

## Prof. CEM KINCAL

### Personal Information

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### International Researcher IDs

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ScopusID: 12761454800

Yoksis Researcher ID: 143498

### Education Information

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Uygulamalı Jeoloji (Dr), Turkey 2002 - 2005

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Uygulamalı Jeoloji (YI) (Tezli), Turkey 1996 - 1999

Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, Turkey 1992 - 1996

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, İZMİR İÇ KÖRFEZİ ÇEVRESİNDE YER ALAN BİRİMLERİN COĞRAFİ BİLGİ SİSTEMLERİ VE UZAKTAN ALGILAMA TEKNİKLERİ KULLANILARAK MÜHENDİSLİK JEOLJİSİ AÇISINDAN DEĞERLENDİRİLMESİ, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Uygulamalı Jeoloji (Dr), 2005

Postgraduate, Coğrafi bilgi sistemlerinin jeolojideki bir uygulaması, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Uygulamalı Jeoloji (YI) (Tezli), 1999

### Research Areas

Geotechnical Engineering, Geographic Information Systems, Geological Engineering, Applied Geology, Engineering Geology foundations, earthquakes, dams, reservoirs, Soil Mechanics, Rock Mechanics, Engineering and Technology

### Academic Titles / Tasks

Professor, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2023 - Continues

Associate Professor, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2015 - 2023

Assistant Professor, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2014 - 2015

Lecturer PhD, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 1997 - 2014

## Academic and Administrative Experience

Assistant Director of the Institute, Dokuz Eylul University, Fen Bilimleri Enstitüsü, 2022 - Continues

Deputy Head of Department, Dokuz Eylul University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2015 - 2018

## Advising Theses

KINCAL C., Landslide susceptibility mapping of the Izmir metropolitan area, Postgraduate, H.KAYHAN(Student), 2021

KINCAL C., Gnayslarda açılmış açık maden ocağı şevlerinin sayısal analizi ve izlenmesi, Postgraduate, E.KALHAN(Student), 2021

KINCAL C., Gnays kaya şevlerindeki hat etüdü ölçümleriyle insansız hava aracı verilerinin kinematik analizlerinin karşılaştırılması, Postgraduate, M.KARAKAŞ(Student), 2021

KINCAL C., İzmir şehir merkezinde yüzeyleyen andezit lavlarının dayanımlarının anizotropiye bağlı değişimlerinin belirlenmesi, Postgraduate, S.TEMBO(Student), 2020

KINCAL C., GÖKTÜRKLER G., Harmandalı (İzmir) atık depolama sahasının mühendislik jeolojisi, Postgraduate, L.PAZARBAŞI(Student), 2018

KINCAL C., Bağarasi-Foça (İzmir) arasındaki karayolu şevlerinin mühendislik jeolojisi, Postgraduate, M.LUKE(Student), 2017

KINCAL C., Engineering geology of the slopes along the Candarli-Dikili (İzmir) route, Postgraduate, S.İNCE(Student), 2014

KINCAL C., Remote sensing and geographical information systems based investigation of the Dikili-Kaynarca and Bbergama-Ovacik hydrothermal alteration zones, Postgraduate, K.ÖZGEN(Student), 2009

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

- I. **Türkiye Mw 7.7 Pazarcık and Mw 7.6 Elbistan earthquakes of February 6th, 2023: Contribution of valley effects on damage pattern**  
Karray M., Karakan E., KINCAL C., Chiaradonna A., Gül T. O., Lanzo G., Monaco P., SEZER A.  
Soil Dynamics and Earthquake Engineering, vol.181, 2024 (SCI-Expanded)
- II. **Investigation of wedge sliding potential using different methods in two open pit albite mines excavated in gneiss in western Türkiye**  
Karagöz S. D., KOCA M. Y., KINCAL C.  
Bulletin of Engineering Geology and the Environment, vol.82, no.12, 2023 (SCI-Expanded)
- III. **Insights on the role of local site effects on damage distribution in the Izmir metropolitan area induced by the October 30, 2020 Samos earthquake**  
Chiaradonna A., Karakan E., KINCAL C., Lanzo G., Monaco P., SEZER A., Karray M.  
Soils and Foundations, vol.63, no.4, 2023 (SCI-Expanded)
- IV. **Determining the inclination angles of anchor bolts for sliding and toppling failures: a case study of İzmir, Türkiye**  
Koca M. Y., Kincal C., Onur A. H., Kadakci Koca T.  
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, vol.82, pp.1-20, 2023 (SCI-Expanded)
- V. **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)
- VI. **The role of site effects on elevated seismic demands and corollary structural damage during the October 30, 2020, M7.0 Samos Island (Aegean Sea) Earthquake**  
ÇETİN K. Ö., Papadimitriou A. G., ALTUN S., Pelekis P., UNUTMAZ B., Rovithis E., AKGÜN M., Klimis N., ASKAN GÜNDOĞAN A., Ziotopoulou K., et al.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.20, no.14, pp.7763-7792, 2022 (SCI-Expanded)

