

## Asst. Prof. KAAAN HAKAN ÇOBAN

### Personal Information

**Office Phone:** [+90 462 377 2782](tel:+904623772782)

**Email:** [h.coban@ktu.edu.tr](mailto:h.coban@ktu.edu.tr)

**Web:** <https://avesis.ktu.edu.tr/h.coban>

### International Researcher IDs

ScholarID: RspwMpYAAAAJ

ORCID: 0000-0001-8034-1486

Publons / Web Of Science ResearcherID: AAG-6580-2020

ScopusID: 57090694200

Yoksis Researcher ID: 187089



### Education Information

2016 - 2021	Doctorate, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, Turkey
2013 - 2016	Postgraduate, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, Turkey
2004 - 2008	Undergraduate, Kocaeli University, Mühendislik Fakültesi, Jeofizik Mühendisliği, Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

2016	Eğitiminin Eğitimi, Education Management and Planning, Sakarya Üniversitesi
2016	Coğrafi Bilgi Sistemi Operatörü Sertifika Programı, IT, Anadolu Üniversitesi
2016	Uygulamalı Girişimcilik Eğitimi, Entrepreneurship, Karadeniz Teknik Üniversitesi
2015	AutoCAD 2D&3D, IT, KTU-SEM
2015	ArcGIS, IT, Esri Türkiye
2015	NetCAD 6.0 GIS, IT, Netcad Kampüs

### Dissertations

2021	DEPREMLERİN MAGNİTÜD TÜRÜ DÖNÜŞÜMÜ VE MAKSİMUM YER HAREKETİ İMMESİ (PGA) TAHMİNİNDE YAPAY ZEKA UYGULAMALARI, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, Doctorate
2016	FARKLI İSTATİSTİKSEL YÖNTEMLERLE KUZEY ANADOLU FAY ZONU (KAFZ) VE ÇEVRESİNİN DEPREMSELLİĞİNİN İNCELENMESİ, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği, Postgraduate

### Research Areas

## Academic Titles / Tasks

2022 - Continues	Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği
2021 - 2022	Research Assistant PhD, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği
2013 - 2021	Research Assistant, Karadeniz Technical University

## Academic and Administrative Experience

2022 - Continues	Deputy Head of Department, Karadeniz Technical University, Mühendislik Fakültesi, Jeofizik Mühendisliği
------------------	---

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

- I. **Seismic site classification based on H/V spectral ratio from strong ground motion records: the urban areas of Bursa province**  
ÇOBAN K. H.  
Journal of Seismology, vol.28, no.2, pp.321-344, 2024 (SCI-Expanded)
- II. **An assessment of seismicity and near surface geophysical characteristics of potential solid waste landfill sites in the Eastern Black Sea Region of Türkiye**  
Karlı H., Babacan A. E., Sayıl N. L., Çoban K. H., Akın Ö.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.31, no.9, pp.14156-14177, 2024 (SCI-Expanded)
- III. **Evaluation of 08 August 2019 Bozkurt (Denizli-Turkey, Mw 6.0) earthquake in terms of strong ground-motion parameters and Coulomb stress changes**  
BAYRAK E., ÇOBAN K. H.  
Environmental Earth Sciences, vol.82, no.20, 2023 (SCI-Expanded)
- IV. **Magnitude Type Conversion Models for Earthquakes in Turkey and Its Vicinity with Machine Learning Algorithms**  
ÇOBAN K. H., Sayıl N. L.  
JOURNAL OF EARTHQUAKE ENGINEERING, vol.27, no.9, pp.2533-2554, 2023 (SCI-Expanded)
- V. **Conditional Probabilities of Hellenic Arc Earthquakes Based on Different Distribution Models**  
ÇOBAN K. H., Sayıl N. L.  
PURE AND APPLIED GEOPHYSICS, vol.177, no.11, pp.5133-5145, 2020 (SCI-Expanded)
- VI. **Different probabilistic models for earthquake occurrences along the North and East Anatolian fault zones**  
Çoban K. H., Sayıl N. L.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.13, no.18, 2020 (SCI-Expanded)
- VII. **Evaluation of earthquake recurrences with different distribution models in western Anatolia**  
Çoban K. H., Sayıl N.  
JOURNAL OF SEISMOLOGY, vol.23, no.6, pp.1405-1422, 2019 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Evaluation of 23 November 2022 Düzce Earthquake in terms of Regional Seismicity and Strong Ground Motions**  
BAYRAK E., BAYRAK E., ÇOBAN K. H.

