

Prof. Selma Ergin

Personal Information

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Education Information

Doctorate, Brunel University, Mechanical Engineering Department, Mechanical Engineering, United Kingdom 1989 - 1993

Post Graduate, Karadeniz Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Turkey 1984 - 1986

Under Graduate, Karadeniz Teknik Üniversitesi, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Pr., Turkey 1980 - 1983

Under Graduate, İstanbul Teknik Üniversitesi, Makine Mühendisliği Bölümü, Makine Mühendisliği, Turkey 1979 - 1980

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Measurements and Numerical Modelling of Natural Convection in a Stairwell Model, Brunel University, Mechanical Engineering Department, 1993

Post Graduate, İki Boyutlu Navier-Stokes Denklemlerinin Çözümü, Karadeniz Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 1986

Research Areas

Mechanical Engineering, Thermodynamics, Heat and Mass Transfer, Naval Architecture and Marine Engineering, Ship Machines, Engineering and Technology

Academic Titles / Tasks

Professor, İstanbul Teknik Üniversitesi, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 2005 - Continues

Associate Professor, İstanbul Teknik Üniversitesi, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 1997 - 2005

Assistant Professor, İstanbul Teknik Üniversitesi, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 1993 - 1997

Assistant Professor, Çukurova Üniversitesi, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü (İngilizce), 1993 - 1993

Research Assistant, Çukurova Üniversitesi, Mühendislik-Mimarlık Fakültesi, 1986 - 1993

Professional Experience

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

- **An experimental investigation on the effects of fuel additive on the exhaust emissions of a ferry**
Ergin S., Durmaz M., Kalender S. S.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M-JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, vol.233, pp.1000-1006, 2019 (Journal Indexed in SCI)
- **An investigation of exhaust smoke dispersion for a generic frigate by numerical analysis and experiment**
Dobrucali E., Ergin S.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M-JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, vol.233, pp.310-324, 2019 (Journal Indexed in SCI)
- **An investigation of marine waste heat recovery system based on organic Rankine cycle under various engine operating conditions**
Akman M., Ergin S.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M-JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, vol.1, pp.1-16, 2018 (Journal Indexed in SCI)
- **AN EXPERIMENTAL INVESTIGATION INTO THE PARTICULATE EMISSIONS OF A FERRY FUELLED WITH ULTRA-LOW SULFUR DIESEL**
Kalender S. S. , Ergin S.
JOURNAL OF MARINE SCIENCE AND TECHNOLOGY-TAWAN, vol.25, pp.499-507, 2017 (Journal Indexed in SCI)
- **EXPERIMENTAL STUDY ON THE EFFECTS OF ULTRA-LOW SULFUR DIESEL FUEL TO THE EXHAUST EMISSIONS OF A FERRY**
Durmaz M., Kalender S. S. , Ergin S.
FRESENIUS ENVIRONMENTAL BULLETIN, vol.26, pp.5833-5840, 2017 (Journal Indexed in SCI)
- **A study of the effect of duct width on fully developed turbulent flow characteristics in a corrugated duct**
Ergin S., OTA M.
HEAT TRANSFER ENGINEERING, vol.26, pp.54-62, 2005 (Journal Indexed in SCI)
- **Surface radiation with conduction and natural convection in a two-floor enclosure**
Ergin S.
ENERGY AND BUILDINGS, vol.32, pp.57-70, 2000 (Journal Indexed in SCI)
- **EXPERIMENTAL-STUDY OF NATURAL-CONVECTION BETWEEN 2 COMPARTMENTS OF A STAIRWELL**
ERGINOZKAN S., MOKHTARZADEHDEHGHAN M., REYNOLDS A.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.38, pp.2159-2168, 1995 (Journal Indexed in SCI)
- **NATURAL-CONVECTION BETWEEN 2 COMPARTMENTS OF A STAIRWELL - NUMERICAL PREDICTION AND COMPARISON WITH EXPERIMENT**
MOKHTARZADEHDEHGHAN M., ERGINOZKAN S., REYNOLDS A.
NUMERICAL HEAT TRANSFER PART A-APPLICATIONS, vol.27, pp.1-17, 1995 (Journal Indexed in SCI)
- **The Effect of Different Air Inlet Sizes on the Air Flow through a Stairwell**
Ergin-Ozkan S., MOKHTARZADEH-DEHGHAN M., REYNOLDS A.
Indoor and Built Environment, vol.2, pp.350-359, 1993 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- **A Numerical Analysis of Exhaust Smoke Dispersion for a Generic Frigate**
Dobrucali E., Ergin S.
JOURNAL OF ETA MARITIME SCIENCE, vol.5, pp.272-289, 2017 (Refereed Journals of Other Institutions)
- **Numerical modeling of exhaust smoke dispersion for a generic frigate and comparisons with experiments**

Ergin S., DOBRUCALI E.

