

## **Prof. LATİFE BERRİN ERBAY**

### **Personal Information**

**Web:** <https://avesis.ogu.edu.tr/lberbay>

**Address:** ESKİŞEHİR OSMANGAZİ ÜNİVERSİTESİ Meşelik Kampüsü Büyükdere Mah, Prof. Dr. Nabi AVCI Bulvarı No: 4 Mühendislik ve Mimarlık Fakültesi Makine Müh. Bölm, M2 Blok 26040, Odunpazarı - ESKİŞEHİR

### **International Researcher IDs**

ORCID: 0000-0001-7302-0588

Publons / Web Of Science ResearcherID: AAG-5891-2019

ScopusID: 6602087985

Yoksis Researcher ID: TR2625

### **Education Information**

Doctorate, Istanbul Technical University, Nükleer Enerji Enstitüsü, Nükleer Enerji (Dr), Turkey 1984 - 1988

Postgraduate, Bogazici University, Institute Of Science, Nükleer Mühendislik (YI) (Tezli) (İngilizce), Turkey 1978 - 1982

### **Certificates, Courses and Trainings**

Quality Management, ISO 9001 Kalite Yönetim Sistemi, KGS Danışmanlık Ltd. Şti., 2008

### **Dissertations**

Doctorate, Mathematical Modeling of Transient Two-Phase Flow During Blowdown in the Water Cooled Power Reactors, Istanbul Technical University, Nükleer Enerji Enstitüsü, Nükleer Enerji (Dr), 1988

### **Research Areas**

Engineering and Technology

### **Academic Titles / Tasks**

Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 1997 - Continues

Associate Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 1991 - 1997

Assistant Professor, Anadolu University, Faculty Of Engineering, Department Of Mechanical Engineering, 1988 - 1991

Lecturer PhD, Anadolu University, Faculty Of Engineering, Department Of Mechanical Engineering, 1984 - 1988

Research Assistant, Anadolu University, Faculty Of Engineering, Department Of Mechanical Engineering, 1984 - 1984

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Deparment Of Mechanical Engineering, 1981 - 1984

Occupational Expert, Bogazici University, Faculty Of Engineering, 1979 - 1981

## **Academic and Administrative Experience**

Fakülte Kurulu Üyesi, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2007 - 2010  
Head of International Office, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2003 - 2004  
Coordinator of The Rectorate, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2003 - 2004  
Coordinator of The Rectorate, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2002 - 2004  
Academic Performance D. Board Member, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2002 - 2003  
University Executive Board Member, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 1999 - 2002  
Fakülte Kurulu Üyesi, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 1998 - 2001  
Vice Dean, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 1993 - 1996  
Deputy Head of Department, Anadolu University, Faculty Of Engineering-Architecture, Department Of Mechanical Engineering, 1992 - 1993

## **Courses**

İLERİ MÜHENDİSLİK TERMODİNAMİĞİ, Doctorate, 2020 - 2021, 2019 - 2020, 2017 - 2018, 2016 - 2017, 2012 - 2013, 2010 - 2011  
TERMOHİDROLİK TASARIM ARAŞTIRMALARI A, Undergraduate, 2020 - 2021  
DOKTORA TEZ ÇALIŞMASI D, Doctorate, 2020 - 2021  
TERMOHİDROLİK TASARIM ARAŞTIRMALARI(A) , Undergraduate, 2019 - 2020  
TERMOHİDROLİK TASARIM ARAŞTIRMALARI(A) , Undergraduate, 2019 - 2020  
DOKTORA TEZ ÇALIŞMASI(D), Doctorate, 2019 - 2020  
UZMANLIK ALAN DERSİ D, Doctorate, 2020 - 2021  
UZMANLIK ALAN DERSİ (YL)(D), Postgraduate, 2019 - 2020  
UZMANLIK ALAN DERSİ (DR)(D), Doctorate, 2019 - 2020  
YÜKSEK LISANS TEZ ÇALIŞMASI D, Postgraduate, 2020 - 2021  
UZMANLIK ALAN DERSİ N, Postgraduate, 2020 - 2021  
YÜKSEK LISANS TEZ ÇALIŞMASI L, Postgraduate, 2020 - 2021  
TERMAL SİSTEMLERİN EXERGY ANALİZİ(A), Doctorate, 2019 - 2020, 2018 - 2019, 2016 - 2017, 2014 - 2015, 2013 - 2014  
TERMOHİDROLİK TASARIM ARAŞTIRMALARI A, Undergraduate, 2020 - 2021  
UZMANLIK ALAN DERSİ D, Postgraduate, 2020 - 2021  
YÜKSEK LISANS TEZ ÇALIŞMASI(E), Postgraduate, 2019 - 2020  
TERMOHİDROLİK TASARIM - I A, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2016 - 2017, 2014 - 2015, 2013 - 2014, 2012 - 2013  
TERMOHİDROLİK TASARIM II(A), Postgraduate, 2019 - 2020, 2018 - 2019, 2012 - 2013  
UZMANLIK ALAN DERSİ (YL)(E), Postgraduate, 2019 - 2020  
YÜKSEK LISANS TEZ ÇALIŞMASI(D), Postgraduate, 2019 - 2020  
HEAT TRANSFER, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2010 - 2011  
ENGINEERING THERMODYNAMICS - I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
HEAT TRANSFER, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011  
ENGINEERING THERMODYNAMICS - I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012