- Fırat Üniversitesi Mühendislik Bilimleri Dergisi, vol.36, no.2, pp.795-807, 2024 (Peer-Reviewed Journal)
- II. **Determination of soil dominant frequency/period and H/V spectral ratio values using earthquake data: The Case of Eskisehir Province**  
COBAN K. H., Bayrak E.  
Türk deprem araştırma dergisi (Online), vol.6, no.1, pp.81-97, 2024 (Scopus)
- III. **24 Ocak 2020 Sivrice (Elazığ) Depreminin ğartlı Olasılığının Değerlendirilmesi**  
Çoban K. H., Sayıl N. L.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.35, no.4, pp.1009-1019, 2020 (Peer-Reviewed Journal)
- IV. **Investigation of the seismicity of East Anatolian fault zone (EAFZ) according to Poisson and Exponential distribution models**  
ÇOBAN K. H., SAYIL N. L.  
Düzce University Journal of Science Technology, vol.6, no.2, pp.491-500, 2018 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Yapay Sinir Ağları Tabanlı En Büyük Yer Hareketi İvmesi (PGA) Tahmini**  
Çoban K. H.  
in: Deprem Araştırmaları, Prof. Dr. Nilgün SAYIL, Editor, Akademisyen Kitabevi, Ankara, pp.181-202, 2022

## Refereed Congress / Symposium Publications in Proceedings

- I. **Background noise effects on the determination of soil dominant frequency in the city of Barcelona**  
Çoban K. H., Díaz J., Schimmel M., Ramos H. S., Sánchez-Pastor P., Akın Ö., Sayıl N. L.  
MedGu, Barcelona, Spain, 25 - 28 November 2024, pp.1
- II. **Antalya İli ve Civarının İstatistiksel Deprem Tehlikesi**  
ÇOBAN K. H., BAYRAK E.  
5. Uluslararası Afet & Dirençlilik Kongresi, Kocaeli, Türkiye, Kocaeli, Turkey, 11 - 13 October 2023, pp.533-538
- III. **23 Şubat 2020 Khoy (İran) Depremlerinin Kuvvetli Yer Hareketi Parametreleri Açısından değerlendirilmesi**  
ÇOBAN K. H., BAYRAK E.  
4th International Symposium of Engineering Applications on Civil Engineering and Earth Sciences (IEACES2023), Karabük, Turkey, 31 May - 02 June 2023, pp.416-424
- IV. **Zemin Parametrelerinin Deprem Kayıtları Üzerinden Belirlenmesi: Van İli Örneği**  
Bayrak E., Çoban K. H.  
4. Uluslararası Afet & Dirençlilik Kongresi İklim Değişikliği & Güvenli Şehirler , Eskişehir, Turkey, 19 - 21 October 2022, pp.51-56
- V. **Evaluation of soil-structure interaction with earthquake and noise records: The case study of Kocaeli-Yuvacık dam.**  
Sancılı M., Çoban K. H.  
6. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, Kocaeli, Turkey, 13 - 15 October 2021, pp.299-307
- VI. **The Conditional Probabilities of an Earthquake according to Different Distribution Models along the North Anatolian Fault Zone**  
ÇOBAN K. H., SAYIL N. L.  
5. International Conference on Earthquake Engineering and Seismology ( 5ICEES 2019, Ankara, Turkey, 8 - 11 October 2019, pp.1-4
- VII. **Assessment of Seismic Hazard by Different Statistical Methods: The Case of East Marmara Region**  
ÇOBAN K. H., SAYIL N. L.  
VI. International Earthquake Symposium Kocaeli 2019, Kocaeli, Turkey, 25 - 28 September 2019, pp.813-816

