

Prof. ABDULLAH ERHAN TERCAN

Personal Information

Office Phone: [+90 312 297 7677](tel:+903122977677)

Office Phone: [+90 312 297 7600](tel:+903122977600)

Fax Phone: [+90 312 299 2155](tel:+903122992155)

Email: erhan@hacettepe.edu.tr

Web: <http://yunus.hacettepe.edu.tr/~erhan/>

Address: Hacettepe Üniversitesi, Maden Mühendisliği Bölümü, 06800 Beytepe, Ankara

International Researcher IDs

ORCID: 0000-0002-0393-4656

Yoksis Researcher ID: 4127

Education Information

Doctorate, The University of Leeds, Department Of Mineral And Mining Engineering, Geostatistics, United Kingdom 1988 - 1994

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Maden Mühendisliği, Turkey 1984 - 1987

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği, Turkey 1978 - 1982

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Nonparametric Methods for Estimating Conditional Distributions and Local Confidence Intervals, University Of Leeds, Department Of Mining And Mineral Engineering, 1993

Postgraduate, Oltu-Aşkale (Erzurum) Kömürlerinin Petrografik İncelenmesi ve Balkaya (Oltu) Bölümünün Ön Maden İşletme Etüdü, Hacettepe Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 1987

Research Areas

Mining Engineering and Technology, Mining Operations, Open pit and underground production planning, Ore Bed Modeling, Engineering and Technology

Academic Titles / Tasks

Professor, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2003 - Continues

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 1999 - 2003

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 1995 - 1999

Lecturer PhD, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 1994 - 1995

Academic and Administrative Experience

Hacettepe Üniversitesi, Mühendislik Fakültesi, Geomatik Mühendisliği Bölümü, 2011 - 2012

Hacettepe Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2005 - 2008

Hacettepe Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2004 - 2007

Courses

GRADUATE PROJECT I, Undergraduate, 2016 - 2017

MADENCİLİKTE SİMULASYON, Postgraduate, 2016 - 2017

KONUMSAL İSTATİSTİK, Postgraduate, 2016 - 2017

MINING ECONOMICS, Undergraduate, 2016 - 2017

GRADUATE PROJECT II, Undergraduate, 2016 - 2017

MADEN PROJELERİNİN DEĞERLENDİRİLMESİ, Postgraduate, 2016 - 2017

BÖLGESEL DEĞİŞKENLER TEORİSİ VE MADEN. UYG., Postgraduate, 2016 - 2017

JEOSTATİSTİKSEL BENZETİM, Postgraduate, 2016 - 2017

MAD 307 EVALUATION OF ORE DEPOSITS, Undergraduate, 2016 - 2017

MAD 465 MINERAL RESOURCE ESTIMATION, Undergraduate, 2016 - 2017

MADEN DEĞERLEME, Doctorate, 2016 - 2017

Advising Theses

TERCAN A. E., g-ROKY: Maden Kaynak Kestiriminde Homojen Ortam Modellenmesine Yönelik Yeni Bir Yöntemin Geliştirilmesi, Doctorate, H.KIVRAK(Student), 2018

TERCAN A. E., Mihalıççık Yunusemre bölgesi Küçüksivri ve Karasivri lateritlerinde nikel kaynak kestirimi ve risk analizi, Postgraduate, R.KUŞOĞLU(Student), 2017

TERCAN A. E., Sağırlar ve Çivili (Bursa-Orhaneli) kömür sahaları kaynak kestirimi, Postgraduate, M.AKTAN(Student), 2015

TERCAN A. E., Kopulalarla maden kaynak kestirimi, Doctorate, F.ATALAY(Student), 2015

TERCAN A. E., Bağımsız bileşenler analizi ile çok değişkenli jeostatistiksel kestirim, Doctorate, B.SOHRABIAN(Student), 2013

TERCAN A. E., Türkiye tersiyer kömürlerinin jeostatistiksel olarak incelenmesi, Postgraduate, F.ATALAY(Student), 2011

