

## **Dr. MUSTAFA KEREM KOÇKAR**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: F-3165-2014

ScopusID: 6603226222

Yoksis Researcher ID: 119460

### **Education Information**

Doctorate, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering, Turkey 2001 - 2006

Postgraduate, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering, Turkey 1999 - 2001

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering, Turkey 1993 - 1998

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Engineering geological and geotechnical site characterization and determination of the seismic hazards of upper pliocene and quaternary deposits situated towards the west of Ankara, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering, 2006

Postgraduate, Engineering geological investigations along the Iliksu tunnels, Alanya, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering, 2001

### **Research Areas**

Geotechnical, Foundation Engineering, Soil Mechanics, Underground Construction, Ground Improvement, Soil Dynamics

### **Academic Titles / Tasks**

Associate Professor, Hacettepe University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2018 - Continues

Lecturer PhD, Gazi University, Araştırma Ve Uygulama Merkezleri, Deprem Mühendisliği Uygulama Ve Araştırma Merkezi

## Courses

### Doctorate

Advanced Analysis Methods of Earth Slopes, Doctorate, 2021 - 2022

Experimental Soil Mechanics, Doctorate, 2019 - 2020

### Postgraduate

Yapı Tasarımında Geoteknik Yöntem Uygulamaları, Postgraduate, 2021 - 2022

Environmental Geotechnics, Postgraduate, 2021 - 2022

Geotechnical Investigations, Postgraduate, 2020 - 2021

### Undergraduate

Geotechnical Design, Undergraduate, 2021 - 2022

Soil Mechanics Laboratory, Undergraduate, 2021 - 2022

Introduction to Slope Stability, Undergraduate, 2021 - 2022

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

- I. Municipal landfill site selection using TOPSIS methodology: A case study for Polatlı, Ankara, Türkiye  
Oner G., AKGÜN H., KOÇKAR M. K., ARSLAN KELAM A.  
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, no.3, 2025 (SCI-Expanded)
- II. Assessment of urban seismic resilience of a town in Eastern Turkey: Turkoglu, Kahramanmaraş before and after 6 February 2023 M 7.8 Kahramanmaraş earthquake  
ASKAN GÜNDÖĞAN A., Altindal A., Aydin M. F., ERBERİK M. A., KOÇKAR M. K., Tun M., ŞENOL BALABAN M., Uygucgil H., KOP A., Karimzadeh S., et al.  
EARTHQUAKE SPECTRA, no.1, pp.146-175, 2025 (SCI-Expanded)
- III. Assessment of Complex Rock Slope Instabilities in Mudurnu, Turkey, Through Kinematic and Dynamic Analyses: A Case Study  
ARSLAN KELAM A., Akguen H., Bobet A., KOÇKAR M. K.  
ROCK MECHANICS AND ROCK ENGINEERING, 2024 (SCI-Expanded)
- IV. Development of a GIS-Based Predicted-VS 30 Map of Turkey Using Geological and Topographical Parameters: Case Study for the Region Affected by the 6 February 2023 Kahramanmaraş Earthquakes  
ŞAHİN G., Okalp K., KOÇKAR M. K., YILMAZ M. T., JALEHFOROUZAN A., Temiz F. A., ASKAN GÜNDÖĞAN A., AKGÜN H., ERBERİK M. A.  
SEISMOLOGICAL RESEARCH LETTERS, vol.95, no.4, pp.2044-2057, 2024 (SCI-Expanded)
- V. Engineering geological characterization and assessment of complex rock slope failures in Mudurnu, Turkey  
Arslan Kelam A., AKGÜN H., Bobet A., KOÇKAR M. K.  
Natural Hazards, vol.120, no.4, pp.3271-3298, 2024 (SCI-Expanded)
- VI. Fundamental period estimation of RC buildings by considering structural and non-structural damage distributions through neural network  
Cinar O. F., ALDEMİR A., Zervent A., Yucel O. B., ERBERİK M. A., ANIL Ö., ŞAHMARAN M., KOÇKAR M. K., ASKAN GÜNDÖĞAN A.  
Neural Computing and Applications, vol.36, no.3, pp.1329-1350, 2024 (SCI-Expanded)
- VII. Geotechnical reconnaissance findings of the October 30 2020, Mw7.0 Samos Island (Aegean Sea) earthquake  
Ziotopoulou K., ÇETİN K. Ö., Pelekis P., ALTUN S., Klimis N., SEZER A., Rovithis E., YILMAZ M. T., Papadimitriou A. G., GÜLERCE Z., et al.

