

Assoc. Prof. Hamdi Alkan

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Turkey 2012 - 2018

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Turkey 2008 - 2012

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Turkey 2003 - 2008

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Vocational Training, Structural Geology and Global Tectonics: Links to Lithosphere Evolution and Mantle Geodynamics, Karadeniz Teknik Üniversitesi, 2019

Vocational Training, From Melt To Igneous rock: An International Workshop on The Petrology and Petrogenesis of Igneous Rocks, Karadeniz Teknik Üniversitesi, 2015

Vocational Training, Convergent Margins, karadeniz teknik üniversitesi, 2014

Dissertations

Doctorate, P- VE S-ALICI FONKSİYONLARININ BİRLEŞİK TERS ÇÖZÜMÜ İLE DOĞU PONTİD OROJENİK KUŞAĞI' NIN KABUK VE ÜST MANTO YAPISININ ARAŞTIRILMASI, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, 2018

Postgraduate, TEK İSTASYON YÜZEY DALGASI GRUP HIZI TERS ÇÖZÜMÜ YÖNTEMİYLE DOĞU KARADENİZ BÖLGESİNDE KABUK YAPISININ ARAŞTIRILMASI , Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik, 2012

Research Areas

Geophysical Engineering, Seismology, Earthquake Seismology, Ground Physics

Academic Titles / Tasks

Associate Professor, Van Yüzüncü Yil University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü, 2023 - Continues
Assistant Professor, Van Yüzüncü Yil University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü, 2019 - 2023
Research Assistant PhD, Van Yüzüncü Yil University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü, 2018 - 2019
Research Assistant, Van Yüzüncü Yil University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü, 2017 - 2019
Research Assistant, Van Yüzüncü Yil University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü, 2014 - 2018
Research Assistant, Sivas Cumhuriyet University, Mühendislik Fakültesi, Jeofizik Mühendisliği, 2011 - 2014

Academic and Administrative Experience

Üye, Van Yüzüncü Yil University, Rektörlük, Afet Yönetimi ve Deprem Uygulama ve Araştırma Merkezi, 2022 - Continues
Deputy Head of Department, Van Yüzüncü Yil University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü, 2021 - Continues
Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi, Van Yüzüncü Yil University, Rektörlük, Rektörlük, 2021 - Continues
BAP Subcommittee Member, Van Yüzüncü Yil University, Rektörlük, Rektörlük, 2021 - Continues
Head of Department, Van Yüzüncü Yil University, Jeofizik Bölümü, 2020 - Continues

Courses

Inversion in Geophysics, Postgraduate, 2020 - 2021
Analysis of Surface waves, Postgraduate, 2020 - 2021
Processing Data in Geophysics, Postgraduate, 2021 - 2022
Theoretical Seismology, Postgraduate, 2020 - 2021

Advising Theses

Alkan H., Comparison of Natural Vibration Periods of Medium-Height Reinforced Concrete Buildings by Microtremor Method and Modal Analysis: A Case from The City Center of Van , Postgraduate, D.Okay(Student), 2022

Jury Memberships

Post Graduate, Post Graduate, İskenderun Teknik Üniversitesi, January, 2024
Post Graduate, Post Graduate, Gümüşhane Üniversitesi, December, 2023
Post Graduate, Post Graduate, Atatürk Üniversitesi, January, 2023
Post Graduate, Post Graduate, Van Yüzüncü Yil Üniversitesi, June, 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Determination of the shear wave velocity structure of substations by the HVSR inversion method using broadband and strong ground motion earthquake data in the Lake Van region, eastern Türkiye**
Akkaya İ., Alkan H.
BALTICA, vol.37, no.1, pp.24-38, 2024 (SCI-Expanded)
- II. **Investigation of earthquake sequence and stress transfer in the Eastern Anatolia Fault Zone by Coulomb stress analysis**
Alkan H., Büyüksaraç A., Bektaş Ö.
TURKISH JOURNAL OF EARTH SCIENCES, vol.33, no.SI-1, pp.56-68, 2024 (SCI-Expanded)
- III. **Multiple parameter analysis for assessing and forecasting earthquake hazards in the Lake Van**

region, Turkey

Öztürk S., Alkan H.