- VII. **A Combined Method for Preparation of Landslide Susceptibility Map in Izmir (Türkiye)**  
Kincal C., Kayhan H.  
applied sciences, vol.12, pp.1-28, 2022 (SCI-Expanded)
- VIII. **The site effects in Izmir Bay of October 30 2020, M7.0 Samos Earthquake**  
ÇETİN K. Ö., ALTUN S., ASKAN GÜNDOĞAN A., AKGÜN M., SEZER A., KINCAL C., ÖZDAĞ Ö. C., Ipek Y., UNUTMAZ B., GÜLERCE Z., et al.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.152, 2022 (SCI-Expanded)
- IX. **Site investigation of a landslide site and its surroundings: a case study at Egridere district, northern Izmir city, Turkey**  
Tunçel A., Kincal C., Berge M. A.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.14, no.20, 2021 (SCI-Expanded)
- X. **A reconnaissance study in Izmir (Bornova Plain) affected by October 30, 2020 Samos earthquake**  
NUHOĞLU A., Erener M. F., Hızal Ç., KINCAL C., ERDOĞAN D. Ş., ÖZDAĞ Ö. C., AKGÜN M., ERCAN E., Kalfa E., Köksal D., et al.  
International Journal of Disaster Risk Reduction, vol.63, 2021 (SCI-Expanded)
- XI. **Fault-controlling safe slope design procedure in an open-pit mine case study: Tuncbilek-Kutahya (Turkey) coal field**  
KINCAL C.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.14, no.2, 2021 (SCI-Expanded)
- XII. **Correlations of in situ modulus of deformation with elastic modulus of intact core specimens and RMR values of andesitic rocks: a case study of the Izmir subway line**  
Kincal C., Koca M. Y.  
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, vol.78, no.7, pp.5281-5299, 2019 (SCI-Expanded)
- XIII. **The relationships between the rock material properties and weathering grades of andesitic rocks around A degrees zmir, Turkey**  
KOCA M. Y., KINCAL C.  
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, vol.75, no.2, pp.709-734, 2016 (SCI-Expanded)
- XIV. **Application of two new stereographic projection techniques to slope stability problems**  
Kincal C.  
INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.66, pp.136-150, 2014 (SCI-Expanded)
- XV. **Using advanced InSAR time series techniques to monitor landslide movements in Badong of the Three Gorges region, China**  
Liu P., Li Z., Hoey T., Kincal C., Zhang J., Zeng Q., Muller J.  
INTERNATIONAL JOURNAL OF APPLIED EARTH OBSERVATION AND GEOINFORMATION, vol.21, pp.253-264, 2013 (SCI-Expanded)
- XVI. **Application of remote sensing data and GIS for landslide risk assessment as an environmental threat to Izmir city (west Turkey)**  
AKGÜN A., KINCAL C., Pradhan B.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.184, no.9, pp.5453-5470, 2012 (SCI-Expanded)
- XVII. **Anchor application in Karatepe andesite rock slope, Izmir-Turkiye**  
KOCA M. Y., KINCAL C., ARSLAN A. T., Yilmaz H. R.  
INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.48, no.2, pp.245-258, 2011 (SCI-Expanded)
- XVIII. **Fractal parameter approach on weathering grade determination of CeAYme (Izmir, Turkey) tuffs**  
Kincal C., Koca M. Y., ÖZDEN G., Demirbasa N.  
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, vol.69, no.4, pp.617-629, 2010 (SCI-Expanded)
- XIX. **Landslide susceptibility assessment in the Izmir (West Anatolia, Turkey) city center and its near vicinity by the logistic regression method**  
KINCAL C., AKGÜN A., Koca M. Y.