- BULLETIN OF EARTHQUAKE ENGINEERING, vol.20, no.14, pp.7819-7852, 2022 (SCI-Expanded)
- VIII. Development of a three-dimensional basin model to evaluate the site effects in the tectonically active near-fault region of Golyaka basin, Duzce, Turkey  
Yousefi-Bavil K., KOÇKAR M. K., AKGÜN H.  
NATURAL HAZARDS, vol.114, no.1, pp.941-969, 2022 (SCI-Expanded)
- IX. An evaluation of seismic hazard and potential damage in Gaziantep, Turkey using site specific models for sources, velocity structure and building stock  
ARSLAN KELAM A., Karimzadeh S., Yousefibavil K., AKGÜN H., ASKAN GÜNDÖĞAN A., ERBERİK M. A., KOÇKAR M. K., PEKCAN O., Ciftci H.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.154, 2022 (SCI-Expanded)
- X. Application of an optical fiber-based system for mass movement monitoring  
ARSLAN KELAM A., AKGÜN H., KOÇKAR M. K.  
ENVIRONMENTAL EARTH SCIENCES, vol.81, no.5, 2022 (SCI-Expanded)
- XI. A case study for probabilistic seismic risk assessment of earthquake-prone old urban centers  
Altindal A., Karimzadeh S., ERBERİK M. A., ASKAN GÜNDÖĞAN A., ANİL Ö., KOÇKAR M. K., ŞAHMARAN M.  
INTERNATIONAL JOURNAL OF DISASTER RISK REDUCTION, vol.61, 2021 (SCI-Expanded)
- XII. Spacing and block volume estimation in discontinuous rock masses using image processing technique: a case study  
Azarafza M., KOÇKAR M. K., Faramarzi L.  
ENVIRONMENTAL EARTH SCIENCES, vol.80, no.14, 2021 (SCI-Expanded)
- XIII. Fuzzy-based multiple decision method for landslide susceptibility and hazard assessment: A case study of Tabriz, Iran  
Nanehkaran Y. A., Mao Y., Azarafza M., KOÇKAR M. K., Zhu H.  
GEOMECHANICS AND ENGINEERING, vol.24, no.5, pp.407-418, 2021 (SCI-Expanded)
- XIV. Assessment of the effect of mineralogy on the geotechnical parameters of clayey soils: A case study for the Orta County, Cankiri, Turkey  
AKGÜN H., Turkmenoglu A. G., ARSLAN KELAM A., Yousefi-Bavil K., Oner G., Kockar M. K.  
APPLIED CLAY SCIENCE, vol.164, pp.44-53, 2018 (SCI-Expanded)
- XV. Evaluation of a sand bentonite mixture as a shaft/borehole sealing material  
AKGÜN H., Kockar M. K.  
APPLIED CLAY SCIENCE, vol.164, pp.34-43, 2018 (SCI-Expanded)
- XVI. The use of Ankara Clay as a compacted clay liner for landfill sites  
AKGÜN H., Turkmenoglu A. G., Met I., Yal G. P., Kockar M. K.  
CLAY MINERALS, vol.52, no.3, pp.391-412, 2017 (SCI-Expanded)
- XVII. A generalized seismic source model for the Eastern Marmara Region along the segments of the North Anatolian Fault System  
Cambazoglu S., Kockar M. K., AKGÜN H.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.88, pp.412-426, 2016 (SCI-Expanded)
- XVIII. Site characterization of the strong motion stations and evaluation of site effects in the Ankara region during the December 2007 and March 2008 moderate Bala earthquakes  
Kockar M. K.  
ENVIRONMENTAL EARTH SCIENCES, vol.75, no.15, 2016 (SCI-Expanded)
- XIX. Geotechnical Assessment of Compacted Sand Bentonite Mixtures to be Utilized in Underground Nuclear Waste Repositories and Barrier Design  
AKGÜN H., Ada M., Kockar M. K.  
TEKNİK DERGI, vol.27, no.3, pp.7477-7496, 2016 (SCI-Expanded)
- XX. Yeraltı Nükleer Atık Haznelerinde Kullanılabilen Sıkıştırılmış Kum Bentonit Karışımının Geoteknik Değerlendirmesi ve Bariyer Tasarımı  
AKGÜN H., ADA M., KOÇKAR M. K.  
TEKNİK DERGİ/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, vol.27, no.3, pp.7477-7496, 2016 (SCI-Expanded)

