

Prof. NURAY DEMİREL

Personal Information

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Biography

Nuray DEMİREL is a Professor of Mining Engineering at the Middle East Technical University. She holds Ph.D. (Missouri University of Science and Technology, formerly University of Missouri-Rolla, USA), M.Sc., B.Sc., and B.Sc. Minor Degree Diploma (Middle East Technical University, Turkey). Dr. Demirel has over 13 years of professional experience in research and teaching. Prior to her current position, she worked as a graduate research and/or teaching assistant (Missouri University of Science and Technology, USA; University of Alberta, Canada; Middle East Technical University, Turkey), as Mining Engineer (in training) for ETİ Krom A.Ş. and BAŞTAŞ Cement Plant. Dr. Demirel has taught several undergraduate and graduate courses in Mining Engineering and has graduated several students for industry and academia. Her current research areas include sustainable surface mining, life cycle assessment (LCA) in mining, excavation machines, machine health and longevity, occupational health and safety, geographic information systems (GIS), and remote sensing. Dr. Demirel is leading major research initiatives in these areas. The results of her research initiatives include five books, three book chapters, 18 refereed journal papers, 33 conference publications, and dissertations and technical presentations to various academic, government and industry audiences. Dr. Nuray Demirel is a member of Society of Mining Professors (SOMP), Society for Mining, Metallurgy and Exploration (SME), National Rock Mechanics Society and Chambers of Mining Engineers of Turkey.

Education Information

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, Turkey 1999 - 2002

Undergraduate Minor, Middle East Technical University, Graduate School of Natural and Applied Sciences, Jeodezi Ve Coğrafi Bilgi Teknolojileri (YI) (Tezli), Turkey 1997 - 1999

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, Turkey 1994 - 1999

Foreign Languages

English, C1 Advanced

Italian, A2 Elementary

Dissertations

Doctorate, DYNAMIC DRAGLINE MODELING AND BOOM STRESS ANALYSIS FOR EFFICIENT EXCAVATION, University Of

Missouri-Rolla, Department Of Mining And Nuclear Engineering, 2007

Postgraduate, AÇIK OCAK SAHASINDAKİ DEĞİŞİMLERİN SPOT UYDU GÖRÜNTÜLERİ KULLANILARAK İZLENMESİ/MONITORING CHANGES IN SURFACE MINING AREA BY USING SPOT SATELLITE IMAGES, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2002

Research Areas

Mining Engineering and Technology, Mining Operations, Mine Safety and Environment, Open pit and underground production planning, Workers' Health and Safety at Mine Operations and Facilities, Mining Methods and Mining System Analysis, Engineering and Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2018 - Continues
Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2013 - 2018

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2012 - 2013

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2010 - 2012

Lecturer, Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2007 - 2010

Academic and Administrative Experience

Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2018 - Continues

Middle East Technical University, Faculty of Engineering, Department of Mining Engineering, 2009 - 2015

Advising Theses

Demirel N., RISK ASSESSMENT OF GÖRDES NICKEL-COBALT PROCESS PLANT, Postgraduate, E.TORUN(Student), 2019

Demirel N., Ocaktan M. C. , ASSESSMENT OF PSYCHOSOCIAL RISK FACTORS AMONG AIR TRAFFIC CONTROLLERS, Postgraduate, G.ALTUNOK(Student), 2019

DEMİREL N., COMPARISON OF SAFETY CULTURE PERCEPTIONS OF UNIVERSITY STUDENT GROUPS, Postgraduate, G.ALTINKAYA(Student), 2019

DEMİREL N., Relationships of safety climate and organizational citizenship behaviors in aerospace industry in Turkey, Postgraduate, M.DİLAYLA(Student), 2019

DEMİREL N., Investigation of ergonomic risks in manufacturing sector using quick exposure check method, Postgraduate, E.İnalçuk(Student), 2019

DEMİREL N., Development of a computer-aided dragline selection program/Bilgisayar destekli çekme kepçeli yerkazaz seçim programının geliştirilmesi, Postgraduate, S.AKHUNDOV(Student), 2017

DEMİREL N., Development of a computer-aided dragline selection program, Postgraduate, S.AKHUNDOV(Student), 2017

DEMİREL N., Risk assessment by fault tree analysis of methane explosions in Turkish Hard coal enterprises underground mines/Türkiye Taşkömürü Kurumu yeraltı madenlerinde metan patlamalarının hata ağacı analizi yöntemiyle risk değerlendirmesi, Postgraduate, R.MEVŞİM(Student), 2016

DEMİREL N., Risk assessment by fault tree analysis of methane explosions in Turkish Hard coal enterprises underground mines, Postgraduate, R.MEVŞİM(Student), 2016

DEMİREL N., Risk assessment by fault tree analysis of roof and rib fall accidents in an underground hard coal mine/Bir yeraltı taş kömürü madeninde taş ve kavlak düşmelerinden kaynaklanan kazaların hata ağacı analizi yöntemiyle risk

değerlendirmesi, Postgraduate, C.DİREK(Student), 2015

DEMİREL N., Reliability-based maintenance optimization of walking draglines/Yürüyen çekme kepçeli yerkazarların güvenilirlik tabanlı bakım-onarım optimizasyonu, Doctorate, O.GÖLBAŞI(Student), 2015