- ENVIRONMENTAL EARTH SCIENCES, vol.59, no.4, pp.745-756, 2009 (SCI-Expanded)
- XX. **A Proposed Method for Drawing the Great Circle Representing Dip Angle and Strike Changes**  
KINCAL C., KOCA M. Y.  
ENVIRONMENTAL & ENGINEERING GEOSCIENCE, vol.15, no.3, pp.145-165, 2009 (SCI-Expanded)
- XXI. **AN INVESTIGATION OF SUBSIDENCE EFFECT ON WASTE DUMP STABILITY IN SOMA-EYNEZ COAL FIELD, TURKEY**  
ONARGAN T., Kose H., Pamukcu C., Kincal C.  
ARCHIVES OF MINING SCIENCES, vol.54, no.4, pp.687-707, 2009 (SCI-Expanded)
- XXII. **Changes in the engineering properties of marble in fire-exposed columns**  
Koca M., ÖZDEN G., YAVUZ A. B., Kincal C., ONARGAN T., KÜÇÜK K.  
INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.43, no.4, pp.520-530, 2006 (SCI-Expanded)
- XXIII. **A solid waste disposal site selection procedure based on groundwater vulnerability mapping**  
ŞİMŞEK C., Kincal C., Gunduz O.  
ENVIRONMENTAL GEOLOGY, vol.49, no.4, pp.620-633, 2006 (SCI-Expanded)
- XXIV. **Abandoned stone quarries in and around the Izmir city centre and their geo-environmental impacts - Turkey**  
Koca M., Kincal C.  
ENGINEERING GEOLOGY, vol.75, no.1, pp.49-67, 2004 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Investigation of the Bearing Capacity of Kalabak Tepe Limestones by the Various Analysis Methods**  
Kadakci Koca T., Kuruoglu M., Koken E., Kincal C.  
Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.29, no.1, pp.236-259, 2024 (Peer-Reviewed Journal)
- II. **Stability analysis of rock slopes using kinematic analysis and numerical modeling: Foca-Bagarasi State Highway, Turkey**  
Ankah M. L. Y., KINCAL C.  
MODELING EARTH SYSTEMS AND ENVIRONMENT, vol.8, no.4, pp.5225-5233, 2022 (ESCI)
- III. **A new approach to the anisotropy classification based on curve length measurement method: a case study in Ürkmez dam site-İzmir, Türkiye**  
Koca M. Y., Kincal C.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.15, 2022 (Scopus)
- IV. **Correlation between aeromagnetic and spherical free air gravity anomaly in western Anatolia, Turkey**  
Doğru F., Pamukçu O., Kincal C., Gönenç T.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.15, no.1300, pp.1-15, 2022 (Scopus)
- V. **Heyelanlı Bir Alanın Yeniden Etkinleşme Potansiyelinin İncelenmesi: Harmandalı\İzmir Katı Atık Düzenli Depolama Alanı Örneği**  
KINCAL C., KADAKCI KOCA T., KOCA M. Y.  
JEOLoji MÜHENDİSLİĞİ DERGİSİ, 2021 (Scopus)
- VI. **Landslide Susceptibility Mapping Using GIS-based Vector Grid File (VGF) Validating with InSAR Techniques: Three Gorges, Yangtze River (China)**  
KINCAL C., Li Z., Drummond J., Liu P., Hoey T., Muller J.  
AIMS GEOSCIENCES, vol.3, no.1, pp.116-141, 2017 (ESCI)
- VII. **Sübsidans Nedeniyle Elek Yolu ve Açık Ocak Şevlerinde Meydana Gelen Deformasyonların Değerlendirilmesi Soma Kırakdere Kömür Sahası için Örnek Bir Çalışma**  
KINCAL C., KARAKUŞ D., ONUR A. H., KOCA M. Y.  
JEOLoji MÜHENDİSLİĞİ DERGİSİ, vol.38, no.2, pp.53-71, 2014 (Scopus)
- VIII. **Engineering-geological and geotechnical investigations for risk assessment of the university Olympic**

**village in Izmir (Turkey)**

KINCAL C., KOCA M. Y., YILMAZ H., AKGÜN M., ÖZYALIN Ş., ESKİŞAR T., AKÇİĞ Z., VAN LOON A.  
Geologos, vol.16, no.1, pp.43-57, 2010 (Scopus)

**IX. Large-scale land-suitability mapping in the GIS environment for the construction site of the University Olympic Village in Izmir (Turkey)**

KINCAL C., YALCIN KOCA M., VAN LOON A.  
Geologos, vol.15, pp.189-198, 2009 (Scopus)

**X. Stability of the Andesite Quarry Slopes Using Kinematic Analysis: Case Study; Göztepe, Bayraklı and Osmangazi Quarries in İzmir (Turkey)**

KOCA M. Y., KINCAL C., ARSLAN A. T., AYDOĞMUŞ T.  
Veröffentlichungen des Instituts für Geotechnik der TU Bergakademie Freiberg, 2006 (Peer-Reviewed Journal)

**Refereed Congress / Symposium Publications in Proceedings**

**I. GEOTECHNICAL AND STRUCTURAL ASSESSMENT OF THE DAMAGES IN BAYRAKLI REGION AFTER SAMOS 2020 EARTHQUAKE**

Erener M. F., Hızal Ç., Erdoğan D. Ş., Nuhoğlu A., Ercan E., Kincal C., Akgün M., Özdağ Ö. C.  
6th International Conference on Earthquake Engineering and Seismology, Kocaeli, Turkey, 13 - 15 October 2021, pp.990-999