BALTICA, vol.36, no.2, pp.133-154, 2023 (SCI-Expanded)

- IV. **Fault modeling around southern Anatolia using the aftershock sequence of the Kahramanmaraş earthquakes ($M_w = 7.7$ and $M_w = 7.6$) and an interpretation of potential field data.**
Büyüksaraç A., Bektaş Ö., Alkan H.
Acta Geophysica, no.01192, pp.1-12, 2023 (SCI-Expanded)
- V. **Seismic Hazard Implications in and Around the Yedisu Seismic Gap (Eastern Türkiye) Based on Coulomb Stress Changes, b-Values, and S-wave Velocity**
Alkan H., Öztürk S., Akkaya İ.
PURE AND APPLIED GEOPHYSICS, vol.180, pp.3227-3248, 2023 (SCI-Expanded)
- VI. **Crustal structure in and around the East Anatolian volcanic belt by using receiver functions stacking**
Alkan H.
Journal Of African Earth Sciences, no.191, pp.1-11, 2022 (SCI-Expanded)
- VII. **Joint inversion of Rayleigh wave phase velocities and P-receiver functions along the East Anatolian fault zone**
Alkan H.
Journal Of Seismology, vol.26, pp.79-100, 2022 (SCI-Expanded)
- VIII. **Coulomb stress change before and after 24.01.2020 Sivrice (Elazığ) Earthquake ($M_w = 6.8$) on the East Anatolian Fault Zone**
Alkan H., Büyüksaraç A., Bektaş Ö., Işık E.
Arabian Journal Of Geosciences, pp.1-12, 2021 (SCI-Expanded)
- IX. **The lithospheric structure underneath the Circum Black Sea: Teleseismic receiver functions and Rayleigh wave phase velocity analysis**
Alkan H., Çınar H.
Journal Of Asian Earth Sciences, vol.206, pp.104652, 2021 (SCI-Expanded)
- X. **Lake Van (Southeastern Turkey) Experiment: Receiver Function Analyses of Lithospheric Structure from Teleseismic Observations**
Alkan H., Çınar H., Oreshin S.
PURE AND APPLIED GEOPHYSICS, vol.177, no.8, pp.3891-3909, 2020 (SCI-Expanded)
- XI. **Investigation of the crustal and upper-mantle structure of the eastern Pontides orogenic belt (NE, Turkey): a receiver-function study**
Alkan H., ÇINAR H., Oreshin S., Vinnik L.
JOURNAL OF SEISMOLOGY, vol.23, no.3, pp.473-491, 2019 (SCI-Expanded)
- XII. **Crustal S-wave structure around the Lake Van region (eastern Turkey) from interstation Rayleigh wave phase velocity analyses**
Çınar H., Alkan H.
TURKISH JOURNAL OF EARTH SCIENCES, vol.26, no.1, pp.73-90, 2017 (SCI-Expanded)
- XIII. **Crustal S-wave structure beneath Eastern Black Sea Region revealed by Rayleigh-wave group velocities**
Çınar H., Alkan H.
JOURNAL OF ASIAN EARTH SCIENCES, vol.115, pp.273-284, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **An assessment of earthquake hazard of Muş province and its surrounding after the 6 february 2023 Kahramanmaraş-centered earthquakes**
Dölek İ., Ekinci R., Alkan H., Büyüksaraç A., Ekinci Y. L.
Türk Coğrafya Dergisi, no.83, pp.59-71, 2023 (Peer-Reviewed Journal)
- II. **Van Gölü Havzası ve Civarının Depremselliğine Genel Bir Bakış**