DEMİREL N., Comparative life cycle cost analysis of centrifugal and positive displacement pumps for mine dewatering/Maden su atımında santrifüj ve pozitif yer değıştirmeli pompaların ömür boyu maliyet kıyaslaması, Postgraduate, A.BURAK(Student), 2015

DEMİREL N., Comparative life cycle cost analysis of centrifugal and positive displacement pumps for mine dewatering, Postgraduate, A.BURAK(Student), 2015

DEMİREL N., Reliability-based maintenance optimization of walking draglines, Doctorate, O.GÖLBAŞI(Student), 2015

DEMİREL N., Risk assessment by fault tree analysis of roof and rib fall accidents in an underground hard coal mine, Postgraduate, C.DİREK(Student), 2015

DEMİREL N., Reliability analysis for two draglines in Tunçbilek Lignite Mine Tunçbilek Linyit Madeni'nde kullanılan iki çekme kepçeli yerkazarın güvenilirlik analizi, Postgraduate, D.TUNCAY(Student), 2014

DEMİREL N., Development of a remotely-controlled road header robot/Uzaktan kumandalı galeri açma makinası robotunun geliştirilmesi, Postgraduate, R.ENTEZARI(Student), 2014

DEMİREL N., Reliability analysis for two draglines in Tunçbilek Lignite Mine, Postgraduate, D.TUNCAY(Student), 2014

DEMİREL N., Development of a remotely-controlled road header robot, Postgraduate, R.ENTEZARI(Student), 2014

DEMİREL N., Fan and pitch angle selection for efficient mine ventilation using analytical hierachy process and neuro fuzzy approach/Analitik hiyerarşı süreci ve nöro-bulanık algoritması kullanılarak etkili maden havalandırma için fan ve eğim açısı seçimi, Postgraduate, A.TAGHIZADEH(Student), 2012

DEMİREL N., Fan and pitch angle selection for efficient mine ventilation using analytical hierachy process and neuro fuzzy approach, Postgraduate, A.TAGHIZADEH(Student), 2012

DEMİREL N., Life cycle assessment of off-highway trucks and belt conveyors for sustainable mining/Sürdürülebilir madencilik için kamyon ve bantlı konveyörlerin yaşam döngüsü değerlendirmesi, Postgraduate, M.ERKAYAOĞLU(Student), 2011

DEMİREL N., Investigation of stress distribution in a dragline bucket using finite element analysis/Sonlu elemanlar analizi ile çekme kepçeli yerkazarın kepçesindeki gerilme dağılımının incelenmesi, Postgraduate, O.GÖLBAŞI(Student), 2011

DEMİREL N., Life cycle assessment of off-highway trucks and belt conveyors for sustainable mining, Postgraduate, M.ERKAYAOĞLU(Student), 2011

DEMİREL N., Investigation of stress distribution in a dragline bucket using finite element analysis, Postgraduate, O.GÖLBAŞI(Student), 2011

DEMİREL N., Development of a GIS-based monitoring and management system for underground mining safety/Yer altı madenciliği emniyetiyle ilgili coğrafi bilgi sistemleri tabanlı bir izleme ve işletme sisteminin geliştirilmesi, Postgraduate, S.ŞALAP(Student), 2008

DEMİREL N., KARSLIOĞLU M. O. , Development of a GIS-based monitoring and management system for underground mining safety, Postgraduate, S.ŞALAP(Student), 2008

Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, July, 2020

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, January, 2020

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, January, 2020

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, September, 2019

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, September, 2019

Doctorate, Doctorate, Orta Doğu Teknik Üniversitesi, May, 2019

Doctorate, Doctorate, Orta Doğu Teknik Üniversitesi, May, 2019

Post Graduate, Post Graduate, Hacettepe Üniversitesi, February, 2019

Appointment Academic Staff, Hasan Öztürk, ODTÜ Maden Mühendisliği Bölümü, January, 2019

