

## Assoc. Prof. KAMİL ERKAN

### Personal Information

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### Biography

Lisans (1998) ve yüksek lisans (2000) derecelerini Bilkent Üniversitesi Fizik Bölümü'nde tamamladı. Doktora derecesini ABD-Texas'ta Southern Methodist Üniversitesi Yer Bilimleri (jeofizik) alanında aldı (2007). 2007-2011 yılları arasında Ohio State Üniversitesi (Columbus)'ta doktora sonrası araştırmacı olarak çalıştı. Daha sonra bir yıl süre ile TÜBİTAK Marmara Araştırma Merkezi'nde ziyaretçi araştırmacı olarak bulundu. 2012 yılından beri Marmara Üniversitesi Mühendislik Fakültesi'nde dersler vermektedir. Karasal ısı akısı, jeotermal enerji kaynakları, ve kuyu paleoiklim konularında araştırmalar yapmaktadır.

### Education Information

Doctorate, Southern Methodist University, Department Of Earth Sciences, United States Of America 2002 - 2007

Postgraduate, İhsan Doğramacı Bilkent University, Faculty Of Science, Department Of Physics, Turkey 1998 - 2000

Undergraduate, İhsan Doğramacı Bilkent University, Faculty Of Science, Department Of Physics, Turkey 1993 - 1998

### Dissertations

Doctorate, Post Subduction Thermal Regime of the Western North America and effects on the Great Valley, Sierra Nevada and Northern Baja-California Provinces, Southern Methodist University, Department Of Earth Sciences, 2007

Postgraduate, Strongly interacting one-dimensional bose condensates, İhsan Doğramacı Bilkent Üniversitesi, Fen Fakültesi, Fizik Bölümü, 2000

### Research Areas

Environmental Engineering, Geophysical Engineering, Geological Engineering

### Academic Titles / Tasks

Associate Professor, Marmara University, Faculty Of Engineering, Environmental Engineering, 2017 - Continues

Assistant Professor, Marmara University, Faculty Of Engineering, Civil Engineering, 2012 - 2017

Research Assistant, Ohio State University, College Of Arts And Sciences, School Of Earth Sciences, 2007 - 2011

Research Assistant, Southern Methodist University, College Of Humanities And Science, Earth Sciences, 2002 - 2007

Research Assistant, Southern Methodist University, School Of Engineering, Electrical Engineering, 2001 - 2002

Lecturer, İhsan Doğramacı Bilkent University, Faculty Of Science, Department Of Physics, 1998 - 2000

### Advising Theses

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

- I. **Surface heat flow in bestern Anatolia (Turkey) and implications to the thermal structure of the Gediz Graben**  
Balkan-Pazvantoglu E., ERKAN K., ŞALK M., AKKOYUNLU B. O. , TAYANÇ M.  
TURKISH JOURNAL OF EARTH SCIENCES, 2021 (Journal Indexed in SCI)
- II. **Using gravity gradients to estimate fault parameters in the Wichita Uplift region**  
Uzun S., ERKAN K., Jekeli C.  
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.222, no.3, pp.1704-1716, 2020 (Journal Indexed in SCI)
- III. **Development of Nonlinear Optimization Models for Wind Power Plants Using Box-Behnken Design of Experiment: A Case Study for Turkey**  
Atalan Y. A. , TAYANÇ M., ERKAN K., Atalan A.  
SUSTAINABILITY, vol.12, no.15, 2020 (Journal Indexed in SCI)
- IV. **Twentieth-century paleoclimatic modeling of borehole temperatures in western and central Anatolia regions, Turkey**  
ERKAN K., Akkoyunlu B., Inal M. O. , Balkan-Pazvantoglu E., TAYANÇ M.  
INTERNATIONAL JOURNAL OF EARTH SCIENCES, vol.108, no.4, pp.1137-1146, 2019 (Journal Indexed in SCI)
- V. **Temperature-depth curves and heat flow in central part of Anatolia, Turkey**  
Balkan-Pazvantoğlu E., ERKAN K.  
Tectonophysics, vol.757, pp.24-34, 2019 (Journal Indexed in SCI)
- VI. **A portable borehole temperature logging system using the four-wire resistance method**  
ERKAN K., Akkoyunlu B., BALKAN E., TAYANÇ M.  
JOURNAL OF GEOPHYSICS AND ENGINEERING, vol.14, no.6, pp.1413-1419, 2017 (Journal Indexed in SCI)
- VII. **Thermal conductivity of major rock types in western and central Anatolia regions, Turkey**  
BALKAN E., ERKAN K., ŞALK M.  
JOURNAL OF GEOPHYSICS AND ENGINEERING, vol.14, no.4, pp.909-919, 2017 (Journal Indexed in SCI)
- VIII. **Characterization of Active Layer Thickening Rate over the Northern Qinghai-Tibetan Plateau Permafrost Region Using ALOS Interferometric Synthetic Aperture Radar Data, 2007-2009**  
Jia Y., Kim J., Shum C. K. , Lu Z., Ding X., Zhang L., ERKAN K., Kuo C., Shang K., Tseng K., et al.  
REMOTE SENSING, vol.9, no.1, 2017 (Journal Indexed in SCI)
- IX. **Geothermal investigations in western Anatolia using equilibrium temperatures from shallow boreholes**  
Erkan K.  
SOLID EARTH, vol.6, no.1, pp.103-113, 2015 (Journal Indexed in SCI)
- X. **Coseismic slip of the 2010 Mw 8.8 Great Maule, Chile, earthquake quantified by the inversion of GRACE observations**  
Wang L., Shum C., Simons F. J. , Tassara A., Erkan K., Jekeli C., Braun A., Kuo C., Lee H., Yuan D.  
Earth and Planetary Science Letters, pp.167-179, 2012 (Journal Indexed in SCI)
- XI. **Fusion of gravity gradient and magnetic field data for discrimination of anomalies using deformation analysis**  
Erkan K., Jekeli C., Shum C. K.  
GEOPHYSICS, vol.77, no.3, 2012 (Journal Indexed in SCI)
- XII. **A comparative analysis of geophysical fields for multi-sensor applications**  
Erkan K., Jekeli C.  
Journal of Applied Geophysics, vol.74, pp.142-150, 2011 (Journal Indexed in SCI)
- XIII. **Geodetic Constraints on the Qinghai-Tibetan Plateau Present-Day Geophysical Processes**  
Erkan K.