Journal of Marine Science and Application, vol.13, pp.206-211, 2014 (Refereed Journals of Other Institutions)

- **Gemiyon İSTKA Destekli Akredite bir Gemi Emisyonları Laboratuvarı Geliştirilmesi ve BİT Destekli Eğitim Projesi**

ERĞİN S.

Denizcilik Dergisi, pp.14-18, 2014 (National Non-Refereed Journal)

- **İTÜ ye İSTKA Destekli Laboratuvar**

ERĞİN S.

Gemi Sanayi, vol.8, pp.38-42, 2014 (Other Refereed National Journals)

- **Tipik bir Fırkateyn için Egzoz Gazları Yayılımının İncelenmesi**

DOBRUCALI E., ERĞİN S.

Gemi ve Deniz Teknolojisi, pp.16-22, 2012 (Other Refereed National Journals)

- **Savaş Gemilerinde Gemi Üst Yapısı ve Egzoz Gazları Arasındaki Etkileşimin Sayısal Olarak İncelenmesi**

ERĞİN S., PARALI Y.

Gemi ve Deniz Teknolojisi, 2010 (Other Refereed National Journals)

- **Dizel Motorlar için Egzoz Emisyon Azaltma Sistemi**

ERĞİN S.

Deniz Ticareti, pp.80-82, 2007 (Other Refereed National Journals)

- **Gemi Dizel Motorları için Geliştirilen Egzoz Emisyon Kontrol Sistemi**

ERĞİN S.

Gemi ve Deniz Teknolojisi Dergisi, TMMOB Gemi Mühendisleri Odası, pp.7-11, 2007 (Other Refereed National Journals)

- **Three-Dimensional Numerical Study of Periodic Turbulent Flow in a Corrugated-Wall Heat Exchanger**

Ergin S., Ota M.

Phoenics Journal of Computational Fluid Dynamics and its Applications, vol.16, pp.1-36, 2004 (Refereed Journals of Other Institutions)

- **Tank Havalandırma Başlığı Dizaynı**

ERĞİN S.

Ç.Ü. Mühendislik-Mimarlık Fakültesi Dergisi, vol.18, pp.233-239, 2003 (Other Refereed National Journals)

- **A numerical study of the effect of interwall spacing on turbulent flow in a corrugated duct**

Ergin S., Ota M., YAMAGUCHI H., SAKAMOTO M.

American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD, vol.333, pp.47-54, 1996 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- **Three-Dimensional Numerical Investigation of Flow Noise Around a Circular Cylinder**

Ergin S., Bulut S.

TEAM 2018, Wuhan, China, 15 - 18 October 2018, vol.1, pp.350-356

- **A Large Eddy Simulation of LNG Pool Fire on Board a Chemical/Oil Tanker**

Bolek A., Ergin S.

3rd European Symposium on Fire Safety Science, ESFSS 2018, Nancy, France, 12 - 14 September 2018, vol.1107

- **An Investigation on The Effects of Various Flow Parameters on the Underwater Flow Noise**

Bulut S., Ergin S.

NAV 2018, Trieste, Italy, 20 - 22 July 2018, vol.1, pp.1-8

- **An investigation on exhaust emissions of a ferry**

ERĞİN S.

3rd INTERNATIONAL SYMPOSIUM ON OCEAN SCIENCE AND TECHNOLOGY Theme: Research Education for Sustainable Development on Ocean Science and Technology, 27 - 30 November 2017

- **An experimental and analytical investigation on the exhaust emissions of a ferry**

Durmaz M., Ergin S.