Post Graduate, Enver Yılmaz, ODTÜ Maden Mühendisliği Bölümü, August, 2018

Doctorate, Mehmet Suphi Önal, Hacettepe Üniversitesi Maden Mühendisliği Bölümü, July, 2018
Post Graduate, Ecem Karahan, Hacettepe Üniversitesi Maden Mühendisliği Bölümü, June, 2018
Post Graduate, Merve Balta Mevsim, ODTÜ Maden Mühendisliği Bölümü, May, 2018
Post Graduate, Ayça Tufan, Hacettepe Üniversitesi Maden Mühendisliği Bölümü, May, 2018
Doctorate, Esin Pekpak Fındıkçioğlu, ODTÜ Maden Mühendisliği Bölümü, March, 2018
Doctorate, Hamza Kıvrak, Hacettepe Üniversitesi Maden Mühendisliği Bölümü, January, 2018
Doctorate, Rajib Ghosh, Lulea Technical University (LTU), Lulea, Sweden, October, 2017
Post Graduate, Sayid Akhundov, ODTÜ Maden Mühendisliği Bölümü, October, 2017
Doctorate, Amol Arun Lanke, Lulea Technical University (LTU), Lulea, Sweden, January, 2017
Post Graduate, Fatma Nur Büyükkara, ODTÜ Maden Mühendisliği Bölümü, February, 2016
Post Graduate, Rıdvan Mevsim, ODTÜ Maden Mühendisliği Bölümü, February, 2016
Post Graduate, Cansu Direk, ODTÜ Maden Mühendisliği Bölümü, September, 2015
Doctorate, Onur Gölbaşı, ODTÜ Maden Mühendisliği Bölümü, September, 2015
Doctorate, Evren Deniz Yaylacı, ODTÜ Maden Mühendisliği Bölümü, September, 2015
Post Graduate, Ali Burak Aktaş, ODTÜ Maden Mühendisliği Bölümü, May, 2015
Post Graduate, Deniz Tuncay, ODTÜ Maden Mühendisliği Bölümü, September, 2014
Post Graduate, Ramin Entezari, ODTÜ Maden Mühendisliği Bölümü, September, 2014
Post Graduate, Hilal Soydan, ODTÜ Maden Mühendisliği Bölümü, August, 2013
Post Graduate, Süleyman Yasin Kılıoğlu, Hacettepe Üniversitesi Maden Mühendisliği Bölümü, June, 2013
Doctorate, Ömer Erdem, ODTÜ Maden Mühendisliği Bölümü, January, 2013
Post Graduate, Gizem Baybaş, ODTÜ Jeodezi ve Coğrafi Bilgi Teknolojileri, December, 2012
Post Graduate, Bilgehan Gençtürk, ODTÜ Maden Mühendisliği Bölümü, September, 2012
Post Graduate, Amir Taghizadeh, ODTÜ Maden Mühendisliği Bölümü, May, 2012
Post Graduate, Fuat Gökhan Ünal, ODTÜ Maden Mühendisliği Bölümü, September, 2011
Post Graduate, Mustafa Erkayaoğlu, ODTÜ Maden Mühendisliği Bölümü, September, 2011
Post Graduate, Nesrin Mevsim, ODTÜ İstatistik, September, 2011
Post Graduate, Onur Gölbaşı, ODTÜ Maden Mühendisliği Bölümü, February, 2011
Post Graduate, Mustafa Kemal Emil, ODTÜ Maden Mühendisliği Bölümü, September, 2010
Post Graduate, Selin Yoncacı, ODTÜ Maden Mühendisliği Bölümü, September, 2009
Post Graduate, Ömer Erdem, ODTÜ Maden Mühendisliği Bölümü, December, 2008
Post Graduate, Seda Şalap, ODTÜ Jeodezi ve Coğrafi Bilgi Teknolojileri, September, 2008
Post Graduate, Gökay Özkan, ODTÜ Maden Mühendisliği Bölümü, December, 2007

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

- I. **Water Footprint Assessment of Carbon in Pulp Gold Processing in Turkey**
Güney E., DEMİREL N.
SUSTAINABILITY, vol.13, no.15, 2021 (Journal Indexed in SCI)
- II. **Comparative study of factors affecting public acceptance of mining projects: Evidence from USA, China and Turkey**
Que S., Awuah-Offei K., Demirel A., Wang L., Demirel N., Chen Y.
JOURNAL OF CLEANER PRODUCTION, vol.237, 2019 (Journal Indexed in SCI)
- III. **A cost-effective simulation algorithm for inspection interval optimization: An application to mining equipment**
GÖLBAŞI O., DEMİREL N.
COMPUTERS & INDUSTRIAL ENGINEERING, vol.113, pp.525-540, 2017 (Journal Indexed in SCI)
- IV. **Optimisation of dragline inspection intervals with time-counter algorithm**
Golbasi O., DEMİREL N.
INTERNATIONAL JOURNAL OF MINING RECLAMATION AND ENVIRONMENT, vol.31, no.6, pp.412-425, 2017 (Journal Indexed in SCI)