- XXI. **Evaluation of site effect within the tectonic basin in the northern side of Ankara**  
 Eker A. M., Kockar M. K., AKGÜN H.  
 ENGINEERING GEOLOGY, vol.192, pp.76-91, 2015 (SCI-Expanded)
- XXII. **Performance assessment of a bentonite-sand mixture for nuclear waste isolation at the potential Akkuyu Nuclear Waste Disposal Site, southern Turkey**  
 AKGÜN H., Ada M., Kockar M. K.  
 ENVIRONMENTAL EARTH SCIENCES, vol.73, no.10, pp.6101-6116, 2015 (SCI-Expanded)
- XXIII. **Investigation of the failure mechanism and stabilization of a landslide in weathered tuffite, Giresun, northeastern Turkey**  
 Avsar O., AKGÜN H., Kockar M. K.  
 ENVIRONMENTAL EARTH SCIENCES, vol.72, no.9, pp.3723-3740, 2014 (SCI-Expanded)
- XXIV. **Geotechnical investigations and preliminary support design for the Gecilmez tunnel: A case study along the Black Sea coastal highway, Giresun, northern Turkey**  
 AKGÜN H., Muratlı S., Kockar M. K.  
 TUNNELLING AND UNDERGROUND SPACE TECHNOLOGY, vol.40, pp.277-299, 2014 (SCI-Expanded)
- XXV. **Local site characterization and seismic zonation study by utilizing active and passive surface wave methods: A case study for the northern side of Ankara, Turkey**  
 Eker A. M., AKGÜN H., Kockar M. K.  
 ENGINEERING GEOLOGY, vol.151, pp.64-81, 2012 (SCI-Expanded)
- XXVI. **Evaluation of the site effects of the Ankara basin, Turkey**  
 Kockar M. K., AKGÜN H.  
 JOURNAL OF APPLIED GEOPHYSICS, vol.83, pp.120-134, 2012 (SCI-Expanded)
- XXVII. **Evaluation of site conditions for the Ankara Basin of Turkey based on seismic site characterization of near-surface geologic materials**  
 Kockar M. K., AKGÜN H., Rathje E. M.  
 SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.30, no.1-2, pp.8-20, 2010 (SCI-Expanded)
- XXVIII. **Development of a geotechnical and geophysical database for seismic zonation of the Ankara Basin, Turkey**  
 Kockar M. K., Akgun H.  
 ENVIRONMENTAL GEOLOGY, vol.55, no.1, pp.165-176, 2008 (SCI-Expanded)
- XXIX. **Evaluation of a compacted bentonite/sand seal for underground waste repository isolation**  
 Akgun H., Kockar M. K., Akturk O.  
 ENVIRONMENTAL GEOLOGY, vol.50, no.3, pp.331-337, 2006 (SCI-Expanded)
- XXX. **Design of anchorage and assessment of the stability of openings in silty, sandy limestone: a case study in Turkey**  
 Akgun H., Kockar M. K.  
 INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.41, no.1, pp.37-49, 2004 (SCI-Expanded)
- XXXI. **Engineering geological investigations along the Iliksu Tunnels, Alanya, southern turkey**  
 Kockar M. K., Akgun H.  
 ENGINEERING GEOLOGY, vol.68, no.3-4, pp.141-158, 2003 (SCI-Expanded)
- XXXII. **Methodology for tunnel and portal support design in mixed limestone, schist and phyllite conditions: a case study in Turkey**  
 Kockar M. K., Akgun H.  
 INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.40, no.2, pp.173-196, 2003 (SCI-Expanded)

## Articles Published in Other Journals

- I. Ankara Kilinde Örselenme Etkisinin ve Derinliğe Bağlı Zemin Özelliklerinin Jeoteknik Arazi ve