TERCAN A. E., Himmetoğlu (Bolu-Göynük) linyit sahasının jeostatistiksel yöntemlerle değerlendirilmesi, Postgraduate, H.KIVRAK(Student), 2011

TERCAN A. E., Eşlenik ilişki analizi ile çok değişkenli doğrusal olmayan jeostatistiksel kestirim, Doctorate, E.AKCAN(Student), 2009

TERCAN A. E., Bootstrap'a dayalı rezerv kestirim yöntemlerinin geliştirilmesi, Doctorate, A.KÖSE(Student), 2004

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Copula-Based Data-Driven Multiple-Point Simulation Method**
SOHRABIAN B., TERCAN A. E.
Spatial Statistics, vol.59, 2024 (SCI-Expanded)
- II. **COST EFFECTIVENESS AND PUBLIC HEALTH IMPACT OF IMPLEMENTING GENDER-NEUTRAL VACCINATION WITH THE 9-VALENT HUMAN PAPILLOMAVIRUS VACCINE IN TURKIYE**
Ersoy A. B., Koc E., Pavelyev A., Daniels V., Ugrekheldze D., Malhan S., Basaran M., ÖZYAR E., Hafiz G., Yumuk P. F., et al.
VALUE IN HEALTH, no.12, 2023 (SCI-Expanded)
- III. **Joint simulation of coal quality attributes using a new simulated annealing-based method of diagonalisation**

- Sohrabian B., Soltani-Mohammadi S., TERCAN A. E.
International Journal of Mining, Reclamation and Environment, vol.37, no.3, pp.216-242, 2023 (SCI-Expanded)
- IV. **A Monte Carlo Simulation-based algorithm for updating Combined Variance cost function in optimally locating additional drillholes**
Soltani-Mohammadi S., Sohrabian B., Safa M., TERCAN A. E.
INTERNATIONAL JOURNAL OF MINING RECLAMATION AND ENVIRONMENT, vol.36, pp.305-322, 2022 (SCI-Expanded)
- V. **Separation of geomagnetic anomalies in the Bashmaq area in northwestern Iran by factorial kriging**
Hasani M., Sharghi Y., TERCAN A. E.
EXPLORATION GEOPHYSICS, vol.52, no.5, pp.540-550, 2021 (SCI-Expanded)
- VI. **Coal resource estimation using Gaussian copula**
ATALAY F., TERCAN A. E.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.175, pp.1-9, 2017 (SCI-Expanded)
- VII. **Lignite resource estimations and seam modeling of Thar Field, Pakistan**
SIDDIQUI F. I., PATHAN A. G., ÜNVER B., TERCAN A. E., HİNDİSTAN M. A., ERTUNÇ G., ATALAY F., UNAL S., KILLIOĞLU Y.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.140, pp.84-96, 2015 (SCI-Expanded)
- VIII. **Introducing minimum spatial cross-correlation kriging as a new estimation method of heavy metal contents in soils**
SOHRABIAN B., TERCAN A. E.
GEODERMA, vol.226, pp.317-331, 2014 (SCI-Expanded)
- IX. **Multivariate geostatistical simulation by minimising spatial cross-correlation**
Sohrabian B., TERCAN A. E.
COMPTES RENDUS GEOSCIENCE, vol.346, pp.64-74, 2014 (SCI-Expanded)
- X. **Seam modeling and resource estimation in the coalfields of western Anatolia**
TERCAN A. E., ÜNVER B., HİNDİSTAN M. A., ERTUNÇ G., ATALAY F., Unal S., Killioglu Y.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.112, pp.94-106, 2013 (SCI-Expanded)
- XI. **Multivariate geostatistical simulation of coal quality data by independent components**
TERCAN A. E., SOHRABIAN B.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.112, pp.53-66, 2013 (SCI-Expanded)
- XII. **Geostatistical estimation of coal quality variables by using covariance matching constrained kriging**
ERTUNÇ G., TERCAN A. E., HİNDİSTAN M. A., ÜNVER B., ÜNAL S., ATALAY F., KILLIOĞLU S. Y.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.112, pp.14-25, 2013 (SCI-Expanded)
- XIII. **Constrained multiple indicator kriging using sequential quadratic programming**
SOLTANI-MOHAMMADI S., TERCAN A. E.
COMPUTERS & GEOSCIENCES, vol.48, pp.211-219, 2012 (SCI-Expanded)
- XIV. **Local spatial regression models: a comparative analysis on soil contamination**
TÜTMEZ B., KAYMAK U., TERCAN A. E.
STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.26, no.7, pp.1013-1023, 2012 (SCI-Expanded)
- XV. **Evaluating geo-environmental variables using a clustering based areal model**
TÜTMEZ B., KAYMAK U., TERCAN A. E., LLOYD C. D.
COMPUTERS & GEOSCIENCES, vol.43, pp.34-41, 2012 (SCI-Expanded)
- XVI. **A Study of nozzle angle in stone surface treatment with water jets**
ÖZÇELİK Y., TERCAN A. E., YILMAZKAYA E., CICCURI, COSTA G.
CONSTRUCTION AND BUILDING MATERIALS, vol.25, no.11, pp.4271-4278, 2011 (SCI-Expanded)
- XVII. **Geostatistical coal quality control in longwall mining**
HİNDİSTAN M. A., TERCAN A. E., Uenver B.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.81, no.3, pp.139-150, 2010 (SCI-Expanded)
- XVIII. **An algorithm for quantifying regionalized ore grades**
TÜTMEZ B., TERCAN A. E., KAYMAK U.