8th Atmospheric Sciences Symposium, ATMOS 2017, İstanbul, Turkey, 1 - 04 November 2017, pp.181-191

- **ESTIMATING FLOW-INDUCED NOISE OF A CIRCULAR CYLINDER USING NUMERICAL AND ANALYTICAL ACOUSTIC METHODS**
ERGİN S., BULUT S.
Developments in Maritime Transportation and Harvesting of Sea Resources IMAM 2017, 9 - 11 October 2017
- **Dairesel kesitli bir silindir etrafındaki akış gürültüsünün sayısal ve analitik olarak incelenmesi**
ERGİN S., BULUT S.
20. Ulusal Mekanik Kongresi, Turkey, 5 - 09 September 2017
- **On Board Measurements of Exhaust Emissions From a Ferry Sailing at Marmara Sea**
ERGİN S., DURMAZ M., KALENDER S. S.
GMO-SHIPMAR 2016 1st International on Congress Ship and Marine Technology, 8 - 09 December 2016
- **Thermodynamic Analysis of Organic Rankine Cycle For Waste Heat Recovery System of A Ship**
Akman M., Ergin S.
GMO SHIPMAR 1st International on Congress Ship and Marine Technology, İstanbul, Turkey, 8 - 09 December 2016, pp.1-10
- **Measurements of Particulate Emissions from a Ferry**
DURMAZ M., KALENDER S. S. , ERGİN S.
the Second Global Conference on Innovation in Marine Technology and the Future of Maritime Transport, 24 - 25 October 2016, pp.377-386
- **An Experimental Investigation of Exhaust Emissions from a Ferry**
ERGİN S., DURMAZ M., KALENDER S. S.
Of 30th Asian-Pacific Technical Exchange and Advisory Meeting on Marine Structures, TEAM 2016, 10 - 13 October 2016, pp.406-412
- **On-board measurements of emissions from a ferry**
KALENDER S., Durmaz M., Ergin S.
3rd International Conference on Maritime Technology and Engineering, MARTECH 2016, Lisbon, Portugal, 4 - 06 July 2016, vol.2, pp.745-750
- **Investigation of Emissions from Ships in Turkish Straits and Marmara Sea**
ERGİN S.
WOST 2015, The 2015 International Workshop on Ocean Science and Marine Technology, Weihai, China, 18 - 19 July 2015
- **A Study on the Energy Efficiency of Turkish Flag Ships**
ERGİN S., ÜÇER C.
8th meeting of the Port-City Universities League (PUL 2014) Green Ship, Sustainable Port and the Marine Environment, İstanbul, Turkey, 20 - 23 October 2014, pp.56-59
- **Exhaust smoke dispersion for a generic frigate: Computational modeling and comparisons with experiments**
DOBRUCAL E., Ergin S.
15th International Congress of the International-Maritime-Association-of-the-Mediterranean (IMAM), A-Coruna, Spain, 14 - 17 October 2013, pp.811-817
- **A numerical investigation of exhaust smoke-superstructure interaction on a naval ship**
Ergin S., PARALI Y., DOBRUCALI E.
14th International Congress of the International-Maritime-Association-of-the-Mediterranean (IMAM), Genoa, Italy, 13 - 16 September 2011, pp.109-115
- **Gemi Dizel Motorları için Geliştirilen Yeni bir NOx Emisyon Kontrol Sistemi**
ERGİN S.
Anadolu Enerji Sempozyumu, Fırat Üniversitesi, Elazığ, Turkey, 22 - 24 June 2011, pp.280-286
- **İstanbul Boğaz ında Gemi Kaynaklı Hava Kirliliğinin Kontrolü**
ERGİN S.
Denizcilik Faaliyetleri, Marmara ve Türk Boğazlarında Çevresel Riskler ve Alınabilecek Tedbirler Konferansı, Turkey, 30 July 2010
- **An Investigation on NOX Emission Reduction System for Ships**
ERGİN S.
The Proc. of the Int. Symp. on the Development of the Albanian Maritime System and the Experience of the

