

Dr.Öğr.Üyesi Emre Avunduk

Kişisel Bilgiler

İş Telefonu: [+90 212 285 1315](tel:+902122851315)

E-posta: eavunduk@itu.edu.tr

Web: <https://avesis.itu.edu.tr/eavunduk>

Uluslararası Araştırmacı ID'leri

ORCID: 0000-0003-2550-3504

ScopusID: 55195719300

Yoksis Araştırmacı ID: 152458

Eğitim Bilgileri

Doktora, İstanbul Teknik Üniversitesi, Maden, Maden Mühendisliği, Türkiye 2011 - 2018

Yüksek Lisans, İstanbul Teknik Üniversitesi, Maden Fakültesi, Maden Mühendisliği Bölümü, Türkiye 2009 - 2011

Yüksek Lisans, Politecnico di Torino, İtalya 2009 - 2010

Lisans, İstanbul Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, Türkiye 2004 - 2008

Yabancı Diller

İngilizce

Yaptığı Tezler

Yüksek Lisans, Performance analysis of EPB-TBM in difficult geological conditions for Kadikoy-Kartal metro project, İstanbul Teknik Üniversitesi, Maden Fakültesi, Maden Mühendisliği Bölümü, 2011

Yüksek Lisans, Implementing Observational Method and Remodelling of Libia Gondar Metro Station-Rome B 1 Metro Line, Politecnico Di Torino, 2010

Araştırma Alanları

Maden Mühendisliği ve Teknolojisi

Akademik Unvanlar / Görevler

Mühendis, İstanbul Teknik Üniversitesi, Maden, Maden Mühendisliği, 2009 - Devam Ediyor

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- Possibility of using torvane shear testing device for soil conditioning optimization**
Avunduk E., Copur H., Tolouei S., Tumac D., Balci C., Bilgin N., Shaterpour-Mamaghani A.
TUNNELLING AND UNDERGROUND SPACE TECHNOLOGY, cilt.107, 2021 (SCI-Expanded)

- II. **Investigation into the Effects of Textural Properties on Cuttability Performance of a Chisel Tool**
Tumaç D., Çopur H., Balcı C., Er S., Avunduk E.
ROCK MECHANICS AND ROCK ENGINEERING, cilt.51, sa.4, ss.1227-1248, 2018 (SCI-Expanded)
- III. **Empirical modeling for predicting excavation performance of EPB TBM based on soil properties**
Avunduk E., Çopur H.
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- IV. **Effects of Different Cutting Patterns and Experimental Conditions on the Performance of a Conical Drag Tool**
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ROCK MECHANICS AND ROCK ENGINEERING, cilt.50, sa.6, ss.1585-1609, 2017 (SCI-Expanded)
- V. **Predicting Performance of Raise Boring Machines Using Empirical Models**
Shaterpour-Mamaghani A., BILGIN N., Balcı C., Avunduk E., POLAT C.
ROCK MECHANICS AND ROCK ENGINEERING, cilt.49, sa.8, ss.3377-3385, 2016 (SCI-Expanded)
- VI. **Double shield TBM performance analysis in difficult ground conditions: a case study in the Gerece water tunnel, Turkey**
Shaterpour-Mamaghani A., Tumaç D., AVUNDUK E.
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, cilt.75, sa.1, ss.251-262, 2016 (SCI-Expanded)
- VII. **An evaluation of fine grained sedimentary materials in terms of geotechnical parameters which define and control excavation performance of EPB TBM's**
Tokgoz N., BINEN I. S., Avunduk E.
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- VIII. **Cuttability of coal from the Soma coalfield in Turkey**
BILGIN N., Balcı C., Çopur H., Tumaç D., Avunduk E.
International Journal of Rock Mechanics and Mining Sciences, cilt.73, ss.123-129, 2015 (SCI-Expanded)
- IX. **Prediction of roadheader performance by artificial neural network**
Avunduk E., Tumaç D., ATALAY A. K.
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Diğer Dergilerde Yayınlanan Makaleler