ENGINEERING THERMODYNAMICS - II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 -

2013 - 2014, 2012 - 2013, 2011 - 2012

ENGINEERING THERMODYNAMICS - II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 -

2013 - 2014, 2012 - 2013, 2011 - 2012

ISI GEÇİŞİNDE ÖZEL PROBLEMLER, Doctorate, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2011 - 2012

ENERJİ VE MOMENTUM TRANSFERİ (A), Doctorate, 2017 - 2018, 2013 - 2014, 2012 - 2013

## Advising Theses

Erbay L. B., Plakalı ısı değiştiricilerinde chevron tipi etkilerinin incelenmesi, Postgraduate, A.CAN(Student), 2019

Erbay L. B., Şerit kanatlı bir ısı değiştiricisinin deneysel ve sayısal termohidrolik analizi, Postgraduate, A.LÜTFÜ(Student), 2019

Erbay L. B., Hermetik pistonlu kompresörlerde egzoz hattı basınç salınımılarına etki eden parametrelerin deneysel ve sayısal incelenmesi, Doctorate, İ.YEŞİLAYDIN(Student), 2018

Erbay L. B., Havacılık motoru türbin disk boşluğunun sonlu hacim ve sonlu elemanlar modellerinin bütünlük çözüm tekniği kullanılarak termohidrolik analizi, Doctorate, E.NADİR(Student), 2017

Erbay L. B., Hava soğutmalı mini kanallı panjurlu kanatlı bir evsel buzdolabı kondenserinin farklı nem ve sabit soğutma yükü koşullarında sayısal ve deneysel analizi, Doctorate, B.DOĞAN(Student), 2017

Erbay L. B., Mini-mikro kanallı bir buzdolabı kondenserinin minimum gaz şarjı sağlayacak tasarımlarının belirlenmesi, Doctorate, M.TOSUN(Student), 2016

Erbay L. B., Absorpsiyonlu soğutma sistemleri, Postgraduate, A.ORAK(Student), 2016

Erbay L. B., Rekuperatör boru konstrüksyonunun verime olan etkisinin deneysel ve sayısal yöntemlerle araştırılması, Postgraduate, H.SELÇUK(Student), 2016

Erbay L. B., Bir ergimiş tuz reaktör-toryum tipi güç santralinda kullanılacak gövde borulu ısı değiştirici tasarımları, Postgraduate, O.YALINAYAK(Student), 2015

Erbay L. B., Karbondioksit soğutkanlı buhar sıkıştırma soğutma çevrimi deney seti tasarımı, Postgraduate, C.POLAT(Student), 2015

Erbay L. B., Jet çarpması ile soğutma sistemi özelliklerinin sayısal araştırılması, Postgraduate, E.NADİR(Student), 2014

Erbay L. B., Hava soğutmalı mini-mikro kanallı kondenserlerde kanat yüksekliği ve adının performansa etkisinin araştırılması, Postgraduate, S.AKYÜZ(Student), 2013

Erbay L. B., Ev tipi buzdolabı kondenserinin kabindibi performansının sayısal araştırılması, Postgraduate, H.YILMAZ(Student), 2012

Erbay L. B., Ev tipi soğutucu kompresörlerde çıkış hattında akış kaynaklı kayıpların incelenmesi, Postgraduate, İ.YEŞİLAYDIN(Student), 2012

Erbay L. B., Ev tipi soğutucu kompresörlerde termodinamik kayıpların analizi, Postgraduate, S.KARA(Student), 2011

Erbay L. B., Enerji ve ekserji analizi ile kazım taşkent şeker fabrikası verimliliğinin hesaplanması, Postgraduate, B.ÇAM(Student), 2011

Erbay L. B., Gelişmekte olan laminer akışta farklı kanal kesitlerinde entropi üretimi üzerine bir çalışma, Postgraduate, B.DOĞAN(Student), 2011

Erbay L. B., Ağır ticari araç soğutma performanslarının deneysel analizi, Postgraduate, O.ALKAN(Student), 2010

Erbay L. B., Plakalı eşanjör etkinlik parametrelerinin deneysel analizi, Postgraduate, C.DANIŞMAN(Student), 2010

Erbay L. B., Dikey derin dondurucularda sistem optimizasyonu, Doctorate, T.SARIÇAY(Student), 2010

Erbay L. B., Bir minikanallı buharlaştırıcıının performansının deneysel olarak araştırılması, Postgraduate, M.TOSUN(Student), 2010

Erbay L. B., Rollbond buharlaştırıcı tasarımlının doğrudan genleşmeli ısı pompası performansına etkisinin deneysel olarak incelenmesi, Doctorate, E.MUTLU(Student), 2010

Erbay L. B., Isı borularının dizayn teknolojisi ve ısı borulu ısı değiştiricilerinin incelenmesi, Postgraduate, A.KUŞ(Student), 2009