European Maritime Industry, Albania, Vlora, Albania, 14 - 15 May 2010, pp.58-71

- **An Investigation of Engine Room Fire Characteristics for a Chemical Tanker**
ERGİN S., SÜLÜS A.
Proc. of the 23rd Asian-Pacific Technical Exchange and Advisory Meeting on Marine Structures, TEAM 2009, Kaohsiung, Taiwan, İstanbul, Turkey, 12 - 15 October 2009, pp.343-349
- **The Effects of Openings on the Fire Development in an Engine Room of a Chemical Tanker**
ERGİN S., Sülüs A.
Proc. of 13th International Congress of the International Maritime Association of the Mediterranean, IMAM 2009, İstanbul, Turkey, İstanbul, Turkey, 12 - 15 October 2009, pp.343-349
- **Gemi Kaynaklı Hava Kirliliğinin ve Sera Gazı Emisyonlarının Kontrolü**
ERGİN S.
Hedef 2023, 10. Ulaştırma Şurası, TC Ulaştırma Bakanlığı, İstanbul, Turkey, 27 September - 01 October 2009
- **Makina Dairesi Yangınlarına Açıklıkların Etkisinin İncelenmesi**
ERGİN S., SÜLÜS A.
Gemi İnşaatı ve Deniz Teknolojisi Teknik Kongresi, İstanbul, Turkey, 24 - 25 November 2008, pp.167-180
- **Gemi Dizel Motorlarında Emisyon Kontrolü**
ERGİN S.
Gemi İnşaatı ve Deniz Teknolojisi Teknik Kongresi, İstanbul, Turkey, 24 - 25 November 2008, pp.181-187
- **Calculation of Thermal Stresses for a 7000 DWT Oil Tanker**
ÖZÇELİK S., ERGİN S., ERGİN A.
Proc. Of the 22nd Asian-Pacific Technical Exchange and Advisory Meeting on Marine Structures, TEAM 2008, İstanbul, Turkey, İstanbul, Turkey, 6 - 09 October 2008, pp.354-359
- **The effect of biodiesel on exhaust emission characteristics of a diesel engine**
DOBRUCALI E., OEZCUMALI R. U. , Ergin S.
12th International Congress of the International-Maritime-Association-of-the-Mediterranean, Varna, Bulgaria, 2 - 06 September 2007, pp.345-350
- **A study on exhaust emissions reduction system for marine diesel engines**
Ergin S.
12th International Congress of the International-Maritime-Association-of-the-Mediterranean, Varna, Bulgaria, 2 - 06 September 2007, pp.351-355
- **Flow Characteristics of air-caps for tank ventilation in ships**
Ergin S.
11th International Congress of the International-Maritime-Association-of-the-Mediterranean (IMAM 2005), Lisbon, Portugal, 26 - 30 September 2005, pp.643-650
- **Tank Havalandırma Başlığındaki Türbülanslı Akışın Sayısal Olarak Modellenmesi**
ERGİN S.
Gemi Mühendisliği ve Sanayimiz Sempozyumu, İstanbul, Turkey, 24 - 25 December 2004, pp.357-365
- **Bir Isı Değiştiricisindeki Türbülanslı ve Üç Boyutlu Akışın Sayısal Olarak İncelenmesi**
ERGİN S.
Türk Loydu'nun 40. kuruluş yıldönümü nedeniyle düzenlenen Gemi İnşaatı ve Deniz Teknolojisi Teknik Kongresi, İstanbul, Turkey, 17 December 2002, pp.72-86
- **Numerical and Experimental Study of Turbulent Flow Through a Corrugated Duct**
ERGİN S., Ota M.
Proc. of ESDA 2002, 6th Biennial Conference on Engineering System Design and Analysis, Istanbul, Turkey, İstanbul, Turkey, 8 - 11 July 2002, pp.1-10
- **Numerical Prediction of Turbulent Flow Characteristics in a Corrugated Duct**
ERGİN S., Ota M.
Proc. of the 15th International Conference on Efficiency, Costs, Optimisation, Simulation and Environmental Impact of Energy Systems, ECOS 2002, Berlin, Germany, Berlin, Germany, 3 - 05 July 2002, pp.17-24
- **A Study of Surface Radiation in a Two Floor Enclosure**
ERGİN S.
ULIBTK'99, 12. Ulusal Isı Bilimi ve Tekniği Kongresi, Sakarya, Turkey, 28 - 29 February 2000, pp.277-282
- **Egzos Emiř Ağzı Etrafındaki Akışın Sayısal Hesabı**

ERGİN S., MESTANİ M.

GİDTTK'99 Gemi İnşaatı ve Deniz Teknolojisi Teknik Kongresi, İstanbul, Turkey, 2 - 03 December 1999, pp.310-318

• **Three Dimensional Finite Volume Predictions of Flow in a Corrugated Duct**

ERGİN S.

Proc. of the Eight Int. Maritime Association of Mediterranean, İstanbul, Turkey, İstanbul, Turkey, 2 - 09 November 1997, pp.1-9

• **Gemi Arkasındaki Türbülanslı Akışın Sayısal Modellenmesi**

ERGİN S.

TUMTK, 10. Ulusal Mekanik Kongresi, İstanbul, Turkey, 15 - 19 September 1997, pp.211-222

• **Oluklu Bir Kanaldaki Türbülanslı Akışın Sayısal Hesabı**

ERGİN S.

