

## **Asst. Prof. Doğa Doğan**

### **Personal Information**

**Email:** dusunur@itu.edu.tr

### **Education Information**

Doctorate, Institut De Physique Du Globe (Ipg) De Paris, Geosciences Marines, France 2004 - 2008

Post Graduate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Jeofizik Mühendisliği (YI) (Tezli), Turkey 2001 - 2004

Under Graduate, İstanbul Teknik Üniversitesi, Maden Fakültesi, Jeofizik Mühendisliği Bölümü, Turkey 1996 - 2000

### **Foreign Languages**

English

### **Dissertations**

Doctorate, Thermal Structure of Mid-Ocean Ridges (Lucky Strike Mid-Atlantic Ridge) and Magma Chambers, Institut De Physique Du Globe (Ipg) De Paris, Geosciences Marines, 2008

Post Graduate, Orta Marmara Havzası'nın aktif tektonik yapısının deniz jeofiziği akustik yöntemleriyle araştırılması, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Jeofizik Mühendisliği (YI) (Tezli), 2004

### **Research Areas**

Technical Sciences, Geophysical Engineering

### **Academic Titles / Tasks**

Associate Professor, Istanbul Technical University, Maden, Jeofizik Mühendisliği, 2015 - Continues

Assistant Professor, Istanbul Technical University, Maden, Jeofizik Mühendisliği, 2012 - 2015

Lecturer PhD, Istanbul Technical University, Maden, Jeofizik Mühendisliği, 2010 - 2012

Research Assistant, Institut De Physique Du Globe (Ipg) De Paris, Geoscience Marine, 2005 - 2008

Research Assistant, Istanbul Technical University, Maden, Jeofizik Mühendisliği, 2002 - 2005

### **Professional Experience**

Deputy Head of Department, İstanbul Teknik Üniversitesi, Maden Fakültesi, Jeofizik Mühendisliği Bölümü, 2014 - Continues

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

- I. An integrated geophysical, hydrological, thermal approach to finite volume modelling of fault-

**controlled geothermal fluid circulation in Gediz Graben**

Uner S., Dogan D.

Geothermics, vol.90, 2021 (Journal Indexed in SCI Expanded)