- Alkan H., Toker M., Akkaya İ.
Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.28, no.1, pp.317-333, 2023 (Peer-Reviewed Journal)
- III. **P- ve S- Alıcı Fonksiyonları Analizi ve Birleşik Ters Çözümü: Erzurum civarındaki Litosferik Yapı**
Alkan H.
YERBİLİMLERİ = EARTH SCIENCES, vol.44, no.1, pp.65-85, 2023 (Scopus)
- IV. **ANALYSIS OF COULOMB STRESS TRANSFER AND EARTHQUAKE HAZARD IN THE ÇALDIRAN FAULT ZONE AND ITS ADJACENT REGION**
Alkan H., Öztürk S., Akkaya İ.
Mühendislik Bilimleri ve Tasarım Dergisi, vol.11, no.2, pp.519-534, 2023 (Peer-Reviewed Journal)
- V. **A Statistical Analysis and Evaluation on the Earthquake Forecasting and Hazard for Lake Van and its adjacent area (Türkiye)**
Öztürk S., Alkan H.
Türk deprem araştırma dergisi (Online), vol.4, no.2, pp.191-209, 2022 (Peer-Reviewed Journal)
- VI. **Coulomb stress changes and magnitude-frequency distribution for Lake Van region**
Alkan H., Bayrak E.
Maden Tetkik ve Arama Dergisi, pp.141-156, 2022 (Peer-Reviewed Journal)
- VII. **Deprem Kayıtlarından Elde Edilen Yatay/Düşey Spektral Oranların Ters Çözümüyle Kayma Dalga Hız Yapısının Belirlenmesi: Van Gölü Doğusu Örneği**
Alkan H., Akkaya İ.
Van Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü dergisi, vol.27, no.2, pp.233-247, 2022 (Peer-Reviewed Journal)
- VIII. **Crust and Uppermost Mantle Velocity Structure beneath the East Anatolian Fault Zone from Joint Inversion of P-Receiver Functions and Rayleigh Wave Group Velocities**
Alkan H.
European Journal of Science and Technology, vol.21, no.21, pp.285-300, 2021 (Peer-Reviewed Journal)
- IX. **Simulated Annealing Method: A Seismological Application for The Black Sea Basin**
Alkan H., Çınar H.
yyufbed, vol.25, no.3, pp.95-106, 2020 (Peer-Reviewed Journal)
- X. **Joint Inversion of P and S Receiver Functions: Example of the Van Lake Basin**
Alkan H., Çınar H.
Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, no.3, pp.231-242, 2018 (Peer-Reviewed Journal)
- XI. **Crustal Structure of Eastern Anatolia from Single-Station Rayleigh Wave Group Velocities**
Alkan H., Çınar H.
Eastern Anatolian Journal of Science, vol.1, no.1, pp.57-69, 2015 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **A SEISMOLOGICAL STUDY ON THE CURRENT SEISMIC HAZARD IN THE MARMARA REGION AND ITS SURROUNDINGS**
Alkan H., Öztürk S.
LATİN AMERİKA 8. ULUSLARARASI BİLİMSEL ARAŞTIRMALAR KONGRESİ, Habana, Cuba, 1 - 05 May 2024, pp.1-11
- II. **REGION-TIME-MAGNITUDE ANALYSIS OF EARTHQUAKE OCCURRENCES IN THE LAKE VAN AND ITS SURROUNDINGS**
Öztürk S., Alkan H.
LATİN AMERİKA 8. ULUSLARARASI BİLİMSEL ARAŞTIRMALAR KONGRESİ, Habana, Cuba, 1 - 05 May 2024, pp.1-10
- III. **Investigation of The Seismotectonic Characteristics of The Van Lake Basin With Current Seismological Data**
Alkan H., Akkaya İ.
Uluslararası Vizyon Van 2024 Kongresi, Van, Turkey, 8 - 09 February 2024, vol.1, pp.225
- IV. **6 Şubat 2023 Kahramanmaraş Ana Şoklarının Stres Etkileşimi ve Artçı Şok Dağılımlarının Potansiyel**

Alan Verileri ile Korelasyonu

Alkan H., Büyüksaraç A., Bektaş Ö.