- Laboratuvar Deneylerine Bağlı Olarak İncelenmesi**  
 ŞAHİN G., KOÇKAR M. K.  
 JEOLOJİ MUHENDISLİĞİ DERGİSİ, vol.47, no.2, pp.149-164, 2023 (Scopus)
- II. Correlations of SMR-Q(slope) Data in Stability Classification of Discontinuous Rock Slope: A Modified Relationship Considering the Iranian Data**  
 Azarafza M., KOÇKAR M. K., Zhu H.  
 GEOTECHNICAL AND GEOLOGICAL ENGINEERING, vol.40, no.4, pp.1751-1764, 2022 (ESCI)
- III. FIELD APPLICATIONS FOR RISK ASSESSMENT METHODS OF URBAN TRANSFORMATION LAW NO. 6306: A CASE STUDY OF BEYOĞLU**  
 ANİL Ö., ŞAHMARAN M., KOÇKAR M. K.  
 Disaster Science and Engineering, vol.4, no.2, pp.54-64, 2018 (Peer-Reviewed Journal)
- IV. Küçük ve Orta Büyüklükte Sismik Aktivite Gösteren Bölgelerdeki Yerel Zemin Koşullarının Belirlenmesi**  
 KOÇKAR M. K.  
 Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.4, no.4, pp.331-341, 2016 (Peer-Reviewed Journal)
- V. Utilization of Optical Fiber System for Mass Movement Monitoring**  
 ARSLAN A., KOÇKAR M. K., AKGÜN H.  
 Disaster Science and Engineering, vol.1, no.2, pp.441-446, 2016 (Peer-Reviewed Journal)
- VI. Preliminary Evaluation of a Compacted Bentonite Sand Mixture as a Landfill Liner Material**  
 KOÇKAR M. K., AKGÜN H., AKTÜRK Ö.  
 JOURNAL OF SOLID WASTE TECHNOLOGY AND MANAGEMENT, vol.31, no.4, pp.187-192, 2005 (Scopus)
- VII. İlksu Tünellerinin Jeoteknik Değerlendirmesi**  
 KOÇKAR M. K., AKGÜN H.  
 TEKNİK DERGİ/TECHNICAL JOURNAL OF TURKISH CHAMBER OF CIVIL ENGINEERS, vol.16, no.2, pp.3191-3214, 2004 (Scopus)
- VIII. İlksu Tünellerinin Jeoteknik Değerlendirmesi Geotechnical Evaluation of the İlksu Tunnels**  
 KOÇKAR M. K., AKGÜN H.  
 TEKNİK DERGİ, vol.15, no.2, pp.3191-3214, 2004 (Peer-Reviewed Journal)

## Books

- I. Production of GIS-Based Predicted Vs30 Maps for Türkiye by Combining Geological and High-Resolution Topographical Digital Maps**  
 ŞAHİN G., Okalp K., KOÇKAR M. K., YILMAZ M. T., Jalehforouzan A., Temiz F. A., ASKAN GÜNDÖĞAN A., AKGÜN H., ERBERİK M. A.  
 in: Proceedings of the 7th International Conference on Earthquake Engineering and Seismology 7ICEES 2023—Volume 1 (Part of the book series: Lecture Notes in Civil Engineering\_LNCE, volume 488), UÇKAN MUHİTTİN EREN, AKGÜN HALUK, GÖK ELÇİN, YENİDOĞAN HABİB CEM, Editor, Springer Nature, Cham, pp.167-174, 2024
- II. Production of GIS-Based Predicted Vs30 Maps for Türkiye by Combining Geological and High-Resolution Topographical Digital Maps**  
 ŞAHİN G., Okalp K., KOÇKAR M. K., YILMAZ M. T., Jalehforouzan A., Temiz F. A., ASKAN GÜNDÖĞAN A., AKGÜN H., ERBERİK M. A.  
 in: Proceedings of the 7th International Conference on Earthquake Engineering and Seismology 7ICEES 2023—Volume 1 (Part of the book series: Lecture Notes in Civil Engineering\_LNCE, volume 488), UÇKAN MUHİTTİN EREN, AKGÜN HALUK, GÖK ELÇİN, YENİDOĞAN HABİB CEM, Editor, Springer Nature, Cham, pp.167-174, 2024
- III. Laboratory Testing of an Optical Fiber-Based Monitoring System Developed for Earthquake-Induced Landslides**  
 ARSLAN KELAM A., DEMİR C., ŞAHİN G., KAYA Y. E., Karabulut A. K., Ural B., Özsimşir A. E., KOÇKAR M. K., AKGÜN H., Temiz F. A.