- I. **Effect of Clogging on EPB TBM Performance: A Case Study in Akfırat Waste Water Tunnel, Turkey**
Avunduk E., Çopur H.
GEOTECHNICAL AND GEOLOGICAL ENGINEERING, cilt.37, sa.6, ss.4789-4801, 2019 (ESCI)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Experimental investigation of double scroll cutting pattern by using button cutting tool of raise boring machines**
Çopur H., Shaterpour-Mamaghani A., Gümüş A., Tumaç D., Balcı C., Kocbay A., Erdogan T., Avunduk E.
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- II. **Possibility of using vane shear testing device for optimizing soil conditioning**
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- III. **Investigation of vibration patterns occurred during tbm excavation and rock cutting tests**
ATEŞ U., ÇOPUR H., SHATERPOUR MAMAGHANI A., AVUNDUK E., BİNEN S.
Rock Dynamics Summit, RDS 2019, Okinawa, Japonya, 7 - 11 Mayıs 2019, ss.729-734
- IV. **Determining the Effects of Physical, Mechanical and Textural Properties of Metamorphic Stones on a**

Chisel Tool Performance

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- V. **Unrelieved Spesific Energy Estimation fromPLCM and FLCM Linear Rock Cutting Tests andComparison with Rock Properties**
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- VI. **Effect of Soil Conditioning on Performance of an EPB TBM: from Laboratory to Mahmutbey-Mecidiyekoy Metro Tunnels in Turkey**
ÇOPUR H., AVUNDUK E., TUMAÇ D., BALCI C., BİLGİN N., SHATERPOUR MAMAGHANI A., TOLOUEI S., Erkuş G., Acun S., Ateş U.
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- VII. **Determining the effects of physical, mechanical and textural properties of metamorphic stones on a chisel tool performance**
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- VIII. **Effect of Adhesion on EPB TBM Performance**
AVUNDUK E., ÇOPUR H., Tolouei S., Gümüş U., Altay U.
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- IX. **TBM Performance Prediction using PLCM and Comparison with TBM field Performance Parameters**
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- X. **Effect of Conditioning on Soil Workability Determined by Mini-Slump and Flow Table Tests**
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- XI. **EPB TBM performance in Ayvali Waste Water Tunnel through marl clay sand and shallow overburden**
ÇINAR M., KAHYA Ş., AVUNDUK E., TOLOUEI S., GEDİKLİ A., ÇOPUR H.
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- XII. **Effect of Difficult Ground Conditions on Double Shield TBM Performance**
Avunduk E., MAMAGHANI A. S., Tumaç D.
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- XIII. **Determining the effect of texture coefficient on performance wire machines of diamond**
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- XIV. **Determining the Effect of Texture Coefficient on Performance of Diamond Wire Machines**
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- XV. **Full-scale linear cutting experiments with a conical cutter for simulating different cutting patterns**
Çopur H., BILGIN N., Balcı C., Tumaç D., AVUNDUK E., MAMAGHANI A.
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- XVI. **Investigation of the effect of textural properties towards predicting sawing performance of diamond wire machines**
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- XVII. **Foam Optimizaton and Relationship between Foam Use and EPB TBM Performance**
Tolouei S., Avunduk E., Çopur H., Tumaç D., Balcı C., BILGIN N., ÇINAR M., Kahya S.
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- XVIII. **Predicting Cutting Performance of Chisel Tools by Using Physical and Mechanical Properties of Natural Stones**
Çopur H., Balcı C., BILGIN N., Tumaç D., Avunduk E.
European Rock Mechanics Symposium (EUROCK 2012, ISRM International Symposium), Stockholm, İsveç, 01 Mayıs 2016, ss.14-0
- XIX. **Investigation of the effect of textural properties towards sawability performance of diamond wire machines**
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- XX. **Rock Mechanical Aspects of Excavation Related to Raise Boring Machine. A Typical Example from Asikoy Underground Mine, Kastamonu, Turkey**
Shaterpour Mamaghani A., Avunduk E., BILGIN N.
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- XXI. **The Effect of Mechanical Properties on Performance of Diamond Wire Machines**
Tumaç D., Avunduk E., BASYIGIT M., Çopur H., Balcı C., ER S.
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- XXII. **Physico-Mechanical Property Tests Towards Performance Prediction of Chain Saw Machines**
Tumaç D., Avunduk E., BASYIGIT M., Çopur H., Balcı C., ER S.
Fifth Thailand Symposium on Rock Mechanics- Thairock 2015, Bangkok, Tayland, 1 - 04 Ekim 2015, ss.381-387
- XXIII. **Cutter Forces Measurement with PLCM Using Mini Conical Pick: Comparison with the Theoretical and Empirical Models**
POLAT C., Balcı C., COMAKLI R., Avunduk E., Tumaç D., Çopur H., BILGIN N.
ITA World Tunnel Congress (WTC 2015), Dubrovnik, Hırvatistan, 1 - 04 Mayıs 2015, ss.8-0
- XXIV. **A New Generation of Portable Linear Rock Cutting Machine (PLCM) and Comparison with Full Scale Linear Rock Cutting Tests**
Balcı C., COMAKLI R., POLAT C., Tumaç D., Avunduk E., Çopur H., BILGIN N.
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- XXV. **Cutter Forces Measurement with (PLCM®) Using Mini Disc Cutters: Comparison with the Theoretical Models**
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- XXVI. **Cutting performance of chain saw and diamond wire machines in beige marble quarry**
AVUNDUK E., Tumaç D., BASYIGIT M., ER S., Çopur H., Balcı C.
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- XXVII. **Pre-investigation to determine the effects of rock properties on performance of chain saw and diamond wire machines**
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- XXVIII. **Amasya-Suluova Bölgesinde Bir Kömür Ocağının Galeri Kazıları İçin Kollu Galeri Açma Makinesi Seçimi ve Performans Tahmini**
Çopur H., Balcı C., Tumaç D., Avunduk E., COMAKLI R., POLAT C.
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- XXIX. **Comparison of the Empirical and Artificial Neural Network Models to Estimate Performance of Roadheaders**
Tumaç D., Avunduk E.
3rd International Symposium on Underground Excavations for Transportation, UYAK 2013, İstanbul, Türkiye, 29 - 30 Kasım 2013, ss.91-98
- XXX. **Experimental comparison of single and double scroll cutting patterns by using chisel cutting tools of chain saw machines**
AVUNDUK E., Tumaç D., Çopur H., Balcı C., BILGIN N.
3rd ISRM Symposium on Rock Characterisation, Modelling and Engineering Design Methods, SINOROCK 2013,