- Terrestrial Atmospheric And Oceanic Sciences, vol.22, no.2, pp.241-253, 2011 (Journal Indexed in SCI)
- XIV. **Transient thermal regimes in the Sierra Nevada and Baja California extinct outer arcs following the cessation of Farallon subduction**  
Erkan K., Blackwell D.  
Journal of Geophysical Research: Solid Earth, vol.114, no.2, 2009 (Journal Indexed in SCI)
- XV. **Understanding the Chena Hot Springs, Alaska, geothermal system using temperature and pressure data from exploration boreholes**  
Erkan K., Holdmann G., Benoit W., Blackwell D.  
Geothermics, vol.37, no.6, pp.565-585, 2008 (Journal Indexed in SCI)
- XVI. **A thermal test of the post-subduction tectonic evolution along the California transform margin**  
Erkan K., Blackwell D. D.  
Geophysical Research Letters, vol.35, no.7, 2008 (Journal Indexed in SCI)
- XVII. **Strongly interacting one-dimensional Bose-Einstein condensates in harmonic traps**  
Tanatar B., Erkan K.  
Physical Review A - Atomic, Molecular, and Optical Physics, vol.62, no.5, pp.53601, 2000 (Journal Indexed in SCI)

### Articles Published in Other Journals

- I. **Geophysical Investigations on Gravity Gradiometry and Magnetic Data over the Wichita Uplift Region, Southwestern Oklahoma**  
Erkan K.  
Geodetic Science Reports, pp.1-26, 2015 (International Refereed University Journal)
- II. **Heat flow and geothermal potential in the South-Central United States**  
Negraru P. T. , Blackwell D. D. , Erkan K.  
Natural Resources Research, vol.17, no.4, pp.227-243, 2008 (Refereed Journals of Other Institutions)
- III. **A Comparative Overview of Geophysical Methods**  
Erkan K.  
Geodetic Science Reports, pp.1-70, 2008 (International Refereed University Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **EGE BÖLGESİNDE JEOTERMAL GRADYAN DAĞILIMI**  
BALKAN E., ERKAN K., ŞALK M., AKKOYUNLU B. O. , TAYANÇ M.  
ULUSLARARASI KATILIMLI TÜRKİYE ULUSAL JEODEZİ VE JEOFİZİK BİRLİĞİ BİLİMSEL KONGRESİ, İzmir, Turkey, 30 May - 02 June 2018
- II. **ISI AKISI ÖLÇÜMLERİ İLE ORTA ANADOLU'DA ÖRTÜLÜ JEOTERMAL SAHALARIN BELİRLENMESİ**  
ERKAN K., BALKAN E., AKKOYUNLU B. O. , TAYANÇ M.  
V. Jeotermal Kaynaklar ve Doğal Mineralli Sular Sempozyumu ve Sergisi, Afyon, Turkey, 21 - 24 February 2018
- III. **Türkiye'de Güncel İklim Değişikliği**  
TAYANÇ M., Eren E., Aydın Y., Baltacı H., GÖKTÜRK O. M. , ERKAN K., AKKOYUNLU B. O.  
VII. Ulusal Hava Kirliliği ve Kontrolü Sempozyumu, Antalya, Turkey, 1 - 03 November 2017
- IV. **DEVELOPMENT OF A DIGITAL DATATRANSMISSION PORTABLE BOREHOLE TEMPERATURE LOGGING SYSTEM FOR CLIMATOLOGICAL AND GEOTHERMAL STUDIES**  
ERKAN K., DOĞRUEL M., AKKOYUNLU B. O. , BAYAT F. K. , ŞİŞMAN A., BALKAN E., TAYANÇ M.  
The 9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 November 2017
- V. **STATISTICAL EVALUATION AND WAVELET ANALYSIS OF WIND SPEED**  
TAYANÇ M., ERKAN K., AKKOYUNLU B. O. , BALTACI H.  
9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 November 2017
- VI. **STATISTICAL ANALYSIS OF TEMPERATURE AND PRECIPITATION SERIES OF TURKEY**