in: Proceedings of the 7th International Conference on Earthquake Engineering and Seismology 7ICEES 2023—Volume 2 (Part of the book series: Lecture Notes in Civil Engineering\_LNCE, volume 401), KOÇKAR MUSTAFA KEREM, ERBERİK MURAT ALTUĞ, ASKAN GÜNDÖĞAN AYŞEGÜL, Editor, Springer Nature, Cham, pp.311-318, 2024

**IV. Geotechnical Reconnaissance Findings**

ÇETİN K. Ö., Ziotopoulou K., Mylonakis G., Klimis N., YILMAZ M. T., GÜLERCE Z., CAN G., ILGAÇ M., ÇAKIR E., SÖYLEMEZ B., et al.

in: Seismological and Engineering Effects of the M 7.0 Samos Island (Aegean Sea) Earthquake, K. Onder Cetin, George Mylonakis, Anastasios Sextos, Jonathan P. Stewart, Editor, GEER, pp.179-224, 2020

**V. Optical Fiber Technology to Monitor Slope Movement**

ARSLAN A., MEHMET ABDULLAH K., MERT ARIF E., AKGÜN H., KOÇKAR M. K.

in: Engineering Geology for Society and Territory Volume 2 Landslide Processes, Giorgio Lollino, Daniele Giordan, Giovanni B. Crosta, Jordi Corominas, Rafiq Azzam, Janusz Wasowski, Nicola Sciarra, Editor, Springer International Publishing, CHAM, pp.1425-1429, 2015

**VI. Characterization and Assessment of Large Landslide Movement Along the Bursa-Inegöl-Bozüyük Highway in Turkey**

DAMLA GAYE O., AKGÜN H., KOÇKAR M. K.

in: Engineering Geology for Society and Territory Volume 2 Landslide Processes, Giorgio Lollino, Daniele Giordan, Giovanni B. Crosta, Jordi Corominas, Rafiq Azzam, Janusz Wasowski, Nicola Sciarra, Editor, Springer International Publishing, CHAM, pp.289-293, 2015

## Papers Published in Refereed Scientific Meetings

**I. DEVELOPING AN EARLY WARNING SYSTEM BY MONITORING EARTHQUAKE-INDUCED LANDSLIDES THROUGH FIBER OPTICS**

ARSLAN KELAM A., ŞAHİN G., DEMİR C., KAYA Y. E., Karabulut A. K., Ural B., Özşimşir A. E., KOÇKAR M. K., AKGÜN H., Temiz F. A.

18. Dünya Deprem Mühendisliği Konferansı, Milan, İtalya (The 18th World Conference on Earthquake Engineering (WCEE2024), Milan, Italy, 30 June - 05 July 2024, pp.1-8

**II. LIQUEFACTION INDUCED HAZARDS AFTER THE FEBRUARY 6 KAHRAMANMARAS EARTHQUAKES**

UNUTMAZ B., KOÇKAR M. K., FIRAT S., GÜRBÜZ A., İŞIK N. S., Erciyies F., ŞAHİN G., Demir C.

18th World Conference on Earthquake Engineering (WCEE2024), Milan, Italy, 30 June 2022 - 05 July 2024

**III. EVALUATION OF SITE EFFECTS IN KAHRAMANMARAS EARTHQUAKES REGION BY CHARACTERIZATION OF SGM STATIONS**

KOÇKAR M. K., Karabulut A. K., ŞAHİN G., ARSLAN KELAM A., AKGÜN H., Ural B., Özşimşir A. E., KAYA Y. E., DEMİR C., Yousefibavil K., et al.

18. Dünya Deprem Mühendisliği Konferansı, Milan, İtalya (The 18th World Conference on Earthquake Engineering\_WCEE2024), Milan, Italy, 30 June - 05 July 2024, pp.1-8

**IV. Monitoring of an Unstable Slope in Kocaeli (Türkiye) by an Optical Fiber Based System**

Arslan Kelam A., KOÇKAR M. K., AKGÜN H.

57th US Rock Mechanics/Geomechanics Symposium, Georgia, United States Of America, 25 - 28 June 2023

**V. NEAR-FIELD DIRECTIVITY EFFECTS IN 2D SITE RESPONSE ANALYSIS**

Yousefi-Bavil K., KOÇKAR M. K., AKGÜN H.

