2020

## Awards

Ulusarslan D., Bilimsel yayınları Teşvik Ödülü, Tübitak, August 2006

Ulusarslan D., En çok yayın yapan Araştırma Görevlisi üçüncülüğü ödülü, Yıldız Teknik Üniversitesi, May 2005