- II. **Fault-controlled deep hydrothermal flow in a back-arc tectonic setting, SE Tyrrhenian Sea**  
Loreto M. F. , Dusunur-Dogan D., Uner S., Iscan-Alp Y., Ocakoglu N., Cocchi L., Muccini F., Giordano P., Ligi M.  
SCIENTIFIC REPORTS, vol.9, 2019 (Journal Indexed in SCI)
- III. **Numerical simulation of groundwater flow and temperature distribution in Aegean Coast of Turkey**  
Dusunur-Dogan D., Uner S.  
JOURNAL OF EARTH SYSTEM SCIENCE, vol.128, no.6, 2019 (Journal Indexed in SCI)
- IV. **Three-dimensional geometry of axial magma chamber roof and faults at Lucky Strike volcano on the Mid-Atlantic Ridge**  
Combiér V., SEHER T., SINGH S. C. , CRAWFORD W. C. , CANNAT M., ESCARTIN J., DUSUNUR D.  
JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.120, no.8, pp.5379-5400, 2015 (Journal Indexed in SCI)
- V. **Lucky Strike seamount: Implications for the emplacement and rifting of segment-centered volcanoes at slow spreading mid-ocean ridges**  
Escartin J., SOULE S. A. , CANNAT M., FORNARI D. J. , DUSUNUR D., GARCIA R.  
GEOCHEMISTRY GEOPHYSICS GEOSYSTEMS, vol.15, no.11, pp.4157-4179, 2014 (Journal Indexed in SCI)
- VI. **Investigation of fault-related small-scale fluid flow in geothermal fields by numerical modeling**  
Dogan D.  
TURKISH JOURNAL OF EARTH SCIENCES, vol.23, no.1, pp.67-79, 2014 (Journal Indexed in SCI)
- VII. **Heat-flow and hydrothermal circulation at the ocean-continent transition of the eastern gulf of Aden**  
Lucazeau F., LEROY S., ROLANDONE F., D'ACREMONT E., WATREMEZ L., BONNEVILLE A., GOUTORBE B., DUSUNUR D.  
EARTH AND PLANETARY SCIENCE LETTERS, vol.295, pp.554-570, 2010 (Journal Indexed in SCI)
- VIII. **Crustal velocity structure of the Lucky Strike segment of the Mid-Atlantic Ridge at 37 degrees N from seismic refraction measurements**  
Seher T., CRAWFORD W. C. , SINGH S. C. , CANNAT M., COMBIER V., DUSUNUR D.  
JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.115, 2010 (Journal Indexed in SCI)
- IX. **Post-rift volcanism and high heat-flow at the ocean-continent transition of the eastern Gulf of Aden**  
Lucazeau F., LEROY S., AUTIN J., BONNEVILLE A., GOUTORBE B., WATREMEZ L., D'ACREMONT E., DUESUENUR D., ROLANDONE F., HUCHON P., et al.  
TERRA NOVA, vol.21, no.4, pp.285-292, 2009 (Journal Indexed in SCI)
- X. **Seismological constraints on the thermal structure along the Lucky Strike segment (Mid-Atlantic Ridge) and interaction of tectonic and magmatic processes around the magma chamber**  
Dusunur D., ESCARTIN J., COMBIER V., SEHER T., CRAWFORD W., CANNAT M., SINGH S. C. , Matias L. M. , Miranda J. M.  
MARINE GEOPHYSICAL RESEARCHES, vol.30, no.2, pp.105-120, 2009 (Journal Indexed in SCI)
- XI. **Persistent thermal activity at the Eastern Gulf of Aden after continental break-up**  
Lucazeau F., LEROY S., BONNEVILLE A., GOUTORBE B., ROLANDONE F., D'ACREMONT E., WATREMEZ L., DUSUNUR D., TUCHAIS P., HUCHON P., et al.  
NATURE GEOSCIENCE, vol.1, no.12, pp.854-858, 2008 (Journal Indexed in SCI)
- XII. **Constructing a 3D structural block diagram of the Central Basin in Marmara Sea by means of bathymetric and seismic data**  
Demirbag E., KURT H., DUESUENUR D., SARIKAVAK K., Cetin S.  
MARINE GEOPHYSICAL RESEARCHES, vol.28, no.4, pp.343-353, 2007 (Journal Indexed in SCI)
- XIII. **Constructing a 3D Structural Block Diagram of the Central Basin in Marmara Sea by Means of Bathymetric and Seismic Data Marine Geophysical Research**  
Demirbağ M. E. , KURT H., DOĞAN D., KERİM S., ÇETİN S.  
MARINE GEOPHYSICAL RESEARCHES, vol.0, 2007 (Journal Indexed in SCI Expanded)
- XIV. **Discovery of a magma chamber and faults beneath a Mid-Atlantic Ridge hydrothermal field**  
Singh S. C. , CRAWFORD W. C. , CARTON H., SEHER T., COMBIER V., CANNAT M., CANALES J. P. , DUESUENUR D.,

## Articles Published in Other Journals

- I. **HESAPLAMALI AKIŞKANLAR DİNAMİĞİ ÇÖZÜCÜSÜ ANSYS FLUENT PROGRAMININ KARŞILAŞTIRILMALI ÇÖZÜMÜ VE YERBİLİMLERİNDE UYGULAMASI**  
ÜNER S., DOĞAN D.  
istanbul üniversitesi yerbilimleri, vol.30, no.1, pp.4, 2019 (Other Refereed National Journals)
- II. **Thermal Modeling of Slow Spreading Mid Ocean Ridges in the Presence of Magma Chamber**  
DOĞAN D., escartin j.  
Yerbilimleri, 2012 (Other Refereed National Journals)

## Books & Book Chapters

- I. **Crustal Structure, Magma Chamber, and Faulting Beneath the Lucky Strike Hydrothermal Vent Field**  
Doğan D.  
in: Diversity of Hydrothermal Systems on Slow Spreading Ocean Ridges, Rona,P.A.aEmail Author,Devey,C.W.bEmail Author,Dyment,J.c,Murton,B.J.d, Editor, John Wiley & Sons, West Sussex, UK , New-Jersey, pp.113-132, 2013