- JOURNAL OF THE SOUTH AFRICAN INSTITUTE OF MINING AND METALLURGY, vol.108, no.2, pp.83-90, 2008 (SCI-Expanded)
- XIX. **The effects of land use changes on some soil properties in Indagi Mountain Pass - Cankiri, Turkey**
BASARAN M., ERPUL G., Tercan A. E., CANGA M. R.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.136, pp.101-119, 2008 (SCI-Expanded)
- XX. **Spatial estimation of some mechanical properties of rocks by fuzzy modelling**
TÜTMEZ B., Tercan A. E.
COMPUTERS AND GEOTECHNICS, vol.34, no.1, pp.10-18, 2007 (SCI-Expanded)
- XXI. **Fuzzy modeling for reserve estimation based on spatial variability**
TÜTMEZ B., Tercan A. E., KAYMAK U.
MATHEMATICAL GEOLOGY, vol.39, no.1, pp.87-111, 2007 (SCI-Expanded)
- XXII. **Canonical ridge correlation of mechanical and engineering index properties**
Tercan A. E., Ozcelik Y.
INTERNATIONAL JOURNAL OF ROCK MECHANICS AND MINING SCIENCES, vol.43, no.1, pp.58-65, 2006 (SCI-Expanded)
- XXIII. **Correlation of serum and ascitic IL-12 levels with second-look laparotomy results and disease progression in advanced epithelial ovarian cancer patients**
Bozkurt N., Yuce K., Basaran M., Gariboglu S., Kose F., Ayhan A.
INTERNATIONAL JOURNAL OF GYNECOLOGICAL CANCER, vol.16, no.1, pp.83-86, 2006 (SCI-Expanded)
- XXIV. **The role of cytoreductive surgery in nongenital cancers metastatic to the ovaries**
Ayhan A., Guvenal T., Salman M., Ozyuncu O., Sakinci M., Basaran M.
GYNECOLOGIC ONCOLOGY, vol.98, no.2, pp.235-241, 2005 (SCI-Expanded)
- XXV. **Clinical results of a split sample liquid-based cytology (ThinPrep) study of 4,322 patients in a Turkish institution**
Tuncer Z., Basaran M., Sezgin Y., Firat P., Kuzey G.
EUROPEAN JOURNAL OF GYNAECOLOGICAL ONCOLOGY, vol.26, no.6, pp.646-648, 2005 (SCI-Expanded)
- XXVI. **Global recoverable reserve estimation by covariance matching constrained kriging**
Tercan A. E.
ENERGY SOURCES, vol.26, no.12, pp.1177-1185, 2004 (SCI-Expanded)
- XXVII. **Management of ovarian dysgerminoma during a pregnancy complicated by preeclampsia; A case report**
Güven S., Basaran M., Usubutun A., Tuncer Z.
EUROPEAN JOURNAL OF GYNAECOLOGICAL ONCOLOGY, vol.25, no.6, pp.759-760, 2004 (SCI-Expanded)
- XXVIII. **Correlation of platelet count with second-look laparotomy results and disease progression in patients with advanced epithelial ovarian cancer**
Bozkurt N., Yuce K., Basaran M., Kose F., Ayhan A.
OBSTETRICS AND GYNECOLOGY, vol.103, no.1, pp.82-85, 2004 (SCI-Expanded)
- XXIX. **The ranked tile resampling in assessing accuracy for the global coal reserve estimates**
Tercan A. E.
ENERGY SOURCES, vol.25, no.2, pp.93-102, 2003 (SCI-Expanded)
- XXX. **Survival and prognostic factors in patients with synchronous ovarian and endometrial cancers and endometrial cancers metastatic to the ovaries**
Ayhan A., Guvenal T., Coskun F., Basaran M., Salman M.
EUROPEAN JOURNAL OF GYNAECOLOGICAL ONCOLOGY, vol.24, no.2, pp.171-174, 2003 (SCI-Expanded)
- XXXI. **Estimation of lignite reserve in the Kalburcayiri field, Kangal basin, Sivas, Turkey**
Tercan A. E., Karayigit A. İ.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.47, no.2, pp.91-100, 2001 (SCI-Expanded)
- XXXII. **Geostatistical evaluation of dimension-stone quarries**
Tercan A. E., Ozcelik Y.
ENGINEERING GEOLOGY, vol.58, no.1, pp.25-33, 2000 (SCI-Expanded)
- XXXIII. **Importance of orthogonalization algorithm in modeling conditional distributions by orthogonal**