6th International Conference on Earthquake Engineering and Seismology (6. ICEES), Kocaeli, Turkey, 13 October 2021, pp.1216-1222

**VI. Determination of Hazard Zones of Mudurnu Rock slopes Under Seismic Loading Conditions**

ARSLAN KELAM A., KOÇKAR M. K., AKGÜN H.

6th International Conference on Earthquake Engineering and Seismology (6. ICEES), 13 October 2021, pp.1242-1251

**VII. Assessment of kinematic rock slope failures in Mudurnu Valley, Turkey**

ARSLAN KELAM A., AKGÜN H., BOBET A., KOÇKAR M. K.

- EUROCK 2021 Mechanics and Rock Engineering from theory to practice, 21 September 2021, vol.833, pp.1-8
- VIII. **Application of an Optical Fiber Based Monitoring System to a Mass Movement Area**  
ARSLAN KELAM A., KOÇKAR M. K., AKGÜN H.  
54th US Rock Mechanics/Geomechanics Symposium, United States Of America, 28 June - 01 July 2020
- IX. **THE COMPARISON OF 2007 AND 2018 TURKISH BUILDING CODE OF SITE CLASSIFICATION PROCEDURE FOR SEISMIC DESIGN BASED ON SEISMIC SITE CHARACTERIZATION STUDIES- A CASE STUDY FOR ANKARA**  
KOÇKAR M. K., AKGÜN H.  
5. International Conference on Earthquake Engineering and Seismology ( 5ICEES ), Ankara, Turkey, 8 - 11 October 2019, pp.1-10
- X. **APPLICATION OF A LANDSLIDE MONITORING SYSTEM TO AN EARTHQUAKE PRONE REGION BY USING OPTICAL FIBER TECHNOLOGY**  
ARSLAN KELAM A., KOÇKAR M. K., AKGÜN H.  
5. International Conference on Earthquake Engineering and Seismology (5. ICEES), Ankara, Turkey, 8 - 11 October 2019, pp.1-9
- XI. **GEOTECHNICAL AND SEISMIC CHARACTERIZATION FOR THE ORTA DISTRICT, ÇANKIRI**  
EKER A. M., AKGÜN H., KOÇKAR M. K.  
5. International Conference on Earthquake Engineering and Seismology ( 5ICEES ), Ankara, Turkey, 8 - 11 October 2019, pp.1-10
- XII. **An Optical Fiber Early Warning System for Monitoring Mass Movements and for Assessing the Effect of the Triggering Factors**  
ARSLAN KELAM A., KOÇKAR M. K., AKGÜN H.  
ENGEO'2019: National Symposium on Engineering Geology and Geotechnics, Denizli, Turkey, 3 - 05 October 2019
- XIII. **Konya Killi Zeminlerinin Jeoteknik Uygulamalar İçin Bentonit İle İyileştirilmesi**  
ARSLAN KELAM A., AKGÜN H., Öner G., KOÇKAR M. K.  
18. Ulusal Kil Sempozyumu, Kocaeli, Turkey, 25 - 28 September 2019
- XIV. **A Landslide Monitoring Methodology Applied to a Seismically Active Region by Using Optical Fiber Systems**  
ARSLAN KELAM A., KOÇKAR M. K., AKGÜN H.  
VI. International Earthquake Symposium (IESKO) 2019, Kocaeli, Turkey, 25 - 27 September 2019, pp.889-904
- XV. **An Optical Fiber Based Early Warning System for Large Landslides**  
ARSLAN KELAM A., KOÇKAR M. K., AKGÜN H.  
European Geosciences Union General Assembly (EGU), Viyana, Austria, 7 - 12 April 2019
- XVI. **MUDURNU YAMAÇ ŞEVLERİİNDEKİ DURAYSIZLIKLARIN İNSAN YAŞAMI VE TARİHİ YAPILAR İÇİN OLUŞTURDUĞU TEHDİT AÇISINDAN DEĞERLENDİRİLMESİ VE ÇÖZÜM ÖNERİLERİ**  
ARSLAN A., AKGÜN H., KOÇKAR M. K.  
International Symposium on Mudurnu Studies, Akhism and Folk Culture, 21 - 22 September 2018
- XVII. **FİBER OPTİK TABANLI HEYELAN İZLEME VE ERKEN UYARI SİSTEMİ**  
ARSLAN A., KOÇKAR M. K., AKGÜN H.  
2. Ulusal Heyelan Sempozyumu, Turkey, 11 - 12 October 2018
- XVIII. **MUDURNU VADİSİ KOMPLEKS KİNEMATİK YENİLME MEKANİZMALARININ İHA TEKNOLOJİSİ VE HAT ETÜDLERİ KULLANILARAK DEĞERLENDİRİLMESİ**  
ARSLAN A., AKGÜN H., KOÇKAR M. K.  
2. Ulusal Heyelan Sempozyumu, Turkey, 11 - 12 October 2018
- XIX. **DEVELOPMENT OF A 3-D TOPOGRAPHICAL BASIN STRUCTURE BASED ON SEISMIC AND GEOTECHNICAL DATA: CASE STUDY AT A HIGH SEISMICITY AREA OF GÖLYAKA, DÜZCE, TURKEY**  
YOUSEFIBAVIL K., KOÇKAR M. K., AKGÜN H.  
16th European Conference on Earthquake Engineering (16ECEE), SELANİK, Greece, 18 - 21 June 2018
- XX. **ASSESSMENT OF SITE EFFECTS IN THE ANKARA REGION DURING THE DECEMBER 2007 AND MARCH 2008 BALAEARTHQUAKES**  
KOÇKAR M. K.