- V. **RISK-BASED RELIABILITY ALLOCATION METHODOLOGY TO SET A MAINTENANCE PRIORITY AMONG SYSTEM COMPONENTS: A CASE STUDY IN MINING**
GÖLBAŞI O., DEMİREL N.
EKSPLOATACJA I NIEZAWODNOSC-MAINTENANCE AND RELIABILITY, vol.19, no.2, pp.191-202, 2017 (Journal Indexed in SCI)
- VI. **A comparative life cycle assessment of material handling systems for sustainable mining**
Erkayaoglu M., DEMİREL N.
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.174, pp.1-6, 2016 (Journal Indexed in SCI)
- VII. **Preventive Replacement Decisions for Dragline Components Using Reliability Analysis**
DEMİREL N., GÖLBAŞI O.
MINERALS, vol.6, no.2, 2016 (Journal Indexed in SCI)
- VIII. **Investigation of stress in an earthmover bucket using finite element analysis: A generic model for draglines**
GÖLBAŞI O., DEMİREL N.
Journal of the Southern African Institute of Mining and Metallurgy, vol.115, no.7, pp.623-628, 2015 (Journal Indexed in SCI)
- IX. **Design and implementation of a multimodal transportation cost analysis model for domestic lignite supply in Turkey**
Demir E. C. , Karpuz C., Demirel N.
JOURNAL OF THE SOUTHERN AFRICAN INSTITUTE OF MINING AND METALLURGY, vol.112, pp.993-998, 2012 (Journal Indexed in SCI)
- X. **Uncertainty assessment for the evaluation of net present value: a mining industry perspective**
Erdem Ö., GÜYAGÜLER T., DEMİREL N.
JOURNAL OF THE SOUTHERN AFRICAN INSTITUTE OF MINING AND METALLURGY, vol.112, no.5, pp.405-412, 2012 (Journal Indexed in SCI)
- XI. **Determination of instantaneous breaking rate by Geological Strength Index, Block Punch Index and power of impact hammer for various rock mass conditions**
Aksoy C. O. , Ozacar V., DEMİREL N., Ozer S. C. , Safak S.
TUNNELLING AND UNDERGROUND SPACE TECHNOLOGY, vol.26, no.4, pp.534-540, 2011 (Journal Indexed in SCI)
- XII. **Effects of the rock mass parameters on the dragline excavation performance**
Demirel N.
JOURNAL OF MINING SCIENCE, vol.47, no.4, pp.441-449, 2011 (Journal Indexed in SCI)
- XIII. **Surface coal mine area monitoring using multi-temporal high-resolution satellite imagery**
Demirel N., Emil M. K. , Duzgun H. S.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.86, no.1, pp.3-11, 2011 (Journal Indexed in SCI)
- XIV. **Landuse change detection in a surface coal mine area using multi-temporal high-resolution satellite images**
DEMİREL N., Duzgun S., Emil M. K.
INTERNATIONAL JOURNAL OF MINING RECLAMATION AND ENVIRONMENT, vol.25, no.4, pp.342-349, 2011 (Journal Indexed in SCI)
- XV. **Development of a GIS-based monitoring and management system for underground coal mining safety**
Şalap S., KARSLIOĞLU M. O. , DEMİREL N.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.80, no.2, pp.105-112, 2009 (Journal Indexed in SCI)
- XVI. **Case study: Planar kinematics of dragline for efficient machine control**
FRIMPONG S., DEMİREL N.
Journal of Aerospace Engineering, vol.22, no.2, pp.112-122, 2009 (Journal Indexed in SCI)
- XVII. **Dragline dynamic modelling for efficient excavation**
DEMİREL N., Frimpong S.
INTERNATIONAL JOURNAL OF MINING RECLAMATION AND ENVIRONMENT, vol.23, no.1, pp.4-20, 2009 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Reliability Analysis of Dragline Using Fault Tree Analysis**
DENİZ T., DEMİREL N.
Madencilik Dergisi, vol.56, pp.55-64, 2017 (Other Refereed National Journals)
- II. **Simulation of an Active Maintenance Policy: A Preliminary Study in Dragline Maintenance Optimization**
GÖLBAŞI O., DEMİREL N.
Lecture Notes in Mechanical Engineering, pp.669-679, 2016 (Refereed Journals of Other Institutions)
- III. **Risk Assessment for Dragline Productivity A Case Study of GLİ s Draglines in Turkey**
DEMİREL N., DÜZGÜN H. Ş.
SME Annual Transactions, vol.330, pp.512-518, 2012 (Refereed Journals of Other Institutions)
- IV. **Sonlu Elemanlar Analizi ile Çekme Kepçeli Yerkazarın Kepçesi Üzerindeki Gerilmelerin İncelenmesi**
DEMİREL N., GÖLBAŞI O.
TMMOB Madencilik Dergisi, vol.50, pp.3-9, 2011 (Other Refereed National Journals)
- V. **Bir Açık Kömür Madeninde Kamyon ve Bantlı Konveyörün Yaşam Döngüsü Değerlendirme Metodu ile Karşılaştırılması**
ERKAYAOĞLU M., DEMİREL N.
TMMOB Madencilik Dergisi, vol.50, pp.25-34, 2011 (Other Refereed National Journals)

Books & Book Chapters

- I. **Energy Efficiency in the Mineral Industry**
DEMİREL N.
in: Energy-Efficient Mine Ventilation Practices, Kwame Awuah-Offei, Editor, Springer, Cham, pp.287-299, 2018
- II. **Energy-Efficient Mine Ventilation Practices**
DEMİREL N.
in: Energy Efficiency in the Mineral Industry, Awuah-Offei K., Editor, Springer, London/Berlin , Zurich, pp.287-299, 2018
- III. **Surface Coal Production Methods and Equipments**
DEMİREL N., KARPUZ C.
in: Coal Production and Processing Technology, M.R. Riazi, Rajender Gupta, Editor, CRC press, 2016
- IV. **Surface Coal Production Methods and Equipments**
DEMİREL N., KARPUZ C.
in: Coal Production and Processing Technology, Riazi, M.R., Gupta, Rajender, Editor, CRC Press Taylor and Francis Group LCC, Boca Raton FL, pp.149-160, 2016
- V. **Health and Safety Issues in Coal Mining**
DEMİREL N., KARPUZ C.
in: Coal Production and Processing Technology, M.R. Riazi, Rajender Gupta, Editor, CRC press, 2016
- VI. **Health and Safety Issues in Coal Mining**
DEMİREL N., KARPUZ C.
in: Coal Production and Processing Technology, Riazi, M.R., Gupta Rajender, Editor, CRC Press Taylor and Francis Group LCC, Boca Raton FL, pp.209-227, 2016
- VII. **Simulation of an Active Maintenance Policy: A Preliminary Study in Dragline Maintenance Optimization**
GÖLBAŞI O., DEMİREL N.
in: Current Trends in Reliability Availability Maintainability and Safety, Uday Kumar,Alireza Ahmadi,Ajit Kumar Verma,Prabhakar Varde, Editor, Springer, Lulea, pp.669-679, 2016
- VIII. **Remote Sensing of the Mine Environment**
DÜZGÜN H. Ş. , DEMİREL N.