- VIII. **Comparison of Site H/V Spectral Ratio and Predominant Frequency by Using Microtremor and Earthquake Data**  
ÇOBAN K. H., SAYIL N. L.  
Near Surface Geoscience Conference & Exhibition 2019, The Hague, Netherlands, 8 - 12 September 2019, pp.1-4
- IX. **AVAILABILITY OF ARTIFICIAL NEURAL NETWORK (ANN) IN STRONG GROUND MOTION PREDICTION**  
ÇOBAN K. H., SAYIL N. L.  
New Trend in Geophysics and Engineering 2018 Conference (NTGE2018), İstanbul, Turkey, 7 - 09 November 2018, pp.114-117
- X. **Investigation of vulnerability index by single station microtremor method: a case study of KTU campus**  
BEKER Y., SAYIL N. L., AKIN Ö., ÇOBAN K. H.  
New Trend in Geophysics and Engineering 2018 Conference (NTGE2018), İstanbul, Turkey, 7 - 09 November 2018, pp.79-82
- XI. **Investigation of Vulnerability Index by Single Station Microtremor Method: A Case of KTU Campus**  
BEKER Y., SAYIL N. L., AKIN Ö., ÇOBAN K. H.  
New Trends in Geophysics and Engineering 2018, İstanbul, Turkey, 7 - 09 November 2018, pp.79-82
- XII. **Availability of Artificial Neural Network (Ann) in Strong Ground Motion Prediction.**  
ÇOBAN K. H., SAYIL N. L.  
NTGE 2018 İstanbul, İstanbul, Turkey, 7 November - 09 October 2018, pp.1
- XIII. **Investigation of the sea water intrusion by using slingram and 2D resistivity imaging methods**  
Coban B., GÖREN S., ÇOBAN K. H., BABACAN A. E.  
24th European Meeting of Environmental and Engineering Geophysics, Porto, Portugal, 9 - 13 September 2018
- XIV. **Determination of Earthquake Location with Particle Swarm Optimization**  
ÇOBAN K. H., SAYIL N. L.  
The European Seismological Commission 36th General Assembly, Valletta, Malta, 2 - 07 September 2018
- XV. **Determination of the Earthquake Location with Particle Swarm Optimization**  
ÇOBAN K. H., SAYIL N. L.  
The 36th General Assembly of the European Seismological Commission ESC 2018, Valetta, Malta, 2 - 07 September 2018, pp.1
- XVI. **The Investigation of the VAN Region Seismicity**  
ÇOBAN K. H., SAYIL N. L.  
ICELIS 2018, Kastamonu, Turkey, 26 - 29 April 2018, pp.1
- XVII. **Estimation of the Peak Ground Acceleration with Artificial Neural Network (ANN) trained by Turkey strong-motion database**  
ÇOBAN K. H., SAYIL N. L.  
European Geosciences Union General Assembly (EGU) 2018, Vienna, Austria, 8 - 13 April 2018, pp.1
- XVIII. **Evaluation of Earthquake Storm in Çanakkale (Gülpınar - Ayvacık) by Magnitude - Frequency Relations,**  
ÇOBAN K. H., SAYIL N. L.  
4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, Eskişehir, Turkey, 11 - 13 October 2017
- XIX. **Determination of Samsun province earthquake risk according to probabilistic and deterministic approaches**  
SAYIL N. L., ÇOBAN K. H., AKIN Ö.  
9th Congress of the Balkan Geophysical Society, Antalya, Turkey, 5 - 09 November 2017, pp.1-5
- XX. **Seismicity for the Eastern Black Sea region with statistical approaches**  
SAYIL N. L., ÇOBAN K. H., AKIN Ö.  
9th Congress of the Balkan Geophysical Society, Antalya, Turkey, 5 - 09 November 2017, pp.1-5
- XXI. **Seismic for the Eastern Black Sea region with statistical approaches**  
Sayıl N. L., Çoban K. H., AKIN Ö.  
9th Congress of the Balkan Geophysical Society, Antalya, Turkey, 5 - 09 November 2017, pp.5
- XXII. **Determination of Fault Types by GIS Applications according to Earthquake Depths**

ÇOBAN K. H., SAYIL N. L.

International Symposium on GIS Applications in Geography and Geosciences, Çanakkale, Turkey, 18 - 21 October 2017, pp.1-5