Shanghai, Çin, 18 - 20 Haziran 2013, ss.729-734

XXXI. Estimation of the performance of chain saw machines from shore hardness and the other mechanical properties

Tumaç D., AVUNDUK E., Çopur H., BILGIN N., Balcı C.

3rd ISRM Symposium on Rock Characterisation, Modelling and Engineering Design Methods, SINOROCK 2013, Shanghai, Çin, 18 - 20 Haziran 2013, ss.261-265

XXXII. Rock Mechanics Aspects Related to Cutting Efficiency of Mechanical Excavators in Complex Geology

BILGIN N., Balcı C., Çopur H., Tumaç D., Avunduk E.

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XXXIII. Effect of some Geotechnical Properties on TBM Performance

Avunduk E., Çopur H., BILGIN N., Balcı C., Tumaç D.

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XXXIV. Sürekli Yüzey Kazıcıların Seçim Kriterleri, Yenice-Sivas Barit Madeni

BILGIN N., Çopur H., Balcı C., Tumaç D., Avunduk E., Ergunalp D.

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XXXV. Zincirli Kesme Makinelerinin Performans Tahmini İçin Görgül Bir Model

Çopur H., Balcı C., BILGIN N., Tumaç D., Avunduk E., Demirel Ş., Şimşek A.

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XXXVI. A Deterministic Model for Predicting and Optimizing Performance of Chain Saw Machines

Çopur H., Balcı C., BILGIN N., Tumaç D., Avunduk E., Saracoglu M., Serter A.

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XXXVII. Experience Gained on Mechanized Tunnelling in Istanbul and Some Recommendations for Mining Industry

BILGIN N., Çopur H., Balcı C., Tumaç D., Avunduk E.

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XXXVIII. Field and laboratory studies on performance of chain saw machines

Çopur H., Balcı C., Tumaç D., BILGIN N., AVUNDUK E.

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Metrikler

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