TAYANÇ M., AKKOYUNLU B. O. , ERKAN K.

9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 November 2017

**VII. TÜRKİYE'DE GÜNCEL İKLİM DEĞİŞİKLİĞİ**

TAYANÇ M., EREN E., DİKMEN AYDIN Y., BALTACI H., GÖKTÜRK O. M. , ERKAN K., AKKOYUNLU B. O.

VII. ULUSAL HAVA KİRLİLİĞİ VE KONTROLÜ SEMPOZYUMU, Antalya, Turkey, 1 - 03 November 2017, pp.17-23

**VIII. YERALTI SICAKLIK KAYITLARINA GÖRE BATI ANADOLU'DA SONYÜZYILDA İKLİM DEĞİŞİKLİĞİ**

ERKAN K., AKKOYUNLU B. O. , DOĞRUEL M., İnal M. o. , BALKAN E., TAYANÇ M.

VII. ULUSAL HAVA KİRLİLİĞİ VE KONTROLÜ SEMPOZYUMU, Antalya, Turkey, 1 - 03 November 2017

**IX. 20th Century Climatic Changes in Western Turkey from Borehole Climatologic Records**

ERKAN K., TAYANÇ M., AKKOYUNLU B. O. , DOĞRUEL M., İnal M. O. , BALKAN E.

8th International Conference on Image Processing, Wavelet and Applications (IWW2016), İstanbul, Turkey, 22 - 24 September 2016

**X. 20th century climate changes in western Turkey from borehole climatologic records**

ERKAN K., TAYANÇ M., AKKOYUNLU B. O. , DOĞRUEL M., İnal M. O. , BALKAN E.

International Conference on Image Processing, Wavelet and Applications, 22 - 24 September 2016

**XI. Development of a high precision thermistor probe for paleo climate studies**

ERKAN K., BALKAN E., ATİKOL F., BAŞARAN T.

International Conference at the Anatolian Peak (IPCAP), 25 - 27 February 2016

**XII. Development of a Digital Output Temperature Probe for Precision Measurements**

ERKAN K., DOĞRUEL M., BAYAT F. K. , AKKOYUNLU B. O. , TAYANÇ M., BALKAN E., SAVAŞ H.

Geothermal Resources Council Annual Meeting, 20 - 23 September 2015

**XIII. Thermal characteristics of the Chena Hot Springs Alaska geothermal system**

ERKAN K., HOLDMAN G., BLACKWELL D., BENOIT W.

Stanford Geothermal Workshop 2007, 22 January 2007

**XIV. Crustal Thermal Regime at The Geysers Clear Lake Area California**

ERKAN K., BLACKWELL D., LEIDIG M.

World Geothermal Congress 2005, 24 April 2005

## Supported Projects

Erkan K., Project Supported by Higher Education Institutions, Kuyu Sıcaklık Derinlik Verilerinin Paleoiklimsel Modellemesi ve Batı Anadolu da Yakın Zamanlı İklimsel Değişimler için Uygulanması, 2015 - 2016

Erkan K., TUBITAK Project, Kuyu sıcaklık derinlik ölçüm sistemi geliştirme ve Türkiye de son iki yüzyıllık iklim değişiminin araştırılması, 2013 - 2016

Erkan K., Tayanç M., Project Supported by Higher Education Institutions, Batı Anadoluda İklim Değişiminin Kuyu Paleoiklim Yöntemiyle Belirlenmesi, 2013 - 2015

## Citations

Total Citations (WOS):183

h-index (WOS):9

## Awards

Erkan K., • K. and W. A. Heiskanen Kıdemli araştırmacı ödülü, Ohio State University, April 2011