Erbay L. B., Farklı çevre koşullarının hava kaynaklı ısı pompasının performansına etkisinin deneysel olarak incelenmesi, Doctorate, M.METE(Student), 2009

Erbay L. B., Kaynak işlemi sırasında ısı geçişinin deneysel ve teorik analizi, Postgraduate, S.LEBLEBİCİ(Student), 2009

Erbay L. B., CNC tezgahlarda parçaya şekil verilmesi sırasında ıslı etkilerin teorik ve deneysel analizi, Postgraduate, E.ÇINA(Student), 2009

Erbay L. B., Endüstriyel tip bir bisküvi fırının analitik ve deneysel analizi, Postgraduate, Ö.ŞAHİN(Student), 2008

Erbay L. B., Laminer sınır tabaka içerisinde yüzey sürtünme katsayısının kama açısına bağlı olarak değişimi, Postgraduate, M.KESKİN(Student), 2007

Erbay L. B., Alt yüzeyi eksenel hareketli yatay paralel iki levha arasında geçici rejimde laminer akışın sayısal ıslı incelemesi, Postgraduate, G.ERCAN(Student), 2002

Erbay L. B., İç cidarı hareketli yatay halka kanalda geçici rejimde laminer akışın sayısal ıslı incelemesi, Postgraduate, M.ŞEREF(Student), 2002

Erbay L. B., Dönmekte olan bir halka kanalda doğal taşınım, Postgraduate, M.GÜRESİN(Student), 2001

Erbay L. B., Ergimiş-tuz reaktörlerle stirling motorlarının olası kombinasyonlarının tartışıması, Postgraduate, K.ASLANTAŞ(Student), 2001

Erbay L. B., Kapalı bir ortamda doğal taşınım ile ısı geçiği sırasında entropi üretiminin incelenmesi, Doctorate, B.SÜLÜŞ(Student), 2001

Erbay L. B., Katlaşma sırasında ısı transferinin analitik ve nümerik incelenmesi, Postgraduate, M.MURAT(Student), 2000

Erbay L. B., Helisel boruda akışkan akışının analizi, Postgraduate, O.ERDİNÇ(Student), 1999

Erbay L. B., Yalıtımında lifli malzemelerin kullanımı, Postgraduate, M.GÖKGÖZ(Student), 1997

Erbay L. B., Sodyum soğutmalı nükleer reaktörlerin termohidrolik analizi, Postgraduate, B.SÜLÜŞ(Student), 1995

Erbay L. B., Nükleer reaktörlerde kullanılan buhar üreticilerinin karşılaştırılması ve buhar üretici modellemesi için matemetiksel teknikler, Postgraduate, S.TATLICAN(Student), 1992

## Jury Memberships

Associate Professor Exam, Associate Professor Exam, Eskişehir Osmangazi Üniversitesi, January, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2020

Associate Professor Exam, Associate Professor Exam, Eskişehir Osmangazi Üniversitesi, October, 2020

Associate Professor Exam, Associate Professor Exam, Eskişehir Osmangazi Üniversitesi, October, 2020

Associate Professor Exam, Associate Professor Exam, Eskişehir Osmangazi Üniversitesi, October, 2020

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, July, 2020

Committee Of Expert, Committee Of Expert, Eskisehir Osmangazi University, September, 2019

Associate Professor Exam, Associate Professor Exam, Eskişehir Osmangazi Üniversitesi, September, 2018

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Eskişehir Teknik Üniversitesi, July, 2018

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Eskişehir Osmangazi Üniversitesi, July, 2018

Competition, İSİB İklimlendirme Sanayi Ürün ve Mühendislik Tasarımı Yarışması, İSİB, May, 2018

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, April, 2018

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2017

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Anadolu Üniversitesi, June, 2017

Associate Professor Exam, Associate Professor Exam, Eskişehir Osmangazi Üniversitesi, June, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi

Üniversitesi, May, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2017

Competition, İSİB İklimlendirme Sanayi Ürün ve Mühendislik Tasarımı Yarışması, İSİB, March, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, January, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, January, 2017

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, January, 2017

Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, December, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2016

Doctorate, Doctorate, Orta Doğu Teknik Üniversitesi, June, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, June, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2016

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, May, 2016

Competition, İSİB Tasarım Yarışması, İSİB, April, 2016

Doctorate, Doctorate, Eskeşehr Osmangazi Üniversitesi, December, 2015

Committee Of Expert, Committee Of Expert, Eskeşehr Osmangazi Üniversitesi, December, 2015

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskeşehr Osmangazi Üniversitesi, December, 2015

Post Graduate, Post Graduate, Eskeşehr Osmangazi Üniversitesi, December, 2015

Post Graduate, Post Graduate, Eskeşehr Osmangazi Üniversitesi, December, 2015

Doctoral Examination, Doctoral Examination, Eskeşehr Osmangazi Üniversitesi, December, 2015

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskeşehr Osmangazi Üniversitesi, December, 2015

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskeşehr Osmangazi Üniversitesi, December, 2015