CRC Press Taylor and Francis, Boca Raton, 2011

- IX. **A GIS-based Management System for Underground Mining Safety**
DEMİREL N., Şalap S.
Lambert Academic Publishing, Saarbrücken, 2010
- X. **Mine Valuation**
DEMİREL N., Güyagüler T.
ODTÜ Yayıncılık, Ankara, 2008
- XI. **Dynamic Dragline Modeling and Boom Stress Analysis for Efficient Excavation**
DEMİREL N.
Lambert Academic Publishing, Saarbrücken, 2007

Refereed Congress / Symposium Publications in Proceedings

- I. **Features of new sites designing on quarry fields of the existing open pit mines of Kuzbass**
Plotnikov E., Kolesnikov V., Simkova Z., DEMİREL N.
5th International Innovative Mining Symposium (IISM), Kemerovo, Russia, 19 - 21 October 2020, vol.174
- II. **Operation Quality Indicators for Shovel-Truck Systems at Open-Pit Coal Mines**
Voronov A., Voronov Y., Voronov A., DEMİREL N.
4th International Innovative Mining Symposium, Kemerovo, Russia, 14 - 16 October 2019, vol.105
- III. **Comparative Evaluation of CO2 Emissions in Europe and Turkey Using GIS**
DEMİREL N.
18th Symposium on Environmental Issues and Waste Management in Energy and Mineral Production, Santiago, Chile, 20 - 22 November 2018, no.1, pp.3-13
- IV. **Development of a Computer-Aided Dragline Selection Program**
DEMİREL N., Akhundov S.
27th International Symposium on Mine Planning and Equipment Selection - MPES 2018, 20 - 22 November 2018, vol.1, no.1, pp.235-244
- V. **Modeling of Three Flat Coal Seams Strata Developing at Open Pit Mining**
GVOZDKOVA T., MARKOV S., DEMİREL N., ANYONA S.
2nd International Innovative Mining Symposium (Devoted to Russian Federation Year of Environment), Kemerovo, Russia, 20 - 22 November 2017, vol.21
- VI. **From Mining Innovations to Sustainable Development: Keynote Speakers of the First to the Second International Innovative Mining Symposium**
CEHLAR M., Janocko J., Demirel N., Anyona S., Voeth S., TYULENEV M., ZHİRONKİN S.
2nd International Innovative Mining Symposium (Devoted to Russian Federation Year of Environment), Kemerovo, Russia, 20 - 22 November 2017, vol.21
- VII. **Classification of Draglines Failure Types by K-NearestNeighbor Algorithm**
TAGHIZADEH A., DEMİREL N.
26th International Symposium on Mine Planning and Equipment Selection (MPES), Lulea, Sweden, 29 - 31 August 2017, pp.493-496
- VIII. **Application of Machine Learning for Dragline Failure Prediction**
TAGHIZADEH A., DEMİREL N.
1st International Innovative Mining Symposium 2017, Kemerovo - Mezhdurechensk, Russia, 24 - 26 April 2017, vol.15
- IX. **Optimization of Dragline Inspection Intervals with Time Counter Algorithm**
GÖLBAŞI O., DEMİREL N.
6th International Conference on Computer Applications in the Minerals Industries, İstanbul, Turkey, 5 - 07 October 2016, pp.1-9
- X. **Development of Data Oriented Equipment Maintenance Policy for Surface Mining**
ERKAYAOĞLU M., DEMİREL N.

6th International Conference on Computer Applications in the Minerals Industries, İstanbul, Turkey, 5 - 07 October 2016, pp.1-6