ULIBTK97, 11. Ulusal Isı Bilimi ve Tekniği Kongresi, Edirne, Edirne, Turkey, 17 - 19 September 1997, pp.330-340

• **Analysis of Periodically Fully Developed Turbulent Flow in a Corrugated Duct Using Various Turbulence Models and Comparison with Experiment**

ERGİN S., Ota M., Yamaguchi H., SAKAMOTO M.

JSME Centennial Grand Congress, Proc. of Int. Conf. on Fluid Eng., Tokyo, Japan, Tokyo, Japan, 13 - 16 July 1997, pp.1527-1533

• **Oluklu Bir Kanaldaki Akışın Sayısal Modellenmesi**

ERGİN S.

Doğal ve Uygulamalı Bilimlerde Sayısal Yöntemler, II. Ulusal Toplantısı, İstanbul, Turkey, 30 May - 01 June 1997, pp.332-343

• **Gemi Dizel Motorlarının Soğutulmasında Kullanılan Plakalı Isı Değiştirgeçerlerin Bilgisayar ile Modellenmesi**

ERGİN S., ÖZGE A.

Gemi İnşaatı ve Deniz Teknolojisi Teknik Kongresi 95, İstanbul, Turkey, 01 November 1995, vol.2, pp.332-343

• **Three dimensional Predictions of Flow within a Stairwell**

ERGİNÖZKAN S., MokhtarzadehDehghan M., Reynolds A.

Proc. of 1992 Int. Sym. on Room Air Convection and Ventilation Effectiveness, Tokyo, Japan, Tokyo, Japan, 22 - 24 July 1992, pp.121-127

Supported Projects

Ergin S., Project Supported by Higher Education Institutions, Bir Feribottan Yayılan Egzoz Emisyonlarının Deneysel Olarak İncelenmesi, 2016 - 2018

Ergin S., Project Supported by Higher Education Institutions, türk Boğazlarında ve Marmara Denizinde Gemi Kaynaklı Emisyonların İncelenmesi, 2015 - 2018

Ergin S., Project Supported by Higher Education Institutions, Tpk Bir Firkateyn için egzoz gazlarının yayılımının incelenmesi sayısal modelleme ve deneylerle karşılaşma, 2013 - 2018

Ergin S., Project Supported by Higher Education Institutions, Savaş Gemilerinde Egzoz Gazları ve Üst Yapı Arasındaki Etkileşimin Sayısal Olarak İncelenmesi, 2011 - 2018

Ergin S., Project Supported by Higher Education Institutions, KİMYASAL BİR TANKER İÇİN DAİRESİ YANGIN KARAKTERİSTİKLERİNİN, 2009 - 2018

Ergin S., Project Supported by Higher Education Institutions, Gemi Dizel Motorları İçin Egzoz Emisyon Kontrol sistemi Üzerine Bir Çalışma, 2007 - 2018

Ergin S., Project Supported by Higher Education Institutions, Gemilerde Tank Havalandırma Başlıklarındaki Akış Karakteristiklerini İncelenmesi, 2005 - 2018

Ergin S., Project Supported by Higher Education Institutions, Gemi Kaynaklı Egzoz Emisyonlarının Oluşum Mekanizmalarının İncelenmesi, 2016 - 2017

Ergin S., Project Supported by Higher Education Institutions, Akış ve Isı Geçişinin Sayısal ve Deneysel Olarak İncelenmesi, 1998 - 2001

Activities in Scientific Journals

Alexandria Engineering Journal, Advisory Committee Member, 2012 - Continues

Proceedings of the Institution of Mechanical Engineers, Journal of Engineering for the Maritime EnvironmentPart M, Committee Member, 2010 - Continues

Gemi ve Deniz Teknolojisi, Naval Architecture and Marine Technology, Journal of the Chamber of Turkish Naval Architects and Marine Engineers., Publication Committee Member, 2010 - 2014

Memberships / Tasks in Scientific Organizations

Board Member, 2011 - Continues

Makina Mühendisleri Odası, Member, 1983 - Continues

Scientific Consultations

Altınova, Yalova ve Dearsan Tersanesi, Tuzla, İstanbul,, Scientific Consultancy, İstanbul Teknik Üniversitesi, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, Turkey, 2011 - 2012

Citations

Total Citations (WOS):52

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Scholarships

Araştırma Bursu, University, 2001 - Continues

Araştırma Bursu, University, 1997 - Continues

Araştırma Bursu, University, 1995 - Continues

Doktora, YOK, 1989 - Continues

Doktora Başarı, University, 1989 - Continues

Yurt İçi Doktora, TUBITAK, 1987 - Continues

Yüksek Lisans, TUBITAK, 1984 - Continues