Assoc. Prof. HATİCE TEKİNER MOĞULKOÇ

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International Researcher IDs
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Biography

She received her BS and MS degrees in Industrial Engineering from Marmara University and Sabancı University, respectively. She obtained her PhD from Rutgers, the State University of New Jersey in Industrial and Systems Engineering. She is interested in optimization problems in electricity generation/transmission/distribution networks, multi-objective stochastic optimization problems, system reliability optimization, vehicle scheduling and airline crew pairing problems.

Education Information

Doctorate, Rutgers, The State University of New Jersey, New Brunswick Campus, Industrial and Systems Engineering, United States Of America 2006 - 2010
Postgraduate, Sabanci University, Institute Of Science, Industrial Engineering, Turkey 2004 - 2006
Undergraduate, Marmara University, Faculty of Engineering, Industrial Engineering, Turkey 1999 - 2004

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, MULTI-OBJECTIVE STOCHASTIC MODELS FOR ELECTRICITY GENERATION EXPANSION PLANNING PROBLEMS CONSIDERING RISK, Rutgers, The State University of New Jersey, New Brunswick Campus, 2010
Postgraduate, Robust Crew Pairing for Managing Extra Flights, Sabanci University, Institute Of Science, 2006

Research Areas

Industrial Engineering

Academic Titles / Tasks

Associate Professor, Marmara University, Faculty of Engineering, Industrial Engineering, 2023 - Continues
Assistant Professor, Marmara University, Faculty of Engineering, Industrial Engineering, 2020 - 2023
Assistant Professor, Istanbul Sehir University, Faculty Of Engıneerıng And Natural Scıences, Department Of Industrıal Engıneerıng, 2010 - 2020

Academic and Administrative Experience

Director of The Institution, Istanbul Sehir University, Instıtute Of Scıence, 2013 - 2020

Courses

Üretim Sistemleri Tasarımı ve Analizi, Undergraduate, 2021 - 2022, 2020 - 2021
Statistics for Engineers, Undergraduate, 2021 - 2022, 2020 - 2021
Engineering Project-II, Undergraduate, 2021 - 2022, 2020 - 2021
Bitirme Projesi II, Undergraduate, 2021 - 2022
Üretim Planlama ve Kontrol, Undergraduate, 2021 - 2022, 2020 - 2021
Engineering Project-I, Undergraduate, 2021 - 2022, 2020 - 2021
Bitirme Projesi I, Undergraduate, 2021 - 2022
İstatistik, Undergraduate, 2020 - 2021
Advanced Linear Optimization, Doctorate, 2021 - 2022

Advising Theses

Tekiner Moğulkoç H., Ulukuş M. Y., PREDICTING HUMAN STRESS EMOTIONS USING MACHINE LEARNING MODELS, Postgraduate, E.AHMETI(Student), 2022
Tekiner Moğulkoç H., An Impact Analysis of Vehicle to Grid (V2G) System on Grid by Considering the Associated Stochastic Parameters Explicitly, Postgraduate, B.BIBAK(Student), 2020
Tekiner Moğulkoç H., Application of Hierarchical Clustering on Demand of Electric Vehicles for GEP Problems, Postgraduate, S.AFGHAH(Student), 2020
Tekiner Moğulkoç H., Analysis of Turkish electricity system: Focusing on smart grid concept, Postgraduate, A.TUĞRUL(Student), 2018
Tekiner Moğulkoç H., Evaluation of the impacts of plug-in hybrid electric vehicles on electricity load curve for Istanbul, Postgraduate, S.EDİZ(Student), 2017
Tekiner Moğulkoç H., Using data envelopment analysis and malmquist total factor productivity index for agriculture of Turkish regions, Postgraduate, Z.ŞİŞMAN(Student), 2017
Tekiner Moğulkoç H., A web-based decision support system for class-teacher timetabling problem, Postgraduate, A.ŞAHİN(Student), 2017
Tekiner Moğulkoç H., Güler M. G., A state space reduction heuristic for multiple depot vehicle scheduling problem, Postgraduate, İ.SEVİM(Student), 2016
Tekiner Moğulkoç H., Understanding residential electricity consumption considering efficiency policies and the impact on the electricity system, Postgraduate, M.NUR(Student), 2014

Advising Graduates (Non-Thesis)

Tekiner Moğulkoç H., Forecasting Parking Space Utilization of a Facility Located in İstanbul, Masters (Non-Thesis), M.Nabeel(Student), 2017
Tekiner Moğulkoç H., Investigating Risk Measures for a Multi-Period Supply Chain Network Design Under Demand

Uncertainty, Masters (Non-Thesis), A.Eshghi(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

I. **The parametric analysis of the electric vehicles and vehicle to grid system's role in flattening the power demand**
Bibak B., TEKİNER MOĞULKOÇ H.
SUSTAINABLE ENERGY GRIDS & NETWORKS, vol.30, 2022 (SCI-Expanded)