- XI. **Sustainability Comparison of Mining Industries by Life Cycle Assessment for Turkey and European Union**
DEMİREL N., ERKAYAOĞLU M.
16th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP) / International Symposium on Computer Applications (CAMI), İstanbul, Turkey, 5 - 07 October 2016
- XII. **Development of Data-Oriented Equipment Maintenance Policy for Surface Mining**
ERKAYAOĞLU M., DEMİREL N.
6th International Conference on Computer Applications in the Minerals Industries, İstanbul, Turkey, 5 - 07 October 2016, pp.1-6
- XIII. **Simulation of an Active Maintenance Policy A Preliminary Study in Dragline Maintenance Optimization**
GÖLBAŞI O., DEMİREL N.
ICRESH-ARMS, Lulea, Sweden, 1 - 04 June 2015, pp.669-679
- XIV. **Review of Trend Tests for Detection of Wear Out Period for Mining Machineries**
GÖLBAŞI O., DEMİREL N.
Uluslararası Madencilik Kongresi ve Sergisi, Antalya, Turkey, 14 - 17 April 2015, pp.933-939
- XV. **Review of Graphical Methods Utilized in System Reliability Assessment**
TUNCAY D., DEMİREL N.
24th INTERNATIONAL MINING CONGRESS OF TURKEY, Antalya, Turkey, 14 - 17 April 2015, pp.925-932
- XVI. **System Reliability Investigation of Draglines Using Fault Tree Analysis**
DEMİREL N., Gölbaşı O., KESTEL A. S. , DÜZGÜN H. Ş.
Mine Planning and Equipment Selection, Delhi, India, 29 September - 01 October 2014, pp.1151-1158
- XVII. **Stochastic models in preventive maintenance policies**
Gölbaşı O., Demirel N.
5th International Conference on Mechanical and Aerospace Engineering, ICMAE 2014, Madrid, Spain, 18 - 19 July 2014, vol.1016, pp.802-806
- XVIII. **Mining Issues and Advancements in Turkey Towards Sustainability**
DEMİREL N., AROL A. İ.
Shechtman International Symposium on Sustainable Industrial Processing Summit and Exhibition, Cancun, Mexico, 29 June - 04 July 2014, vol.1, pp.119-129
- XIX. **Determination of Optimal Time Intervals for the Dragline Maintenance Using Probabilistic Approaches**
GÖLBAŞI O., DEMİREL N.
22nd International Symposium on Mine Planning and Equipment Selection, Dresden, Germany, 14 - 19 October 2013, vol.1, pp.1195-1203
- XX. **Çekme Keççeli Yerkazalarının Arıza Türleri ve Sınıflandırılması**
GÖLBAŞI O., DEMİREL N.
4. MADEN MAKİNALARI SEMPOZYUMU, İzmir, Turkey, 23 - 25 May 2013, pp.47-55
- XXI. **Failure Types of Draglines and Their Classification**
GÖLBAŞI O., DEMİREL N.
Maden Makinaları Sempozyumu, Turkey, 23 - 24 May 2013
- XXII. **Reliability of Dragline's Subsystems**
GÖLBAŞI O., DEMİREL N.
International Mining Congress of Turkey, Turkey, 16 - 19 April 2013
- XXIII. **A Comparative Reliability Analysis for Draglines in Turkey**
DEMİREL N., DÜZGÜN H. Ş. , KESTEL A. S.
21st International Symposium on Mine Planning and Equipment Selection, YENİ DELHİ, India, 28 - 30 November 2012, vol.1, pp.166-172
- XXIV. **Stress and Deformation Distribution in a Dragline Bucket Using Finite Element Analysis**

- GÖLBAŞI O., DEMİREL N.
IV. Balkan Mining Congress, Ljubljana, Slovenia, 18 - 21 October 2011, pp.431-438
- XXV. **Application of FAHP in Optimization of Mine Ventilation Networks Deal With Fan Selection**
TAGHIZADEH A., DEMİREL N.
22nd World Mining Congress, İstanbul, Turkey, 11 - 16 September 2011, vol.1, pp.753-759
- XXVI. **Life Cycle Assessment and Its Implementation for Sustainable Material Handling in Surface Mining**
ERKAYAOĞLU M., DEMİREL N.
22nd World Mining Congress, İstanbul, Turkey, 11 - 16 September 2011, vol.1, pp.459-464
- XXVII. **Comparison of CO2 emission related to off highway trucks and belst conveyors in an open pit coal mine**
ERKAYAOĞLU M., DEMİREL N.
22nd International Mining Congress and Exhibition of Turkey, Ankara, Turkey, 11 - 13 May 2011, pp.409-415
- XXVIII. **Proceedings of the 22nd International Mining Congress and Exhibition of Turkey**
DEMİREL N., Erkayaoğlu M., Erdem Ö.
22nd International Mining Congress and Exhibition of Turkey, Ankara, Turkey, 11 - 13 May 2011, pp.0-422
- XXIX. **Application of Technical and Economic Analysis on Refuge and Self Breathing Apparatus Design**
AMIR T., DEMİREL N., BAHRAMI A.
22nd International Mining Congress and Exhibition of Turkey, Ankara, Turkey, 11 - 13 May 2011, pp.377-384
- XXX. **Risk Assessment for Dragline Productivity A Case Study of GLI s Draglines in Turkey**
DEMİREL N., DÜZGÜN H. Ş.
SME Annual Meeting and Exhibition, DENVER, KOLORADO, United States Of America, 27 February - 02 March 2011, pp.1-11
- XXXI. **Comparison of CO2emission related to off-highway trucks and belt conveyors in an open pit coal mine**
Erkayaoğlu M., DEMİREL N.
22nd International Mining Congress and Exhibition of Turkey, IMCET 2011, Ankara, Turkey, 11 - 13 May 2011, pp.409-415
- XXXII. **Landuse Change Detection in a Surface Coal Mine Area Using Multi Temporal High Resolution Satellite Images**
DEMİREL N., DÜZGÜN H. Ş. , EMİL M. K.
12th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP), PRAG, Czech Republic, 24 - 26 May 2010, pp.66-72
- XXXIII. **Development of GIS Based Emergency Management System for Underground Coal Mine Safety**
Şalap S., KARSLIOĞLU M. O. , DEMİREL N.
11th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP), BANFF, ALBERTA, Canada, 16 - 19 November 2009, pp.388-395
- XXXIV. **Reliability Modeling and Analysis for Walking Draglines of GLI Mine**
DEMİREL N., DÜZGÜN H. Ş.
18th International Symposium on Mine Planning and Equipment Selection, BANFF, ALBERTA, Canada, 16 - 19 November 2009, pp.255-262
- XXXV. **Reliability Modeling of Draglines for Availability Estimation and Maintenance Planning Modelación de Confiabilidad de Dragas Para Estimar Disponibilidady Planificar Mantención**
DEMİREL N., DÜZGÜN H. Ş.
MANTEMİN IV International Mine Equipment Maintenance Meeting, Antofagasta, Chile, 4 - 09 November 2009, pp.169-177
- XXXVI. **Çekme Kepçe Peformansını Etkileyen Operasyonel Faktörler**
DEMİREL N.
2. Maden Makinaları Sempozyumu, Zonguldak, Turkey, 4 - 06 November 2009, pp.267-276
- XXXVII. **Yeraltı Madencilği Emniyetiyle İlgili Coğrafi Bilgi Sistemleri Tabanlı Bir İzleme ve İşletme Sisteminin Geliştirilmesi**
Şalap S., KARSLIOĞLU M. O. , DEMİREL N.