Post Graduate, Post Graduate, Eskeşehr Osmangazi Üniversitesi, December, 2015

Committee Of Expert, Committee Of Expert, Eskeşehr Osmangazi University, October, 2015

Associate Professor Exam, Associate Professor Exam, Eskeşehr Osmangazi Üniversitesi, October, 2015

Competition, İSIB Tasarım Yarışması, İSIB, June, 2015

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskeşehr Osmangazi

Üniversitesi, June, 2015

Committee Of Expert, Committee Of Expert, Eskisehir Osmangazi University, June, 2015

Post Graduate, Post Graduate, Eskisehir Osmangazi Üniversitesi, June, 2015

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Anadolu Üniversitesi, May, 2015

Doctorate, Doctorate, Eskisehir Osmangazi Üniversitesi, February, 2015

Doctorate, Doctorate, Eskisehir Osmangazi Üniversitesi, February, 2015

Doctorate, Doctorate, Eskisehir Osmangazi Üniversitesi, February, 2015

Committee Of Expert, Committee Of Expert, Eskisehir Osmangazi University, January, 2015

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskisehir Osmangazi Üniversitesi, December, 2014

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskisehir Osmangazi Üniversitesi, December, 2014

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskisehir Osmangazi Üniversitesi, December, 2014

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskisehir Osmangazi Üniversitesi, December, 2014

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskisehir Osmangazi Üniversitesi, December, 2014

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskisehir Osmangazi Üniversitesi, December, 2014

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Eskisehir Osmangazi Üniversitesi, May, 2014

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Anadolu Üniversitesi, April, 2014

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Eskisehir Osmangazi Üniversitesi, April, 2013

Committee Of Expert, Committee Of Expert, Anadolu Üniversitesi, February, 2013

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Eskisehir Osmangazi Üniversitesi, February, 2013

Committee Of Expert, Committee Of Expert, Ministry of Science, Industry and Technology, February, 2013

Associate Professor Exam, Associate Professor Exam, Eskisehir Osmangazi Üniversitesi, October, 2012

Appointment to Academic Staff-Professorship, Appointment Academic Staff, Muğla Sıtkı Koçman Üniversitesi, September, 2012

Associate Professor Exam, Associate Professor Exam, Eskisehir Osmangazi Üniversitesi, June, 2012

Associate Professor Exam, Associate Professor Exam, Eskisehir Osmangazi Üniversitesi, June, 2012

Associate Professor Exam, Associate Professor Exam, Eskisehir Osmangazi Üniversitesi, June, 2012

Committee Of Expert, Committee Of Expert, Eskisehir Valiliği, April, 2012

Appointment to Academic Staff-Professorship, Appointment Academic Staff, İzmir Yüksek Teknoloji Enstitüsü, November, 2011

Committee Of Expert, Committee Of Expert, Eskisehir Osmangazi Üniversitesi, April, 2011

Committee Of Expert, Committee Of Expert, Ministry of Industry and Trade, March, 2011

Committee Of Expert, Committee Of Expert, Ministry of Industry and Trade , March, 2011

Committee Of Expert, Committee Of Expert, THE SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TURKEY,

March, 2008

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, İstanbul Üniversitesi, August, 2007

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Eskisehir Osmangazi Üniversitesi, July, 2007

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Hittit Üniversitesi, February, 2007

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Kütahya Dumlupınar Üniversitesi, December, 2006

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Eskisehir Osmangazi Üniversitesi, September, 2006

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Muğla Sıtkı Koçman Üniversitesi, July, 2006

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Kütahya Dumlupınar Üniversitesi, May, 2006

