

## **Asst. Prof. FIRAT ATALAY**

### **Personal Information**

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**Address:** Hacettepe Üniversitesi, Beytepe Kampüsü Maden Mühendisliği Bölümü Beytepe / Ankara

### **Education Information**

Doctorate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Maden Mühendisliği Bölümü, Turkey 2011 - 2015

Post Graduate, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Maden Mühendisliği Bölümü, Turkey 2008 - 2011

Undergraduate Minor, Hacettepe Üniversitesi, Sosyal Bilimler Fakültesi, İşletme Bölümü, Turkey 2006 - 2008

Under Graduate, Hacettepe Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, Turkey 2003 - 2008

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Kopulularla maden kaynak kestirimi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Maden Mühendisliği (Dr), 2015

Post Graduate, Türkiye Tersiyer Kömürlerinin Jeostatistiksel İncelenmesi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Maden Mühendisliği Bölümü, 2011

### **Research Areas**

Mining Engineering and Technology, Mining Operations, Prospecting and Exploratory Operations, Production Methods (open-pit and underground), Open pit and underground production planning, Ore Bed Modeling, Mining Engineering Process Design, Management and Economics, Mining Methods and Mining System Analysis, Engineering and Technology

### **Academic Titles / Tasks**

Assistant Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği, 2018 - Continues

Research Assistant, Hacettepe Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2008 - 2018

### **Courses**

Mineral Resource Estimation, Under Graduate, 2018 - 2019

Evaluation of Ore Deposits , Under Graduate, 2018 - 2019

## Jury Memberships

Post Graduate, Post Graduate, Hacettepe Üniversitesi, June, 2019  
Post Graduate, Post Graduate, Hacettepe Üniversitesi, June, 2019  
Post Graduate, Post Graduate, Hacettepe Üniversitesi, July, 2018  
Post Graduate, Post Graduate, Hacettepe Üniversitesi, May, 2018

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Uncertainty assessment of soil erodibility by direct sequential Gaussian simulation (DSIM) in semiarid land uses**  
Madenoglu S., Atalay F., Erpul G.  
Soil and Tillage Research, vol.204, 2020 (Journal Indexed in SCI Expanded)
- II. **Coal resource estimation using Gaussian copula**  
ATALAY F., TERCAN A. E.  
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.175, pp.1-9, 2017 (Journal Indexed in SCI)
- III. **Metaheuristic kriging : A new spatial estimation method**  
ATALAY F., ERTUNÇ G.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.46, pp.483-492, 2017 (Journal Indexed in SCI)
- IV. **Assessment of Inverse Distance Weighting (IDW) Interpolation on Spatial Variability of Selected Soil Properties in the Cukurova Plain**  
TUNCAY T., BAYRAMİN İ., ATALAY F., UNVER İ.  
TARIM BİLİMLERİ DERGİSİ-JOURNAL OF AGRICULTURAL SCIENCES, vol.22, pp.377-384, 2016 (Journal Indexed in SCI)
- V. **Lignite resource estimations and seam modeling of Thar Field, Pakistan**  
SIDDIQI 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 (Journal Indexed in SCI)
- VI. **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 (Journal Indexed in SCI)
- VII. **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 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **APPLICATION OF SUPPORT VECTOR MACHINES IN COAL DEPOSIT BOUNDARY DECISION**  
ERTUNÇ G., ATALAY F.  
International Journal of Scientific Research in Information Systems and Engineering, 2017 (Refereed Journals of Other Institutions)
- II. **SPATIAL ESTIMATION OF A COAL RESOURCE USING ARTIFICIAL NEURAL NETWORKS**  
ATALAY F., ERTUNÇ G.  
International Journal of Scientific Research in Information Systems and Engineering, 2017 (Refereed Journals of Other Institutions)
- III. **Soma Eynez 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 (Other Refereed National Journals)

## Refereed Congress / Symposium Publications in Proceedings

- I. **ESTIMATION OF IRON CONTENT OF A DEPOSIT USING DEEP NEURAL NETWORKS**  
ATALAY F., ERTUNÇ G.  
7th Balkan Mining Congress, 11 - 13 October 2017
- II. **IMPLICIT 3D SOLID MODELLING WITH SUPPORT MACHINES**  
ERTUNÇ G., ATALAY F.  
7th Balkan Mining Congress, 11 - 13 October 2017
- III. **Geostatistical estimation of iron content distribution of an ore body using kriging and lognormal kriging techniques – A comparative study**  
ATALAY F., ERTUNÇ G.  
IRSYSC 2017, 24 - 26 May 2017
- IV. **Estimation of Spatial Components by Covariance Matching Kriging Under the Linear Model of Regionalization**  
ERTUNÇ G., ATALAY F.  
IRSYSC 2017, 24 - 26 May 2017
- V. **Destek Vektör Makinaları ile Jeolojik Zonların Kesti Yorumları**  
ERTUNÇ G., ATALAY F.  
IMCET 2017, 11 - 14 April 2017
- VI. **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
- VII. **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
- VIII. **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
- IX. **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
- X. **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
- XI. **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

## Supported Projects

- Atalay F., Energy and Natural Resources Ministry, Orta ve Doğu Anadolu Nadir Yer Element Aramaları, 2018 - 2018
- ATALAY F., Project Supported by Higher Education Institutions, Maden Kaynak Kestiriminde Krigleme ve Kopula Yöntemlerinin Karşılaştırılması, 2017 - 2018
- ATALAY F., ERTUNÇ G., Project Supported by Higher Education Institutions, ESTIMATION OF IRON CONTENT OF A DEPOSIT USING DEEP NEURAL NETWORKS (BİR DEMİR YATAĞININDA DEMİR İÇERİĞİNİN DERİN SINIR AĞLARI KULLANILARAK KONUMSAL KESTİRİMİ ), 2017 - 2017
- ATALAY F., Project Supported by Other Private Institutions, İVRİNDİ ALTIN GÜMÜŞ MADENİ PASA DURAYLILIĞI ANALİZİ, 2016 - 2016

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

## **Activities in Scientific Journals**

Bilimsel Madencilik Dergisi, Editor, 2017 - 2019

## **Scientific Refereeing**

ARABIAN JOURNAL OF GEOSCIENCES, Journal Indexed in SCI-E, August 2020

Arabian Journal Of Geosciences, Journal Indexed in SCI-E, July 2020

Arabian Journal Of Geosciences, Journal Indexed in SCI-E, July 2020

Arabian Journal Of Geosciences, Journal Indexed in SCI-E, June 2020

ARABIAN JOURNAL OF GEOSCIENCES, Journal Indexed in SCI-E, January 2020

European Journal of Pure and Applied Mathematics, Other Indexed Journal, November 2018

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, October 2018

Karaelmas Science and Engineering Journal, National Scientific Refreed Journal, July 2018

Bulletin of the Mineral Research and Exploration, Other Indexed Journal, February 2018

## **Citations**

Total Citations (WOS):37

h-index (WOS):4

## **Awards**

Atalay F., Maden Mühendisliği Bölümü Bölüm 1.ligi, Hacettepe Üniversitesi, July 2008

Atalay F., İhsan Doğramacı Supreme Success Award, Hacettepe Üniversitesi, July 2008