2023 KAHRAMANMARAŞ-TÜRKİYE DEPREMLERİ ULUSLARARASI ANMA KONFERANSI, Adıyaman, Turkey, 06 February 2024, pp.1

- V. **An Evaluation of the Earthquake Potential on the Yedisu Segment and its Surroundings (Türkiye): Hazard Implication**
Öztürk S., Alkan H., Akkaya İ.
7th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 11 - 13 July 2023, pp.1-7
- VI. **The Upper-Lower Crust Structure based on the P-Receiver Functions underneath ARPR and MALT stations, SE Turkey**
Alkan H., Öztürk S.
10th International Mardin Artuklu Scientific Researches Conference MAY 19-21, 2023 / MARDIN, TÜRKİYE, Mardin, Turkey, 19 - 21 May 2023, pp.1-10
- VII. **Current Earthquake Hazard in and around the Southeastern Part of Türkiye: Evaluation of the Multiple Parameters**
Öztürk S., Alkan H.
10th International Mardin Artuklu Scientific Researches Conference MAY 19-21, 2023 / MARDIN, TÜRKİYE, Mardin, Turkey, 19 - 21 May 2023, pp.1-10
- VIII. **A Study on the Earthquake Hazard and Forecasting in the Lake Van and its surroundings, Turkey**
Öztürk S., Alkan H.
6th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 21 - 24 June 2022, pp.82-91
- IX. **Statistical Analysis of Earthquake Occurrences in and around the Çaldıran Fault Zone (Turkey)**
Alkan H., Öztürk S., Akkaya İ.
6th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 21 - 24 June 2022, pp.553-560
- X. **Comparison of two Different Joint Inversion Algorithm: Crustal Structure Throughout East Anatolian Fault Zone**
Alkan H.
6th International Conference on Earthquake Engineering and Seismology, Kocaeli, Turkey, 13 - 15 October 2021, pp.1-10
- XI. **Regional Coulomb Stress Variations in the North of Hellenic Subduction Zone**
Alkan H.
11th Congress of the Balkan Geophysical Society, Bucuresti, Romania, 10 - 14 October 2021, vol.2021, pp.1-5
- XII. **Evaluation of Coulomb Stress Accumulations and Magnitude Frequency (b-value) Distribution for the East Anatolian Region of Turkey**
Alkan H., Öztürk S.
11th Congress of the Balkan Geophysical Society, Bucuresti, Romania, 10 - 14 October 2021, vol.2021, pp.1-5
- XIII. **Teleseismic Receiver Functions and Gutenberg-Richter b-value distributions around the Lake Van region (Eastern Turkey)**
Alkan H., Çınar H., Bayrak E.
10TH Congress of Balkan Geophysical Society, Varna, Bulgaria, 18 - 22 September 2019, pp.79-83
- XIV. **Crust and Upper Mantle Structure beneath The Lake Van Region (southeastern Turkey) from P- and S-Wave Receiver Functions**
Alkan H., Çınar H.
International Conference on Civil Environmental, Geology and Mining Engineering, Trabzon, Turkey, 20 - 22 April 2019, pp.741-745
- XV. **Alıcı Fonksiyonlarının Birleşik Ters Çözümü Yöntemi Kullanılarak ERZN İstasyonunun (Erzincan, Türkiye) P ve S Dalgası Hız Histogramlarının Elde Edilmesi**
Alkan H., Çınar H.