II. **Application of hierarchical clustering on electricity demand of electric vehicles for GEP problems**
Afghah S., TEKİNER MOĞULKOÇ H., Bibak B.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.7, pp.2654-2671, 2022 (SCI-Expanded)

III. **Scheduling the vehicles of bus rapid transit systems: a case study**
SEVİM İ., Tekiner-Mogulkoc H., GÜLER M. G.
INTERNATIONAL TRANSACTIONS IN OPERATIONAL RESEARCH, vol.29, no.1, pp.347-371, 2022 (SCI-Expanded)

IV. **Influences of vehicle to grid (V2G) on power grid: An analysis by considering associated stochastic parameters explicitly**
Bibak B., TEKİNER MOĞULKOÇ H.
SUSTAINABLE ENERGY GRIDS & NETWORKS, vol.26, 2021 (SCI-Expanded)

V. **Profiling energy efficiency tendency: A case for Turkish households**
Tumbaz M. N. M., Mogulkoc H.
ENERGY POLICY, vol.119, pp.441-448, 2018 (SCI-Expanded)

VI. **Mean-risk stochastic electricity generation expansion planning problems with demand uncertainties considering conditional-value-at-risk and maximum regret as risk measures**
Tekiner-Mogulkoc H., Coit D. W., Felder F. A.
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.73, pp.309-317, 2015 (SCI-Expanded)

VII. **Electric power system generation expansion plans considering the impact of Smart Grid technologies**
Tekiner-Mogulkoc H., Coit D. W., Felder F. A.
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.42, no.1, pp.229-239, 2012 (SCI-Expanded)

VIII. **System Reliability Optimization Considering Uncertainty: Minimization of the Coefficient of Variation for Series-Parallel Systems**
Tekiner-Mogulkoc H., Coit D. W.
IEEE TRANSACTIONS ON RELIABILITY, vol.60, no.3, pp.667-674, 2011 (SCI-Expanded)

IX. **Multi-period multi-objective electricity generation expansion planning problem with Monte-Carlo simulation**
Tekiner H., Coit D. W., Felder F. A.
ELECTRIC POWER SYSTEMS RESEARCH, vol.80, no.12, pp.1394-1405, 2010 (SCI-Expanded)

X. **Robust crew pairing for managing extra flights**
Tekiner H., Birbil S. I., Bulbul K.
COMPUTERS & OPERATIONS RESEARCH, vol.36, no.6, pp.2031-2048, 2009 (SCI-Expanded)

Articles Published in Other Journals

I. **Using malmquist TFP index for evaluating agricultural productivity: Agriculture of Türkiye NUTS2 regions**
Tekiner Moğulkoç H., Şişman Z.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.40, no.3, pp.513-528, 2022 (ESCI)

II. **A Methodology for Explicit Representation Of The Stochastic Demand Due To Electric Vehicles in Generation Expansion Planning Problems**
Tekiner Moğulkoç H.
Academic Platform-Journal of Engineering and Science, vol.9, no.2, pp.257-263, 2021 (Peer-Reviewed Journal)

III. **A comprehensive analysis of Vehicle to Grid (V2G) systems and scholarly literature on the application of such**
Bibak B., TEKİNER MOĞULKOÇ H.
RENEWABLE ENERGY FOCUS, vol.36, pp.1-20, 2021 (ESCI)

IV. **AUTOMATED VEHICLE SCHEDULING SYSTEM: A CASE STUDY OF METROBUS SYSTEM**
SEVİM İ., Mogulkoc H., GÜLER M. G., Mutlu Z. P.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.7, no.1, pp.1-7, 2016 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

I. **Optimization of LTE Radio Resource Block Allocation for Maritime Channels**
Kachroo A., ÖZDEMİR M. K., TEKİNER MOĞULKOÇ H.
2016 IEEE 37TH SARNOFF SYMPOSIUM, Newark, 19 - 21 September 2016, pp.88-93

II. **Review and Comparison of System Reliability Optimization Algorithms Considering Reliability Estimation Uncertainty**
Coit D. W., Jin T., Tekiner H.
8th International Conference on Reliability, Maintainability and Safety (ICRMS 2009), Chengdu, China, 20 - 24 July 2009, pp.49-50

III. **System reliability optimization considering uncertainty: Minimization of a coefficient of variation measure**
TEKİNER MOĞULKOÇ H., Coit D. W.
IIE Annual Conference and Expo 2008, Vancouver, Canada, 17 - 21 May 2008, pp.995-1000

Supported Projects

Tekiner Moğulkoç H., Tunaboylu B., Ulukuş M. Y., Bilsel M., TUBITAK Project, Elektrikli Araçların Elektrik Üretim Genisletme Problemine Entegrasyonu Ve Optimum Araç Penetrasyon Seviyelerinin Belirlenmesi, 2021 - 2024

Metrics

Publication: 17
Citation (WoS): 208
Citation (Scopus): 275
H-Index (WoS): 7
H-Index (Scopus): 8