## Refereed Congress / Symposium Publications in Proceedings

- I. **Temperature and fluid flow modeling of gas bearing sediments in Offshore Antarctic Peninsula South Shetland Islands.**  
türkdoğan s., DOĞAN D., ÜNER S., ALTAN Z., OCAKOĞLU GÖKAŞAN N., GÖRÜM T., Tinivella U., Giustiniani M.  
International Earth Science Colloquim on the Aegean Regeion IESCA-2019, 7 - 11 October 2019
- II. **A Benchmark study: numerical fluid flow and temperature modeling of Basin and Range geothermal system**  
ÜNER S., DOĞAN D., türkdoğan s.  
International Earth Science Colloquim on the Aegean Regeion IESCA-2019, 7 - 11 October 2019
- III. **Tracing the Hisarcık Fault with 2D VES Inversion and Numerical Fluid Flow and Temperature Simulations**  
ÜNER S., özür lan g., DOĞAN D.  
New Trends in Geophysics and Engineering, İstanbul, Turkey, 7 - 09 November 2018
- IV. **Fault-controlled hydrothermal flow over a deep magmatic intrusion inferred by numerical modelling in a back-arc tectonic setting, SE Tyrrhenian Sea**  
loreto m. f. , DOĞAN D., ÜNER S., işcan alp y., OCAKOĞLU GÖKAŞAN N., Le C., Muccini F., Ligi L., Giordano P.  
SGI-SIMP, Catania, Italy, 12 - 14 September 2018
- V. **Antarktika Kıtası Güney Shetland Şelf Alanının Morfotektonik Özelliklerinin ve Yeraltı Akışkan Hareketlerinin Jeofizik Yöntemler ile Araştırılması**  
OCAKOĞLU GÖKAŞAN N., DOĞAN D., GÖRÜM T., ALTAN Z., ÜNER S., Tinivella U., Giustiniani M.  
İTÜ PolReC 2. Kutup Bilimleri Çalıştayı, Turkey, 12 - 13 September 2018
- VI. **Simulation of the Effect of a Geothermal Production Well on Water Wells in Balçova, İzmir**  
aksu p., önder i. c. , DOĞAN D., ÜNER S.  
Yerbilimlerinde Öğrenci Bitirme Tasarım Projeleri ve Sergisi, 11 - 12 June 2018
- VII. **Fluid Flow Pattern within a buried volcanic structure, Southeast Tyrrhenian Sea. 9th Congress of Balkan Geophysical Society, BGS2017**  
DOĞAN D., Loreto M. F. , ÜNER S., Alp Y. İ. , OCAKOĞLU GÖKAŞAN N., Giordano P.

9th Congress of Balkan Geophysical Society, BGS2017, 5 - 07 November 2017

VIII. **Fluid Flow Pattern Within A Buried Volcanic Structure, Southeast Tyrrhenian Sea**

DOĞAN D., loreto m. f. , ÜNER S., işcan alp y., OCAKOĞLU GÖKAŞAN N., Patrizia g.

9th Congress of the Balkan Geophysical Society, Antalya, Turkey, 5 - 09 November 2017

IX. **Fault Dip Angle Controlled Temperature And Fluid Flow Modelling**

ÜNER S., DOĞAN D.

:9th Congress of the Balkan Geophysical Society, 5 - 09 November 2017

X. **Numerical Temperature And Fluid-flow Modelling For The Topographic Effects On Hydrothermal Circulation A Case Study In Lucy Strike Vent Field**

Erçetin E., DOĞAN D.

General Assembly and Congress European Geoscience Union, 8 - 13 April 2017

XI. **Numerical Temperature And Fluid-flow Modelling For The Topographic Effects On Hydrothermal Circulation A Case Study In Lucy Strike Vent Field**

Erçetin E., DOĞAN D.

General Assembly and Congress European Geoscience Union, 8 - 13 April 2017

XII. **Controls of topographic highs on fluid circulation**

DOĞAN D.

International Scientific Conference on Applied Sciences, 8 - 13 April 2017

## Supported Projects

Doğan D., TUBITAK Project, Gediz Grabeni Sıyrılma Fayının Bölgedeki Jeotermal Akışkan Hareketi Ve Sıcaklık Rejimi Üzerine Olan Etkisinin Sayısal Modellenmesi, 2018 - 2020

Doğan D., Project Supported by Higher Education Institutions, Temperature and Fluid Flow Calculations in the Gulf of İzmir, Turkey, 2014 - 2018

Doğan D., Project Supported by Higher Education Institutions, İzmir Bölgesinin Jeotermal Potansiyelinin Çok Disiplinli Yöntemlerle Araştırılması ve Faylarla İlişkili Yeriçi Sıcaklık Dağılımının Modellenmesi, 2013 - 2018

Doğan D., Project Supported by Higher Education Institutions, Jeotermal Alanlarda Faylanmalar Kaynaklı Taşınım Modellenmesi, 2012 - 2018

## Citations

Total Citations (WOS):355

h-index (WOS):8