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

- I. A novel condenser with offset strip fins on a mini channel flat tube for reducing the energy consumption of a household refrigerator  
DOĞAN B., Ozturk M. M., Tosun T., Tosun M., ERBAY L. B.  
Journal of Building Engineering, vol.44, 2021 (SCI-Expanded)
- II. The effect of refrigerant circuitry on the performance of a freezer with a tube-on-sheet evaporator  
Tosun T., Ozturk M. M., DOĞAN B., ERBAY L. B.  
Science and Technology for the Built Environment, vol.27, no.5, pp.557-566, 2021 (SCI-Expanded)
- III. Integration of a mini-channel condenser into a household refrigerator with regard to accurate capillary tube length and refrigerant amount  
Tosun M., DOĞAN B., Ozturk M. M., ERBAY L. B.  
INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.98, pp.428-435, 2019 (SCI-Expanded)
- IV. Effect of working fluid on the performance of the duplex Stirling refrigerator  
DOĞAN B., Ozturk M. M., ERBAY L. B.  
JOURNAL OF CLEANER PRODUCTION, vol.189, pp.98-107, 2018 (SCI-Expanded)
- V. Overall performance of the duplex Stirling refrigerator  
ERBAY L. B., Ozturk M. M., DOĞAN B.  
ENERGY CONVERSION AND MANAGEMENT, vol.133, pp.196-203, 2017 (SCI-Expanded)
- VI. Numerical Investigation of the Air-Side Thermal Hydraulic Performance of a Louvered-Fin and Flat-Tube Heat Exchanger at Low Reynolds Numbers  
ERBAY L. B., UĞURLUBİLEK N., ALTUN Ö., DOĞAN B.  
HEAT TRANSFER ENGINEERING, vol.38, no.6, pp.627-640, 2017 (SCI-Expanded)
- VII. Turkey  
ERBAY L. B.  
MOLTEN SALT REACTORS AND THORIUM ENERGY, pp.735-744, 2017 (SCI-Expanded)
- VIII. An experimental comparison of two multi-louvered fin heat exchangers with different numbers of fin rows  
DOĞAN B., ALTUN Ö., UĞURLUBİLEK N., Tosun M., Sarıçay T., ERBAY L. B.  
APPLIED THERMAL ENGINEERING, vol.91, pp.270-278, 2015 (SCI-Expanded)
- IX. AN EXPERIMENTAL ANALYSIS OF AIR SOURCE HEAT PUMP WATER HEATER  
Ozturk M. M., Erbay L. B.  
ISI BİLİMI VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.32, no.1, pp.117-127, 2012 (SCI-Expanded)
- X. Flow exergy destruction in ducts  
Erbay L. B.  
ISI BİLİMI VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.27, no.2, pp.1-6, 2007 (SCI-Expanded)
- XI. Entropy generation during fluid flow between two parallel plates with moving bottom plate  
ERBAY L. B., Ercan M.Ş., SÜLÜŞ B., Yalçın M. M.  
Entropy, vol.5, pp.506-518, 2003 (SCI-Expanded)
- XII. Optimization of the irreversible stirling heat engine  
Erbay L. B., Yavuz H.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.23, no.10, pp.863-873, 1999 (SCI-Expanded)

- XIII. **The maximum cooling density of a realistic stirling refrigerator**  
Erbay L. B., Yavuz H.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.31, no.3, pp.291-293, 1998 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Numerical investigation of heat transfer and pressure drop characteristics in an offset strip fin heat exchanger**  
Doğan B., Öztürk M. M., Erbay L. B.  
JOURNAL OF THERMAL ENGINEERING, vol.7, no.6, pp.1417-1431, 2021 (ESCI)
- II. **Heat transfer enhancement using different types of turbulators on the heat exchangers**  
Çelik H. S., ERBAY L. B.  
Journal of Thermal Engineering, vol.7, no.7, pp.1654-1670, 2021 (Scopus)
- III. **Heat exchanger design studies for molten salt fast reactor**  
Kose U., Koc U., ERBAY L. B., Oğut E., Ayhan H.  
EPJ NUCLEAR SCIENCES & TECHNOLOGIES, vol.5, 2019 (ESCI)
- IV. **NUMERICAL INVESTIGATION OF THE BOTTOM CABINET OF A HOUSEHOLD REFRIGERATOR**  
YILMAZ H., Erbay L. B., DOĞAN B.  
JOURNAL OF THERMAL ENGINEERING, vol.2, no.5, pp.946-953, 2016 (ESCI)
- V. **Transient Exergy Analysis of the Condenser and Evaporator of an Air Source Heat Pump Water Heater**  
ÖZTÜRK M. M., ERBAY L. B.  
Journal of Mechanics Engineering and Automation, vol.6, no.7, 2016 (Peer-Reviewed Journal)
- VI. **EXPERIMENTAL ANALYSIS OF THE EFFECT OF COLD FLUID INLET TEMPERATURE ON THE THERMAL PERFORMANCE OF A HEAT EXCHANGER**  
DOĞAN B., ERBAY L. B.  
JOURNAL OF THERMAL ENGINEERING, vol.2, no.1, pp.583-592, 2016 (ESCI)
- VII. **Kompakt Isı Değiştiriciler**  
ERBAY L. B., UĞURLUBİLEK N., ALTUN Ö., DOĞAN B.  
Mühendis ve Makina, vol.54, no.646, pp.37-48, 2013 (Peer-Reviewed Journal)

### Books & Book Chapters

- I. **Comprehensive Study of Compact Heat Exchangers with Offset Strip Fin**  
Erbay L. B., Öztürk M. M., Doğan B.  
in: Heat Exchangers - Advanced Features and Applications, S. M. Sohel Murshed and Manuel Matos Lopes, Editor, InTechOpen, London, pp.31-59, 2017
- II. **Comprehensive Study of Heat Exchangers with Louver Fins**  
Erbay L. B., Doğan B., Öztürk M. M.  
in: Heat Exchangers - Advanced Features and Applications, S. M. Sohel Murshed and Manuel Matos Lopes, Editor, InTechOpen, London, pp.61-92, 2017
- III. **Ünite:6 Dalga Enerjisi**  
ERBAY L. B.  
in: Yenilenebilir Enerji Kaynakları, Prof. Dr. Ertuğrul Yörükogulları, Editor, Anadolu Üniversitesi, pp.130-157, 2016
- IV. **Ünite 4: Nükleer Santraller**  
ERBAY L. B.  
in: Elektrik Enerjisi Üretimi ve Dağıtımları, Prof. Dr. Süleyman Demir, Editor, Anadolu Üniversitesi, pp.64-89, 2016