- XXIII. **Modeling of Soil Parameters Obtained by Geophysical Methods Using GIS: A case Study in Trabzon**  
ÇOBAN K. H., AKIN Ö., SAYIL N. L.  
International Symposium on GIS Applications in Geography and Geosciences, Çanakkale, Turkey, 18 - 21 October 2017, pp.1-5
- XXIV. **A MATLAB Interface Application for Spectral Ratio by Reference Station and Damping Ratio**  
ÇOBAN K. H., SAYIL N. L.  
4. International Earthquake Engineering and Seismology Congress, Eskişehir, Turkey, 11 - 13 October 2017, pp.1-5
- XXV. **Evaluation of Earthquake Swarm in Çanakkale (Gülpınar - Ayvacık) by Magnitude - Frequency Relations**  
ÇOBAN K. H., SAYIL N. L.  
4 UDMSK, Eskişehir, Turkey, 11 - 13 October 2017, pp.1-4
- XXVI. **The Use of Slingram Method to Map the Marine Water Intrusion: A Case Study from the Trabzon, Turkey**  
ÇOBAN K. H., BABACAN A. E., Durmaz E., Ceylan S.  
Near Surface Geoscience, Malmö, Sweden, Sweden, 3 - 07 September 2017
- XXVII. **Investigation of the seismicity of East Anatolian fault zone (EAFZ) according to Poisson and Exponential distribution models**  
ÇOBAN K. H., SAYIL N. L.  
International Multidisciplinary Congress of Eurasia, IV.IMCOFE, Roma, Italy, 23 - 25 August 2017, pp.1-5
- XXVIII. **Calculation of earthquake risk of Aegean region with different statistical approaches**  
ÇOBAN K. H., SAYIL N. L.  
International Multidisciplinary Congress of Eurasia, IV.IMCOFE, Roma, Italy, 23 - 25 August 2017, pp.1-5
- XXIX. **The Calculation of Earthquake Magnitude Probability Near Van Lake**  
ÇOBAN K. H., SAYIL N. L.  
3rd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2016), 19 - 24 October 2016
- XXX. **The Statistical Earthquake Probability in Marmara Region**  
ÇOBAN K. H., SAYIL N. L.  
3rd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2016), 19 - 24 October 2016
- XXXI. **"The Calculation of Earthquake Magnitude Probability near Van Lake"**  
ÇOBAN K. H., SAYIL N. L.  
3rd International Conference on Computational And Experimental Science and Engineering (ICCESEN-2016), Antalya, Turkey, 19 - 24 October 2016, pp.362
- XXXII. **"The Statistical Earthquake Probability in Marmara Region"**  
ÇOBAN K. H., SAYIL N. L.  
3rd International Conference on Computational And Experimental Science and Engineering (ICCESEN-2016), Antalya, Turkey, 19 - 24 October 2016, pp.355
- XXXIII. **Estimation of Earthquake Occurrence by Using Markov Chain Approach in Turkey**  
ÇOBAN K. H., SAYIL N. L.  
International Conference on Engineering and Natural Science, 24 - 28 May 2016
- XXXIV. **A Gui Interface for Estimation of the Earthquake Risk Based on Poisson Model**  
ÇOBAN K. H., SAYIL N. L.  
International Conference on Advances in Science ICAS 2016, 31 August - 02 September 2016
- XXXV. **Usefulness of Slip Predictable Model for Earthquake Occurrence in Turkey**  
SAYIL N. L., ÇOBAN K. H.  
International Conference on Engineering and Natural Science, 24 - 28 May 2016
- XXXVI. **Determination of the Ground building Relationships in the KTU Campus Area with Microtremor**

## Measurements

BEKER Y., SAYIL N. L., AKIN Ö., ÇOBAN K. H.

22nd European Meeting of Environmental and Engineering Geophysics, 4 - 08 September 2016

XXXVII. **Determination of the Ground-Building Relationships in The KTU Campus Area With Microtremor Measurements**

BEKER Y., SAYIL N. L., AKIN Ö., ÇOBAN K. H.

22nd European Meeting of Environmental and Engineering Geophysics, Barcelona, Spain, 4 - 08 September 2016, pp.8

XXXVIII. **Determination of the Dynamic Characteristics of the Faculty Building of Law at KTU Campus with HVSR and FSR Methods**

BEKER Y., ÇOBAN K. H., SAYIL N. L.

22nd European Meeting of Environmental and Engineering Geophysics.Near Surface Geoscience (EAGE) 2016, Barcelona, Spain, 4 - 08 September 2016, pp.1

XXXIX. **Determination of the Ground-building Relationships in the KTU Campus Area with Microtremor Measurements”**

SAYIL N. L., AKIN Ö., BEKER Y., ÇOBAN K. H.

22nd European Meeting of Environmental and Engineering Geophysics.Near Surface Geoscience (EAGE), Barcelona, Spain, 4 - 08 September 2016, pp.1

XL. **“A Gui Interface for Estimation of The Earthquake Risk Based on Poisson Model” ICAS 2016**

ÇOBAN K. H., SAYIL N. L.

International Conference on Advances in Science ( Icas 2016), İstanbul, Turkey, 31 August - 02 September 2016, pp.56-60

XLI. **Usefulness of Slip Predictable Model for Earthquake Occurrence in Turkey**

SAYIL N. L., ÇOBAN K. H.