- AKTİF TEKTONİK ARAŞTIRMA GRUBU (ATAG), Çanakkale, Turkey, 1 - 03 November 2018, pp.74
- XVI. **P-dalgası Alıcı Fonksiyonlarının Kullanılması ile Tokat ve Reşadiye Arasındaki Litosferik Yapının Modellenmesi**
Alkan H., Çınar H.
AKTİF TEKTONİK ARAŞTIRMA GRUBU (ATAG), Çanakkale, Turkey, 1 - 03 November 2018, pp.30
- XVII. **A Close Look at Crustal Structure of Lake-Van Region from Inter-Station Rayleigh Wave Phase Velocities**
Alkan H., Çınar H.
New Trends in Geophysics and Engineering, İstanbul, Turkey, 7 - 09 November 2018, pp.1-4
- XVIII. **Crust and Upper Mantle Structure beneath the KTUT (Trabzon) and ERZN (Erzincan) Stations from Joint Inversion of P and S Receiver Functions**
Alkan H., Çınar H., Oreshin S., Vinnik L.
New Trends in Geophysics and Engineering, İstanbul, Turkey, 7 - 09 November 2018, pp.1
- XIX. **Seismicity of the Erzurum City and the Surrounding Area from maximum Likelihood Method**
Bayrak E., Bayrak Y., Alkan H.
New Trends in Geophysics and Engineering, İstanbul, Turkey, 7 - 09 November 2018, pp.1
- XX. **A Preliminary P and S-wave Receiver Functions Study at Ktut Station (Trabzon, Turkey)**
Alkan H., Çınar H.
9 Congress of the Balkan Geophysical Society, Antalya, Turkey, 5 - 09 November 2017, pp.1
- XXI. **2011 Van Depremi'nin Ana ve Artçı Şoklarının Kullanılmasıyla Doğu Anadolu'nun Kabuk Yapısının Belirlenmesi**
Alkan H., Çınar H., Akkaya İ.
Genç Yerbilimciler Kongresi, İzmir, Turkey, 5 - 07 June 2015, vol.1, pp.34-35
- XXII. **An Overview of Eastern Black Sea Crust using Single Station Fundamental Mode Surface Wave Method**
Alkan H., Çınar H.
7th Congress of the Balkan Geophysical Society, Tirane, Albania, 7 - 10 October 2013, pp.1

Supported Projects

Bayram B. Ç., Alkan H., Bayrak E., Kesik H. İ., Sipahi S., Kaymakçı A., Tor Ö., Özkan O. E., Karamanoğlu M., TÜBİTAK Project, Ahşap Yapılar, Deprem ve Sürdürülebilirlik, 2023 - 2023

Memberships / Tasks in Scientific Organizations

Jeofizik Mühendisleri Odası, Member, 2008 - Continues, Turkey

Scientific Refereeing

International Journal of Earth Sciences Knowledge and Applications, Other Indexed Journal, July 2024

TECTONICS, SCI Journal, April 2024

Acta Geophysica, SCI Journal, January 2024

Gümüşhane Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, January 2024

Gümüşhane Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, January 2024

Türk deprem araştırma dergisi (Online), National Scientific Refreed Journal, December 2023

YERBİLİMLERİ = EARTH SCIENCES, National Scientific Refreed Journal, November 2023

TURKISH JOURNAL OF EARTH SCIENCES, SCI Journal, October 2023

Acta Geophysica, SCI Journal, October 2023

Gümüşhane Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, September 2023
Acta Geophysica, SCI Journal, July 2023
Academic Platform Journal of Natural Hazards and Disaster Management, National Scientific Refreed Journal, July 2023
Acta Geophysica, SCI Journal, July 2023
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, June 2023
FRONTIERS IN EARTH SCIENCES, SCI Journal, March 2023
FRONTIERS IN EARTH SCIENCES, SCI Journal, March 2023
Acta Geophysica, Journal Indexed in SSCI, November 2022
Kahramanmaraş Sütçü İmam Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, October 2022
Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi, National Scientific Refreed Journal, September 2022
International Journal of Earth Sciences Knowledge and Applications, Other Indexed Journal, August 2022
Kahramanmaraş Sütçü İmam Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, August 2022
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, National Scientific Refreed Journal, August 2022
Afet ve Risk Dergisi, National Scientific Refreed Journal, August 2022
Acta Geophysica, SCI Journal, August 2022
Acta Geophysica, SCI Journal, June 2022
Gümüşhane Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, November 2021
Maden Tetkik ve Arama Dergisi, National Scientific Refreed Journal, August 2021
International Journal of Earth Sciences Knowledge and Applications, Other Indexed Journal, July 2021
Muş Alparslan Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, May 2021
International Journal of Earth Sciences Knowledge and Applications, Other Indexed Journal, March 2021
Mühendislik Bilimleri ve Tasarım Dergisi, National Scientific Refreed Journal, February 2021
International Journal of Earth Sciences Knowledge and Applications, Other Indexed Journal, January 2021
Avrupa Bilim ve Teknoloji Dergisi, National Scientific Refreed Journal, December 2020

Metrics

Publication: 47
Citation (WoS): 27
Citation (Scopus): 40
H-Index (WoS): 3
H-Index (Scopus): 4