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Serpentin Tipi Bir Isı Değiştiricinin Isıl Performansının Analitik, Sayısal ve Deneysel İncelenmesi**  
Çelik H. S., DOĞAN B., ERBAY L. B.  
15. Ulusal Tesisat Mühendisliği Kongresi, İzmir, Turkey, 26 April 2023, pp.1-17
- II. **Bir Telli-Boru Tip Kondenserin Boru Adımı ve Geçiş Sayısının Dikey Bir Derin Dondurucunun Performansına Etkisi**  
TOSUN T., ÖZTÜRK M. M., DOĞAN B., ERBAY L. B.  
Uluslararası Katılımlı 23. Isı Bilimi ve Tekniği Kongresi, ULIBTK21, Gaziantep, Turkey, 08 September 2021, pp.132-139
- III. **Effect of Spiral Position of The Diabatic Capillary Tube on The Performance of a Vertical Freezer**  
TOSUN T., DOĞAN B., ÖZTÜRK M. M., ERBAY L. B.  
Effect of Spiral Position of The Diabatic Capillary Tube on The Performance of a Vertical Freezer, South Africa, 25 July 2021, pp.712-717
- IV. **Numerical Investigation of Heat Transfer and Pressure Drop Characteristics in an Offset Strip Fin Heat Exchanger**  
DOĞAN B., ÖZTÜRK M. M., ERBAY L. B.  
22th Congress of Thermal Sciences and Technology, 11 - 14 September 2019, pp.1197-1205
- V. **Numerical Investigation of Parameters Affecting Discharge Line Pressure Pulsations in Hermetic Reciprocating Compressors**  
Yesilaydin I., Erbay L. B.  
11th International Conference on Compressors and Their Systems 2019, London, United Kingdom, 9 - 11 September 2019, vol.604
- VI. **A Study on a Numerical Modelling of Discharge Line Flow Analysis of a Household Type Refrigerator Compressor**  
YEŞİLAYDIN İ., ERBAY L. B.  
24th International Compressor Engineering Conference at Purdue, 9 - 12 July 2018, pp.1-8
- VII. **Thermo-hydraulic Performance Assessment of a Compact Heat Exchanger by Varying Plate Fins**  
Ozturk M. M., DOĞAN B., Erbay L. B.  
6th IEEE INTERNATIONAL CONFERENCE on RENEWABLE ENERGY RESEARCH and APPLICATIONS (ICRERA 2017), California, United States Of America, 5 - 08 November 2017, pp.70-75
- VIII. **Th MSR and RELATED STUDIES IN TURKEY**  
ERBAY L. B.  
Technical Meeting on the Status of Molten Salt Reactor Technology IAEA's Headquarters, Viyena, Austria, 31 October - 03 November 2016
- IX. **Numerical Characterization of a Jet Impingement Cooling System**  
Kaçar E. N., ERBAY L. B.  
12th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT2016, Malaga, Spain, 11 - 13 July 2016
- X. **Transient Exergy Analysis Of The Condenser And Evaporator Of An Air Source Heat Pump Water Heater**  
ÖZTÜRK M. M., ERBAY L. B.  
12th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, Malaga, Spain, 11 - 13 July 2016
- XI. **Comparison of 2D 3D Numerical Analysis of the Air Side Heat Transfer and Laminar Flow in Multilouvered Fin and Flat Tube Heat Exchanger**  
UĞURLUBİLEK N., ERBAY L. B.  
XII. International HVAC+R & Sanitary Technology Symposium, İstanbul, Turkey, 31 March - 02 April 2016, pp.19-26
- XII. **Kompakt Bir Isı Değiştiricide Dış Akış Entropi Üretiminin Taguchi Metodu ile Optimizasyonu**  
DOĞAN B., ERBAY L. B.  
20. Ulusal Isı Bilimi ve Tekniği Kongresi, Balıkesir, Turkey, 2 - 05 September 2015, vol.1