- TMMOB Coğrafi Bilgi Sistemleri Kongresi, İzmir, Turkey, 2 - 06 November 2009, pp.1-8
- XXXVIII. **Çekme Kepçe Dragline Bum Gerilme Dağılımının Sonlu Elemanlar Yöntemi ile Analizi**
DEMİREL N.
21st International Mining Congress and Exhibition of Turkey, Antalya, Turkey, 5 - 08 May 2009, vol.189
- XXXIX. **Yeraltı Madencilğiyle İlgili Coğrafi Bilgi Sistemleri Tabanlı Bir İzleme ve İşletme Sisteminin Geliştirilmesi**
ŞALAP S., KARSLIOĞLU M. O. , DEMİREL N.
1. CBS Günleri Sempozyumu, Ankara, Turkey, 19 - 21 November 2008, pp.355-363
- XL. **Dragline Boom Stress Analysis Using Finite Element Method FEM**
DEMİREL N., FRIMPONG S.
17th International Symposium on Mine Planning and Equipment Selection, PEKİN, China, 20 - 22 October 2008, pp.834-841
- XLI. **Dynamic Modeling of a Dragline Front End and Boom Stress Analysis for Efficient Excavation**
DEMİREL N., FRIMPONG S.
16th International Symposium on Mine Planning and Equipment Selection (MPES), BANGKOK, 11 - 13 December 2007, pp.247-254
- XLII. **Comparison of Mechanical Vs Electric Drive Mine Trucks Based on Life Cycle Assessment LCA**
DEMİREL N., DÜZGÜN H. Ş. , CHECKEL D. M.
2nd Mine Equipment Maintenance Meeting, Vina-Del-Mar, Chile, 14 - 16 November 2007, pp.133-142
- XLIII. **Dragline Dynamic Modeling for Efficient Excavation**
DEMİREL N., FRIMPONG S.
20th International Mining Congress and Exhibition of Turkey, Ankara, Turkey, 6 - 08 June 2007, pp.265-276
- XLIV. **Planar Kinematics of Dragline Digging for Efficient Machine Control**
DEMİREL N., FRIMPONG S.
SME Annual Meeting and Exhibit & 7th ICARD, ST. LOUIS, MISSOURI, United States Of America, 26 - 29 March 2006, pp.1-5
- XLV. **Research Frontiers on Dragline Productivity and Maintainability**
DEMİREL N., FRIMPONG S.
Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mining Industry Conference and Exhibition, Toronto, Canada, 24 - 27 April 2005
- XLVI. **Monitoring Changes in Surface Mining Area by Using SPOT Satellite Images**
DEMİREL N., ÖZGENOĞLU A., AKYÜREK S. Z. , FRIMPONG S.
SCSC 2003 Advanced Simulation Technologies Conference, Montreal, Canada, 20 - 24 July 2003, pp.139-144
- XLVII. **Monitoring the Overburden Excavation Stripping in Open Cast Mines by Using GIS and RS**
DEMİREL N., ÖZGENOĞLU A., AKYÜREK S. Z.
7th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production, Cagliari, Italy, 7 - 10 October 2002, pp.373-380

Expert Reports

- I. **2. Asliye Hukuk Mahkemesi'ne Bilirkişi Heyeti Raporu**
Demirel N., Atalay M. Ü. , Karpuz C.
Mahkeme, pp.11, Ankara, 2018
- II. **BİLİRKİŞİ KURULU RAPORU ANKARA 7. ASLİYE TİCARET MAHKEMESİ BAŞKANLIĞI'NA**
Demirel N.
Orta Doğu Teknik Üniversitesi, pp.3, Ankara, 2018
- III. **33. İş Mahkemesi'ne Bilirkişi Heyeti Raporu**
Demirel N., Arol A. İ. , Bölükbaşı N.
Mahkeme, pp.7, Ankara, 2018
- IV. **T.C. Ankara 18. İş Mahkemesi Hakimliği'ne Bilirkişi Kurulu Raporu**

Demirel N., Atalay M. Ü. , Karpuz C.
Orta Doğu Teknik Üniversitesi, pp.8, Ankara, 2018