ICENS 2016, Bosnia And Herzegovina, 24 - 28 May 2016

XLII. **Estimation of the Earthquake Magnitude Transition Probability in Marmara Region with Semi-Markov Model**

ÇOBAN K. H., SAYIL N. L.

7 th International Geosciences Student Conference (7th IGSC), Kataowice, Poland, 11 July - 14 October 2016, pp.33-37

XLIII. **Estimation of Earthquake Occurrences by Using Markov Chain Approach in Turkey**

ÇOBAN K. H., SAYIL N. L.

International Conference on Engineering and Natural Science (ICENS), Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, pp.1443-1448

XLIV. **Usefulness of Slip Predictable Model for Earthquake Occurrence in Turkey” ICENS 2016**

SAYIL N. L., ÇOBAN K. H.

International Conference on Engineering and Natural Science (ICENS), Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, pp.3004-3010

XLV. **Determination of Earthquake Probability by Using Statistical Methods in Turkey**

ÇOBAN K. H., SAYIL N. L.

International Conference on Engineering and Natural Science (ICENS), Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, pp.1448-1454

XLVI. **GRAFİK ARAYÜZÜ KULLANILARAK REFERANS İSTASYONUNA GÖRE SPEKTRAL ORANLAR S R YÖNTEMİNDEN BÜYÜTME DEĞERİNİN BELİRLENMESİ**

ÇOBAN K. H., AKIN Ö., SAYIL N. L.

3. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, İzmir, Turkey, 14 - 16 October 2015

XLVII. **Grafik Arayüzü Kullanılarak Referans İstasyonuna Göre Spektral Oranlar (S/R) Yönteminden Büyütme Değerinin Belirlenmesi**

ÇOBAN K. H., SAYIL N. L.

TDMSK, İzmir, Turkey, 14 - 16 October 2015, pp.1-4

XLVIII. **RefPick A GUI Application to Pick First Arrival Times and Data Processing on Seismic Refraction Data**

ÇOBAN K. H., ŞENKAYA M., KARSLI H.

8th Congress of the Balkan Geophysical Society, Chania, Greece, 5 - 08 October 2015

**XLIX. TEK İSTASYON MİKROTREMOR KAYITLARI KULLANILARAK İKİ FARKLI YÖNTEMLE BÜYÜTME DEĞERLERİNİN KARŞILAŞTIRILMASI**

AKIN Ö., ÇOBAN K. H., SAYIL N. L.

Kocaeli 2015 8th International Earthquake Symposium, Kocaeli, Turkey, 10 - 12 June 2015

**L. Tek İstasyon Mikrotremor Kayıtları Kullanılarak İki Farklı Yöntemle Büyütme Değerlerinin Karşılaştırılması**

AKIN Ö., ÇOBAN K. H., SAYIL N. L.

5th International Earthquake Symposium, Kocaeli/ Türkiye, Kocaeli, Turkey, 10 - 12 June 2015, pp.1

**LI. Tek İstasyon Mikrotremor Yönteminde Baskın Frekans ve H/V Oranının Kayıt Uzunluğu ve Zemin Özelliklerine Göre Değişimi (Ktü Kampüs Örneği)**

AKAR Z. B., MURTEZAOĞLU M., AKIN Ö., ÇOBAN K. H., SAYIL N. L.

Genç Yerbilimciler Kongresi, İzmir, Turkey, 5 - 07 June 2015, pp.8

**LII. İzmir ve çevresinin depremselliğinin incelenmesi**

BAYINDIR G., AKIN Ö., ÇOBAN K. H., SAYIL N. L.

Genç Yerbilimciler Kongresi, İzmir, Turkey, 5 - 07 June 2015, pp.6

## Supported Projects

2024 - 2024

Identifying the sources of background vibrations and evaluating the reliability of subsurface Vs profiles in urban environments: The case of Barcelona city, TUBITAK Project

2021 - 2023

Yeni Jeofiziksel Parametreler Eklenerek Analitik Hiyerarşi Süreci ile Oluşturulan Heyelan Duyarlılık Çalışmalarının Gelişimine Katkıda Bulunması Trabzon Değirmendere Vadisi Örneği, Project Supported by Higher Education Institutions

## Metrics

Publication: 64

Citation (WoS): 32

Citation (Scopus): 57

H-Index (WoS): 4

H-Index (Scopus): 4