- 16 th European Conferenceon Earthquake Engineering (16ECEE), SELANIK, Greece, 18 - 21 June 2018
- XXI. A UAV Supported Evaluation of the Complex Kinematic Failures for the Discontinuous Rock Mass Slopes of Mudurnu Valley**  
 ARSLAN A., AKGÜN H., KOÇKAR M. K.  
 2nd International Syposium on Natural Hazards and Disaster Management (ISHAD2018), 4 - 06 May 2018
- XXII. Evaluating modes of failure zones of the rock masses along Mudurnu Valley (Turkey) by using a unmanned aerial vehicle**  
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- XXIII. 3-D basin geometry model to determine the site effects based on geophysical and geotechnical data: Case study at near-field and high seismicity area of Gölyaka, Düzce, Turkey.**  
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- XXV. 6306 Sayılı Kentsel Dönüşüm Yasası Risk Değerlendirme Tekniklerinin Saha Uygulaması: Beyoğlu Örneği**  
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- XXVI. Monitoring Bahçecik Landslide in Kocaeli Using Optical Fibers**  
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- XXVII. ASSESMENT OF THE EFFECT OF MINERALOGY ON THE GEOTECHNICAL PARAMETERS OF CLAYEY SOILS A CASE STUDY FOR ORTA COUNTY ÇANKIRI**  
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- XXVIII. Evaluation of a sand bentonite mixture as a shaft borehole sealing material**  
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- XXXI. Site Effect Study in the Ankara Region During the Moderate Bala Earthquake Series**  
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- XXXII. UTILIZATION OF OPTICAL FIBER SYSTEM FOR MASS MOVEMENT MONITORING**  
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- XXXVII. Slope Movement Monitoring with Optical Fiber Technology**  
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- XXXIX. Heyelan Hareketlerinin İzlenmesinde Fiber Optik Teknolojisinin Kullanımı**  
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17. Yuvarlak Masa Toplantısı, Orta Doğu Teknik Üniversitesi, Afet Yönetimi Uygulama ve Araştırma Merkezi, Ankara, Turkey, 12 January 2015
- XL. Optical Fiber Technology to Monitor Slope Movement**  
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- XLI. Characterization and Assessment of Large Landslide Movement Along the Bursa-Inegol-Bozuyuk Highway in Turkey**  
Oral D. G., AKGÜN H., Kockar M. K.  
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- XLII. Thermal Anomaly and Alteration Mineral Mapping in İzmir Dikili Region by using ASTER and Investigation of the Geothermal Potential of the Region**  
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- XLIII. Kilis ve Çivarı için Sismik Kaynak Modeli Oluşturulması ve Şahinbey İlçesi için Örnek Bir Sismik Tehlike Analizi**  
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2. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Hatay, Turkey, 25 - 27 September 2013, pp.1-10
- XLV. Doğu Marmara Bölgesinin Sismik Tehlike Değerlendirmesi için Bir Sismik Kaynak Modeli Kuzey Anadolu Fay Sistemi Segmanlarına Dair Bir Uygulama**  
CAMBAZOĞLU S., AKGÜN H., KOÇKAR M. K.  
2. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Hatay, Turkey, 25 - 27 September 2013, pp.1-11
- XLVI. Sismik Saha Karakterizasyonlarında Birleştirilmiş Yüzey Dalgası Yöntemlerinin Kullanılması**  
EKER A. M., AKGÜN H., KOÇKAR M. K.  
2. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Hatay, Turkey, 25 - 27 September 2013, pp.1-10
- XLVII. A comprehensive study to define local site effects in northern Ankara Turkey**