- V. **25. İş Mahkemesi'ne Bilirkişi Heyeti Raporu**
Demirel N., Karpuz C., Bölükbaşı N.
Mahkeme, pp.9, Ankara, 2018
- VI. **11. Ağır Ceza Mahkemesi'ne Bilirkişi Heyeti Raporu**
Demirel N., Atalay M. Ü. , Karpuz C., Kırhan B., Sağdıçoğlu M.
Mahkeme, pp.4, Ankara, 2018
- VII. **Ermenek Cenne linyit madeni kazası**
ATALAY M. Ü. , KARPUZ C., ÇAMUR M. Z. , TOPAL T., DEMİREL N.
12. Ağır Ceza Mahkemesi, pp.126, Ankara, 2017
- VIII. **Ermenek Cenne linyit madeni kazası**
ATALAY M. Ü. , KARPUZ C., ÇAMUR M. Z. , TOPAL T., DEMİREL N.
Ankara 7. Ağır Ceza Mahkemesi, pp.24, Ankara, 2017
- IX. **Ermenek Cenne linyit madeni kazası**
ATALAY M. Ü. , KARPUZ C., ÇAMUR M. Z. , TOPAL T., DEMİREL N.
Ankara 7. Ağır Ceza Mahkemesi, pp.24, Ankara, 2017

Supported Projects

- DEMİREL N., Project Supported by Other Private Institutions, Özkoyuncu Attepe Mine Closure Plan, 2017 - 2017
- DEMİREL N., Project Supported by Other Private Institutions, Özkoyuncu Madencilik Metalurji Enerji A.Ş. for Yeşilhisar Crushing and Screening Plant, 2017 - 2017
- DEMİREL N., Project Supported by Other Official Institutions, NAKMAL Program Update Project, 2017 - 2017
- DEMİREL N., Project Supported by Other Official Institutions, NAKMAL Program Güncelleme Projesi, 2014 - 2014
- DEMİREL N., KARPUZ C., Other Supported Projects, An Academic Program Initiative for Developing Kabul Polytechnic Faculty for Excellence in Geology and Mining Engineering Education and Research, 2014 - 2014
- DEMİREL N., Project Supported by Other Private Institutions, Koza Altın A.Ş. Mastra Altın Madeni için danışmanlık, 2012 - 2012
- DEMİREL N., Project Supported by Other Private Institutions, Özkoyuncu Madencilik A. Ş. Kayseri Menteş Demir Madeni Projesi, 2012 - 2012
- DEMİREL N., Project Supported by Other Private Institutions, Çayeli Copper Enterprises Landslide Project, 2012 - 2012
- DEMİREL N., Project Supported by Higher Education Institutions, Sürdürülebilir Madencilik Türkiye Çerçeve Çalışması, 2011 - 2011
- DEMİREL N., Project Supported by Higher Education Institutions, Bir Açık Ocak Kömür Madeninde Kamyon Ve Bantlı Taşıyıcının Ydd İle Karşılaştırılması, 2010 - 2010
- DEMİREL N., Project Supported by Other Official Institutions, Coal Transportation Cost Analysis Model (Nakmal) DSİM Projesi, 2007 - 2008

Activities in Scientific Journals

- Bilimsel Madencilik Dergisi, Editor, 2018 - Continues
- Madencilik Türkiye Dergisi, Editor, 2009 - Continues

Memberships / Tasks in Scientific Organizations

- Member, 2011 - Continues
- Member, 2005 - Continues

Member, 1999 - Continues

Member, 1999 - Continues

Scientific Refereeing

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, January 2020

Project Supported by Higher Education Institutions, BAP Research Project, Middle East Technical University, Turkey, August 2019

JOURNAL OF CLEANER PRODUCTION, SCI Journal, April 2019

Kristal Baret Yarışması, Other Journals, December 2018

International Journal of Oil, Gas and Coal Technology, SCI Journal, December 2018

TUBITAK Project, December 2018

TUBITAK Project, December 2018

Journal of Mining and Environment, Other Indexed Journal, November 2018

International Journal of Oil, Gas and Coal Technology, SCI Journal, November 2018

Journal of Cleaner Production, SCI Journal, October 2018

Journal of Cleaner Production, SCI Journal, September 2018

International Journal of Mining, Reclamation and Environment, SCI Journal, August 2018

International Journal of Oil, Gas and Coal Technology, SCI Journal, June 2018

Journal of Cleaner Production, SCI Journal, June 2018

Journal of Cleaner Production, SCI Journal, June 2018

May 2018

Bilimsel Madencilik Dergisi, National Scientific Refreed Journal, April 2018

Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, April 2018

Arabian Journal for Science and Engineering, SCI Journal, March 2018

International Journal of Oil, Gas and Coal Technology, SCI Journal, March 2018

International Journal of Oil, Gas and Coal Technology, SCI Journal, February 2018

Mobility Activity

Erasmus Programme, Lecturing, Royal Melbourne Institute of Technology (RMIT), Australia, 2018 - 2018

Erasmus Programme, Lecturing, AGH University of Science and Technology, Poland, 2016 - 2016

Bilateral Colloboration Agreement, Lecturing, University of Cagliari, Italy, 2013 - 2013

Edit Congress and Symposium Activities

9. Uluslararası İş Sağlığı ve Güvenliği Kongresi, Invited Speaker, İstanbul, Turkey, 2018

Citations

Total Citations (WOS):262

h-index (WOS):10

Awards

DEMİREL N., Certificate of Appreciation, Department of Defense of the United States of America, Task Force for Business

and Stability Operations, December 2014

DEMIREL N., Outstanding GRA 2006/2007 Research Award, Missouri University of Science and Technology, January 2007