**II. Investigation of a landslide: a case study from Eğridere, İzmir, Turkey**

TUNÇEL A., KINCAL C., BERGE M. A., ONGAR A., GÖKTÜRKLER G., KOCA M. Y.  
7. International Earth Science Colloquium on the Aegean Region-IESCA2019, 7 - 11 October 2019

**III. Evaluating the Slope Movements with Inclinomenter in Open Pit Mines A Case Study Soma Lignite Basin**

TURAN G., ONUR A. H., KARAKUŞ D., KINCAL C., KOCA M. Y.  
The World Multidisciplinary Earth Sciences Symposium, Prag, Czech Republic, 7 - 11 September 2015

**IV. Aliğa Helvacı Andezitlerinin Liman Dolgusu Olarak Kullanılabilirliğinin Araştırılması**

ÖZDOĞAN M. V., DELİORMANLI A. H., YENİCE H., KARAKUŞ D., AKAL C., KINCAL C.  
9. Uluslararası Endüstriyel Hammaddeler Sempozyumu, 14 - 15 May 2015

**V. Eğimli ve Killi Taban Şartlarında Açık İşletme Madenciliği ile Kömür Üretimi: Kısırkdere Örneği**

ÖZDOĞAN M. V., KARAKUŞ D., ONUR A. H., KINCAL C., KOCA M. Y.  
23rd International Mining Congress And Exhibition of Turkey, 16 - 19 April 2013

**VI. İzmir Kuvvetli Yer Hareketi Deprem İstasyon Ağı**

POLAT O. D., ÇEKEN U., GÖK E., NURLU M., KINCAL C., KOCA M. Y., YALÇINKAYA E., ULUSAY R., ARSLAN B.  
Türkiye 18. Uluslararası Jeofizik Kongre ve Sergisi, Ankara, Turkey, 14 - 17 October 2008

**VII. Armutalanı (Marmaris-Muğla) Beldesi Sahasının Yerleşim Amaçlı Arazi Kullanım Haritasının Coğrafi Bilgi Sistemleri (CBS) Destekli Hazırlanması**

KINCAL C., KOCA M. Y., ÖZYALIN Ş.  
TMMOB Harita ve Kadastro Mühendisleri Odası Ulusal Coğrafi Bilgi Sistemleri Kongresi, Trabzon, Turkey, 30 October 2007, pp.775-780

**VIII. Seismic Risk Determination of Bornova Plain Soils in Izmir Turkey Using S wave and P wave Velocity Measurements**

KINCAL C., ÖZYALIN Ş., ZARİF H. İ.  
International Earth Sciences Colloquium on the Aegean Regions, IESCA 2005, İzmir, Turkey, 4 - 07 October 2005, pp.194-205

**IX. Tahtalı (İzmir) Baraj Yeri Uygunluğunun Coğrafi Bilgi Sistemleri Kullanılarak Analizi**

KINCAL C., AKGÜN A., ERONAT A. H., TÜRK N.  
1.Ulusal Barajlar ve Hidroelektrik Santraller Sempozyumu, ANKARA, TÜRKİYE, Turkey, 01 June 2004, pp.45-56

**X. Barajlardaki Siltasyonun Uydu Görüntülerinin İşlenmesi Yoluyla Değerlendirilmesi”**

AKGÜN A., KINCAL C., TÜRK N., ERONAT A. H.

1.Ulusal Barajlar ve Hidroelektrik Santraller Sempozyumu, ANKARA, TÜRKİYE, Turkey, 1 - 03 June 2004, pp.111-120

**XI. An Application of Multi Criteria Decision Analysis in Harmandalı İzmir Waste Disposal Site Using Geographical Information Systems**

BAYSAL G., TECİM V., KINCAL C.

International Earth Science Colloquium on The Eagean Region, IESCA 2005, İzmir, Turkey, 4 - 07 October 2005, pp.31-42

**XII. Armutalanı Marmaris Muğla beldesinin yerleşim alanının jeoteknik değerlendirilmesi**

KOCA M. Y., SÖZBİLİR H., KINCAL C.

55. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 11 - 15 March 2002

**XIII. Andezitlerin dış mekan kaplama taşı olarak kullanımında Bergama örneği**

KOCA M. Y., YAVUZ A. B., KINCAL C.

Türkiye III. Mermer Sempozyumu, Bildiriler Kitabı, Afyon, Turkey, 3 - 05 May 2001, pp.99-112

## **Metrics**

Publication: 50

Citation (WoS): 495

Citation (Scopus): 513

H-Index (WoS): 10

H-Index (Scopus): 11

## **Awards**

Somay Altaş A. M., Kincal C., Sezer A., Ufuk 2020 Programı eşik üstü, Tübitak, April 2015