transformed indicator methods

Terzan A. E.

MATHEMATICAL GEOLOGY, vol.31, no.2, pp.155-173, 1999 (SCI-Expanded)

Articles Published in Other Journals

- I. **Agricultural land suitability assessment with GIS-based multi-criteria decision analysis and geostatistical approach in semi-arid regions**
TUĞAÇ M. G., Terzan E., TORUNLAR H., KARAKURT E., USUL M.
Soil Studies, vol.12, no.1, pp.15-29, 2023 (Peer-Reviewed Journal)
- II. **Soma Eyzek kömür sahası için farklı bir üretim yöntemi önerisi**
ÜNVER B., HİNDİSTAN M. A., TERCAN A. E., ERTUNÇ G., ÜNAL M. S., KILLIOĞLU S. Y., ATALAY F.
Bilimsel Madencilik Dergisi, vol.56, pp.5-12, 2017 (Peer-Reviewed Journal)
- III. **Veledler Sırtı Kurtşeyh Sivrihisar Eskişehir sepiyolit cevherleşmesinin rezerv tenör değerlendirilmesi**
SARAÇ C., İRKEÇ M. T., GENÇOĞLU H., TERCAN A. E.
Jeoloji Mühendisliği, no.49, pp.23-34, 1996 (Peer-Reviewed Journal)
- IV. **Grade and reserve estimation of the tulovasi borate deposit by block kriging**
SARAÇ C., TERCAN A. E.
International Geology Review, vol.38, no.9, pp.832-837, 1996 (Scopus)
- V. **İndikatör temel bileşenler kriging yöntemi ile yeraltısuyu kirliliği saptanılması ve yöntemin Eskişehir Ovası na uygulanması**
SARAÇ C., TERCAN A. E., MAMUREKLİ D., KAÇAROĞLU F.
Jeoloji Mühendisliği, no.48, pp.16-21, 1996 (Peer-Reviewed Journal)
- VI. **Sinir ağları ile maden yataklarının değerlendirilmesinde jeostatistiksel simülasyonun kullanılması**
SARAÇ C., TERCAN A. E.
Geosound, vol.2, pp.327-342, 1994 (Peer-Reviewed Journal)
- VII. **A geostatistical case study of the Kızılyüksek Yatardıç chromium orebody**
SARAÇ C., TERCAN A. E.
Geosound, no.20, pp.212-229, 1992 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **VALUATION OF EARLY-STAGE COAL FIELDS BY COST APPROACH MALİYET YAKLAŞIMI İLE ERKEN EVRE KÖMÜR SAHALARININ DEĞERLEMESİ**
Aktan M., TERCAN A. E.
27th International Mining Congress and Exhibition of Turkey, IMCET 2022, Antalya, Turkey, 22 - 25 March 2022, pp.584-595
- II. **Classification Trees As an Aid For Domaining in Mineral Resource Estimation**
ERTUNÇ G., TERCAN A. E.
18th Mathematical Geosciences Conference IAMG 2017, Perth, Australia, 2 - 09 September 2017
- III. **Madencilik Faaliyetleri İzleme ve Otomasyon Sistemi**
TERCAN A. E., ÜNVER B., HİNDİSTAN M. A., URAL S., GAZEL S., HADİMOĞULLARI A.
Türkiye 25. Uluslararası Madencilik Kongresi ve Sergisi (IMCET 2017), 11 - 14 April 2017, pp.325-330
- IV. **Modeling Spatial Uncertainty of Soil Erodibility in Different Land Uses Using Direct Sequential Simulation DSIM**
MADENOĞLU S., ERPUL G., ATALAY F., TERCAN A. E.
Conference On Desertification and Land Degradation, 16 - 17 June 2015
- V. **Soma eynez kömür sahası için alternatif bir üretim yöntemi önerisi**

ÜNVER B., HİNDİSTAN M. A., TERCAN A. E., ERTUNÇ G., ÜNAL M. S., KILLIOĞLU S. Y., ATALAY F.
Türkiye 24. uluslararası madencilik kongresi, 14 - 17 April 2015