- XIII. **Kompakt Bir Isı Değiştiricide Dış Akış Entropi Üretiminin Sayısal İncelenmesi**  
DOĞAN B., ERBAY L. B.  
20. Ulusal Isı Bilimi ve Tekniği Kongresi, Balıkesir, Turkey, 2 - 05 September 2015, vol.1
- XIV. **Numerical Investigation of Flow Losses through Discharge Line of Household Type Refrigerator Compressors**  
Yesilaydin I., Erbay L. B.  
9th International Conference on Compressors and their Systems, London, Canada, 5 - 09 September 2015, vol.90
- XV. **NUMERICAL CHARACTERIZATION OF A JET IMPINGEMENT COOLING SYSTEM USING COUPLED HEAT TRANSFER ANALYSIS**  
Kacar E. N., ERBAY L. B.  
ASME Turbo Expo: Turbine Technical Conference and Exposition, Montreal, Canada, 15 - 19 June 2015
- XVI. **Numerical Investigation of Thermal and Hydraulic Performance of Louvered Fin Aluminum Heat Exchanger**  
ALTUN Ö., UĞURLUBİLEK N., DOĞAN B., ERBAY L. B.  
XI. International HVAC R Technology Symposium, İstanbul, Turkey, 8 - 10 May 2014, vol.1, pp.169-176
- XVII. **Bir Isı Değiştiricide Dış Akış Basınç Düşümü Karakteristiğinin Sayısal İncelenmesi**  
DOĞAN B., ERBAY L. B.  
19. Ulusal Isı Bilimi ve Tekniği Kongresi, Samsun, Turkey, 9 - 12 September 2013, vol.1, pp.386-391
- XVIII. **Bir Isı Değiştiricide Dış Akış Isı Transferi Karakteristiğinin Sayısal İncelenmesi**  
DOĞAN B., ERBAY L. B.  
19. Ulusal Isı Bilimi ve Tekniği Kongresi, Samsun, Turkey, 9 - 12 September 2013, vol.1, pp.380-385
- XIX. **Numerical Analysis of Entropy Generation at the Entrance of a Channel**  
DOĞAN B., ERBAY L. B.  
EWRES - European Workshop on Renewable Energy Systems, Antalya, Turkey, 17 - 28 September 2012, vol.1
- XX. **Endüstriyel Tip Bir Bisküvi Fırının Deneysel Isıl Analizi 17 Ulusal Isı Bilimi ve Tekniği Kongresi Bildiri Kitabı**  
DOĞAN B., ERBAY L. B.  
17. Ulusal Isı Bilimi ve Tekniği Kongresi, Sivas, Turkey, 24 - 27 June 2009, vol.1, pp.843-849
- XXI. **Experimental analysis of the effect of humidity on the performance of a heat pump water heating system**  
Öztürk M. M., ERBAY L. B.  
22nd International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2009, Foz du Iguacu, Parana, Brazil, 30 August - 03 September 2009, pp.759-766
- XXII. **Exergetic analysis of heat pump water heaters**  
Cerit E., Sarıçay T., ERBAY L. B.  
21st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2008, Cracow-Gliwice, Poland, 24 - 27 June 2008, pp.381-389
- XXIII. **The use of Artificial Neural Network in thermal systems**  
Öztürk M. M., ERBAY L. B.  
21st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2008, Cracow-Gliwice, Poland, 24 - 27 June 2008, pp.781-788
- XXIV. **A search for THORIMS-NES from exergetic point of view**  
ERBAY L. B., Furukawa K., Kamei T., Mitachi K., Yoshioka R., Kato Y.  
21st International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2008, Cracow-Gliwice, Poland, 24 - 27 June 2008, pp.1375-1384
- XXV. **A road map for the realization of global-scale thorium breeding fuel cycle by single molten-fluoride flow**  
Furukawa K., Arakawa K., ERBAY L. B., Ito Y., Kato Y., Kiyavitskaya H., Lecocq A., Mitachi K., Moir R., Numata H., et al.  
13th International Conference on Emerging Nuclear Energy Systems 2007, ICENES 2007, İstanbul, Turkey, 3 - 08 June 2007, vol.1, pp.5-32
- XXVI. **Numerical investigation of the effects of reynolds number to the flow and heat transfer**

### **characteristics of the water flow inside multi-port minichannels**

Mutlu E., ERBAY L. B.

20th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2007, Padova, Italy, 25 - 28 June 2007, vol.1, pp.373-379

### **XXVII. Numerical analysis of flow exergy destruction in parallel plate microchannels**

ERBAY L. B., Ercan M. S., Öztürk M. M.

20th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2007, Padova, Italy, 25 - 28 June 2007, vol.1, pp.365-372

### **XXVIII. Design parameters of a thermionic energy converter**

ERBAY L. B., YAVUZ H. S.

Proceedings of the International Conference on Thermodynamic Analysis and Improvement of Energy Systems, TAIES'97, Beijing, China, 10 - 13 June 1997, pp.20-24

## **Supported Projects**

Erbay L. B., Energy and Natural Resources Ministry, Advanced Reactor Design Feasibility Study Project Study: 30 MWth Molten Salt Reactor Feasibility Preliminary Analysis Project, 2022 - 2023

Erbay L. B., Doğan B., Öztürk M. M., Industrial Thesis Project, Şerit ve İnovatif-Şerit Kanatlı Yassı Borulu Isı Değiştirici Geliştirilmesi 0888.STZ.2015, 2016 - 2019

Erbay L. B., Uğurlubilek N., Altun Ö., Industrial Thesis Project, Ev Tipi Mini Mikro Kanallı Kondenser Geliştirme Projesi 865 STZ 2011 1, 2011 - 2015

Erbay L. B., Project Supported by Higher Education Institutions, Motor Parçalarının Isıl - Hidrolik Analizi , 2003 - 2006

Erbay L. B., Project Supported by Higher Education Institutions, Na Soğutmalı Nükleer Reaktörlerde Kaza Anı Termo Hidrolik Analizi , 1995 - 1997

## **Activities in Scientific Journals**

Mühendis ve Makina, Assistant Editor/Section Editor, 2018 - Continues

Mühendis ve Makina, Publication Committee Member, 2004 - Continues

Eskişehir Osmangazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, Committee Member, 1998 - 2009