- EKER A. M., AKGÜN H., KOÇKAR M. K.  
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- XLVIII. Probabilistic Seismic Hazard Assessment with the Integration of Local Site Characterization Studies for Düzce Province Turkey**  
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## Supported Projects

KOÇKAR M. K., AKGÜN H., TEMİZ A. F., OKALP K., TUBITAK Project, Depremlerin Tetiklediği Heyelanların Yaratmış Olduğu Tehlike Ve Risklerin Fiber Optik Yöntemlerle Laboratuvara Test Edilmesi Ve Sahada İzlenmesi Sonucunda Gerçek Zamanlı Bir Heyelan Erken Uyarı Sisteminin Kurulması (Heusis-Net), 2021 - 2024  
 Askan Gündoğan A., Koçkar M. K., Erberik M. A., Şenol Balaban M., Tün M., Kop A., Project Supported by Other Official Institutions, KENTSEL SİSMİK DİRENÇLİLİK DEĞERLENDİRİMESİ İÇİN BİR YÖNTEM GELİŞTİRİLMESİ: TÜRKOĞLU, KAHRAMANMARAŞ ÖRNEĞİ, 2021 - 2023  
 Yılmaz M. T., Koçkar M. K., Akgün H., Erberik M. A., Askan Gündoğan A., Temiz A., Project Supported by Other Official Institutions, TOPOĞRAFİK VE JEOLOJİK SAYISAL VERİLER KULLANILARAK TÜRKİYE ÖLÇEĞİNDE TAHMİNİ Vs30

## HARİTASININ CBS ORTAMINDA ÜRETİLMESİ, 2020 - 2022

Akgün H., Koçkar M. K., Gök E., Koç A., Cambazoğlu S., Yal Önder G. P., TUBITAK Project, Menderes Masifi Mermert Kütlelerinin Jeomekanik Özelliklerinin ve Asal Gerilmelerin Belirlenmesi Sonucu Çatlak Ağrı İyileştirme Mekanizma ve Parametrelerinin Hidro-Mekanik Modelleme Çalışmaları ile Araştırılması, 2020 - 2022  
Akgün H., Koçkar M. K., Project Supported by Other Official Institutions, Kocaeli İlinde Heyelan Hareketlerinin Erken Uyarı Sistemleri ile İzlenmesi, Depremle Meydana Gelen Sismik Hareketin ve Diğer Faktörlerin (Hidrojeolojik, Hidrolojik, Yağış koşulları) Heyelan Kütle Hareketlerinde Meydana Gelen Deformasyonlar Uzerindeki Etkilerinin ve Hassasiyetlerinin İncelenmesi (UDAP), 2017 - 2021  
Akgün H., Koçkar M. K., Project Supported by Higher Education Institutions, Konya Killерinin Jeoteknik Uygulamalarla Katı atık İzolasyon Şiltesi Olarak Kullanılması için Bentonit ile İyileştirilmesi, 2018 - 2020  
Akgün H., Koçkar M. K., Project Supported by Other Official Institutions, Kocaeli İli Heyelan Hareketlerinin İzlenmesinde Fiber Optik Teknolojisinin Kullanımı Ulusal Deprem Araştırma Programı UDAP, 2014 - 2017

## Metrics

Publication: 104

Citation (WoS): 199

Citation (Scopus): 411

H-Index (WoS): 11

H-Index (Scopus): 14

## Non Academic Experience

GAZİ ÜNİVERSİTESİ, Deprem Mühendisliği Uygulama ve Araştırma Merkezi

ODTÜ, Jeoloji Mühendisliği Bölümü, Araştırma Görevlisi

University, UNIVERSITY OF TEXAS AT AUSTIN, CIVIL AND ENVIRONMENTAL ENGINEERING, Araştırmacı ve Araştırma Asistanı

Texas Üniversitesi, Austin, Araştırmacı ve Araştırma Asistanı