- VI. **A New Production Method Proposal for Soma Eynez Coal Field**
ÜNVER B., HİNDİSTAN M. A., TERCAN A. E., ERTUNÇ G., ÜNAL M. S., KILLIOĞLU S. Y., ATALAY F.
24th International Mining Congress and Exhibition of Turkey, 14 - 17 April 2015
- VII. **Geostatistics As a Tool to Estimate Undiscovered Deposits of Coal**
ATALAY F., TERCAN A. E., ERTUNÇ G.
24th INTERNATIONAL MINING CONGRESS OF TURKEY, Antalya, Turkey, 14 - 17 April 2015, pp.322-326
- VIII. **An Alternative Multivariate Kriging Technique: Covariance Matching Constrained CoKriging**
ERTUNÇ G., TERCAN A. E., ATALAY F.
24th INTERNATIONAL MINING CONGRESS OF TURKEY, Antalya, Turkey, 14 - 17 April 2015, pp.250-256
- IX. **A Geostatistical Study of Tertiary Coal Fields in Turkey**
ATALAY F., TERCAN A. E., ÜNVER B., HİNDİSTAN M. A., ERTUNÇ G.
15th Annual Conference of the International-Association-for-Mathematical-Geosciences (IAMG), Madrid, Spain, 2 - 06 September 2013, pp.723-726
- X. **Estimation of coal quality variables by covariance matching constrained kriging Kömür kalite değişkenlerinin kovaryans eşlemeli krigleme yöntemi ile kestirimi**
ERTUNÇ G., HİNDİSTAN M. A., TERCAN A. E., ÜNVER B.
23rd International Mining Congress and Exhibition of Turkey, IMCET 2013, Antalya, Turkey, 16 - 19 April 2013, vol.3, pp.1785-1792
- XI. **Decreased serum paraoxonase activity: An additional risk factor for atherosclerotic heart disease in patients with PCOS?**
Dursun P., Demirtas E., Basaran M., Bayrak A., Yarali H.
60th Annual Meeting of the American-Society-for-Reproductive-Medicine, Pennsylvania, United States Of America, 16 - 20 October 2004, vol.82
- XII. **Geostatistical interpretation of geology in Kizilyuksek Yataardic Adana Turkey chromium deposit**
TERCAN A. E., SARAÇ C.
Third International Turkish Geology Workshop, Ankara, Turkey, 31 August - 04 September 1998
- XIII. **Conditional simulation approach to assessment of groundwater contamination a case study**
TERCAN A. E., SARAÇ C.
International Symposium on Geology and Environment, İstanbul, Turkey, 2 - 09 May 1997
- XIV. **Veledler Sırtı Kurtşeyh Sivrihisar Eskişehir sepiyolit cevherleşmesinin rezerv tenör değerlendirilmesi**
SARAÇ C., İRKEÇ M. T., GENÇOĞLU H., TERCAN A. E.
49. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 7 - 12 April 1996
- XV. **Indicator principal component kriging as a decision tool in assessing groundwater pollution**
Tercan A. E., Saraç C., Mamurekli D.
International Symposium and Field Seminar on Karst Water & Environmental Impacts, Antalya, Turkey, 10 - 20 September 1995
- XVI. **Ore reserve estimation of Tulovasi borate deposit by geostatistical techniq**
SARAÇ C., TERCAN A. E.
International Workshop, Work in Progress on the Geology of Turkey, Sivas, Turkey, 6 - 10 September 1995
- XVII. **Sinir ağları ile maden yataklarının değerlendirilmesinde jeostatistiksel simülasyonun kullanılması**
SARAÇ C., TERCAN A. E.
15. yıl Sempozyumu, Çukurova Üniversitesi, Adana, Turkey, 4 - 07 April 1994
- XVIII. **A geostatistical case study of Kızılyüksek Yatardic chromium orebody**
SARAÇ C., TERCAN A. E.
1st International Symposium on Eastern Mediterranean Geology, Adana, Turkey, 13 - 16 October 1992

Expert Reports

- I. 08 09 2015 tarih ve 2015 757 Talimat nolu Ankara 12 İş Mahkemesi hakimliğinin talimatıyla istenilen Soma İş mahkemesine ait 2015 249 sayılı dosyaya yönelik bilirkişi raporu
ÖZÇELİK Y., KAHRAMAN S., TERCAN A. E.
2015

Supported Projects

- ERTUNÇ G., TERCAN A. E., TUBITAK Project, Maden Kaynak Kestiriminde Siniflandirma Ve Regresyon Agaci Yöntemi IleHomojen Ortam Modellemesi, 2016 - Continues
- ERTUNÇ G., TERCAN A. E., Project Supported by Higher Education Institutions, Sınıflandırma Ağaçlarının Kaynak Kestiriminde Yardımcı Araç Olarak Kullanımı, 2017 - 2017
- ATALAY F., TERCAN A. E., Project Supported by Other Private Institutions, Çayırhan D ve G Sektörleri Tavan Formasyonlarının Fiziksel ve Mekanik Özellikleri, 2016 - 2016
- TERCAN A. E., ATALAY F., Project Supported by Higher Education Institutions, KOPULALARLA MADEN KAYNAK KESTİRİMİ, 2015 - 2015
- TERCAN A. E., TUBITAK Project, Çokdeğişkenli Jeostatistiksel Kestirimde Dikleştirilmiş Bileşenli Yeni Yöntemlerin Geliştirilmesi, 2012 - 2013
- TERCAN A. E., TUBITAK Project, Madencilik Otomasyon ve Tasarım MOTAY Yazılımı Geliştirme, 2009 - 2012

Metrics

- Publication: 59
Citation (WoS): 396
Citation (Scopus): 295
H-Index (WoS): 12
H-Index (Scopus): 12