Eskişehir Osmangazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, Committee Member, 1998 - 2009

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

T.M.M.O.B Makina Müh. Odası Eskişehir Şubesi, Member of Advisory Board, 2012 - Continues, Turkey

Türk Isı Bilimi ve Tekniği Derneği , Board Member, 2012 - Continues, Turkey

## **Scientific Refereeing**

APPLIED THERMAL ENGINEERING, SCI Journal, December 2023

Horizon Europe Project, Horizon Europe Project, HORIZON-EIC-2023-PATHFINDERCHALLENGES, Belgium, December 2023

Horizon Europe Project, Horizon Europe Project, HORIZON-EIC-2023-PATHFINDERCHALLENGES, Belgium, December 2023

APPLIED THERMAL ENGINEERING, SCI Journal, November 2023

APPLIED THERMAL ENGINEERING, SCI Journal, October 2023

APPLIED THERMAL ENGINEERING, SCI Journal, August 2023

APPLIED THERMAL ENGINEERING, SCI Journal, July 2023

APPLIED THERMAL ENGINEERING, SCI Journal, May 2023  
APPLIED THERMAL ENGINEERING, SCI Journal, March 2023  
APPLIED THERMAL ENGINEERING, SCI Journal, March 2023  
APPLIED THERMAL ENGINEERING, SCI Journal, February 2023  
APPLIED THERMAL ENGINEERING, SCI Journal, January 2023  
APPLIED THERMAL ENGINEERING, SCI Journal, May 2022  
APPLIED THERMAL ENGINEERING, SCI Journal, March 2022  
APPLIED THERMAL ENGINEERING, SCI Journal, March 2022  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, SCI Journal, February 2021  
APPLIED THERMAL ENGINEERING, SCI Journal, February 2021  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, SCI Journal, January 2021  
HEAT AND MASS TRANSFER, SCI Journal, June 2019  
Project Supported by Higher Education Institutions, BAP Research Project, Kütahya Dumlupınar University, Turkey, January 2019  
HEAT AND MASS TRANSFER, SCI Journal, March 2017  
HEAT AND MASS TRANSFER, SCI Journal, February 2017  
HEAT AND MASS TRANSFER, SCI Journal, September 2015  
HEAT AND MASS TRANSFER, SCI Journal, September 2015  
HEAT AND MASS TRANSFER, SCI Journal, August 2015  
JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, SCI Journal, March 2014  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Turkey, May 2012  
Project Supported by Higher Education Institutions, BAP Infrastructure, Kütahya Dumlupınar University, Turkey, March 2010  
Project Supported by Higher Education Institutions, BAP Infrastructure, Kütahya Dumlupınar University, Turkey, March 2010  
Project Supported by Higher Education Institutions, BAP Research Project, Eskisehir Osmangazi University, Turkey, May 2009  
Project Supported by Higher Education Institutions, BAP Research Project, Mugla Sitki Kocman University, Turkey, March 2001

## Scientific Consultations

TENMAK, Project Consultancy, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, Turkey, 2022 - 2023

## Tasks In Event Organizations

Erbay L. B., 22. Isı Bilimi ve Tekniği Kongresi, Scientific Congress, Kocaeli, Turkey, Eylül 2019  
Erbay L. B., 21. Ulusal Isı Bilimi ve Tekniği Kongresi, Scientific Congress, Çorum, Turkey, Eylül 2017  
Erbay L. B., 20. Ulusal Isı Bilimi ve Tekniği Kongresi, Scientific Congress, Balıkesir, Turkey, Eylül 2015  
Erbay L. B., 19. Ulusal Isı Bilimi ve Tekniği Kongresi, Scientific Congress, Samsun, Turkey, Eylül 2013  
Erbay L. B., 18. Ulusal Isı Bilimi ve Tekniği Kongresi, Scientific Congress, Zonguldak, Turkey, Eylül 2011  
Erbay L. B., 17. Ulusal Isı Bilimi ve Tekniği Kongresi, Scientific Congress, Sivas, Turkey, Haziran 2009  
Erbay L. B., 16. Isı Bilimi ve Tekniği Ulusal Kongresi - (TİBTD), Scientific Congress, Kayseri, Turkey, Haziran 2007

## Metrics

Publication: 68

Citation (WoS): 484

Citation (Scopus): 596

H-Index (WoS): 14

H-Index (Scopus): 16

## Awards

Erbay L. B., TÜBİTAK - UBYT, Tübitak, February 2016

Erbay L. B., TÜBİTAK - UBYT, Tübitak, December 2015

Erbay L. B., TÜBİTAK - UBYT, Tübitak, June 2013

Erbay L. B., TÜBİTAK - UBYT, Tübitak, August 2007

Erbay L. B., TÜBİTAK - UBYT, Tübitak, February 2005

Erbay L. B., TÜBİTAK - UBYT, Tübitak, June 2001

Erbay L. B., TÜBİTAK - UBYT, Tübitak, September 1999

Erbay L. B., TÜBİTAK - UBYT, Tübitak , February 1998

Erbay L. B., TÜBİTAK - UBYT, Tübitak , April 1997