

Assoc. Prof. MEHMET SOYSAL

Personal Information

Office Phone: [+90 312 780 5773](tel:+903127805773)

Email: mehmetsoysal@hacettepe.edu.tr

Education Information

Doctorate, Wageningen Universiteit, Social Sciences, Operations Research And Logistics, Netherlands 2011 - 2015

Post Graduate, Hacettepe Üniversitesi, Social Sciences, Production Management And Quantitative Methods, Turkey 2008 - 2010

Under Graduate, Hacettepe Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İşletme, Turkey 2002 - 2007

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Decision Support Modeling for Sustainable Food Logistics Management, Wageningen Universiteit, Social Science - Operations Research And Logistics, 2015

Post Graduate, Devingen ufuk planlaması altında tedarik döngüsü envanter politikası için bir performans değerlendirmesi, Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü, Üretim Yönetimi Ve Sayısal Yöntemler (YI) (Tezli), 2010

Research Areas

Industrial Engineering , Supply Chain and Logistics Management, Network Design, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Hacettepe University, İktisadi Ve İdari Bilimler Fakültesi, İşletme Bölümü, 2020 - Continues

Research Assistant, Hacettepe University, İktisadi Ve İdari Bilimler Fakültesi, İşletme Bölümü, 2009 - 2017

Courses

PRODUCTION AND OPERATIONS MANAGEMENT I, Under Graduate, 2017 - 2018

SUPPLY CHAIN MANAGEMENT, Under Graduate, 2017 - 2018

Introduction to Business Administration, Under Graduate, 2017 - 2018

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

- I. **A Bender's Algorithm of Decomposition Used for the Parallel Machine Problem of Robotic Cell**
Alaei M. R. K. , SOYSAL M., Elmi A., Banaitis A., Banaitiene N., Rostamzadeh R., Javanmard S.
MATHEMATICS, vol.9, no.15, 2021 (Journal Indexed in SCI)
- II. **A closed vendor managed inventory system under a mixed fleet of electric and conventional vehicles**
SOYSAL M., Belbag S., Sel C.
COMPUTERS & INDUSTRIAL ENGINEERING, vol.156, 2021 (Journal Indexed in SCI)
- III. **A review on sustainable urban vehicle routing**
Dundar H., ÖMÜRGÖNÜLŞEN M., SOYSAL M.
JOURNAL OF CLEANER PRODUCTION, vol.285, 2021 (Journal Indexed in SCI)
- IV. **A heuristic approach for green vehicle routing**
SOYSAL M., ÇİMEN M., Sel Ç., Belbağ S.
RAIRO - Operations Research, vol.55, 2021 (Journal Indexed in SCI)
- V. **Pickup and delivery with electric vehicles under stochastic battery depletion**
SOYSAL M., ÇİMEN M., Belbağ S.
Computers and Industrial Engineering, vol.146, 2020 (Journal Indexed in SCI)
- VI. **A review on sustainable inventory routing**
SOYSAL M., ÇİMEN M., Belbağ S., Toğrul E.
Computers and Industrial Engineering, vol.132, pp.395-411, 2019 (Journal Indexed in SCI)
- VII. **On the mathematical modeling of green one-to-one pickup and delivery problem with road segmentation**
SOYSAL M., ÇİMEN M., Demir E.
JOURNAL OF CLEANER PRODUCTION, vol.174, pp.1664-1678, 2018 (Journal Indexed in SCI)
- VIII. **Modeling a green inventory routing problem for perishable products with horizontal collaboration**
SOYSAL M., Bloemhof-Ruwaard J. M. , Haijema R., van der Vorst J. G.
Computers and Operations Research, vol.89, pp.168-182, 2018 (Journal Indexed in SCI)
- IX. **A Simulation Based Restricted Dynamic Programming approach for the Green Time Dependent Vehicle Routing Problem**
SOYSAL M., ÇİMEN M.
Computers and Operations Research, vol.88, pp.297-305, 2017 (Journal Indexed in SCI)
- X. **A green model for the catering industry under demand uncertainty**
SEL Ç., SOYSAL M., ÇİMEN M.
Journal of Cleaner Production, vol.167, pp.459-472, 2017 (Journal Indexed in SCI)
- XI. **Time-dependent green vehicle routing problem with stochastic vehicle speeds: An approximate dynamic programming algorithm**
ÇİMEN M., SOYSAL M.
Transportation Research Part D: Transport and Environment, vol.54, pp.82-98, 2017 (Journal Indexed in SCI)
- XII. **Toward Sustainable Logistics**
SOYSAL M., Bloemhof-Ruwaard J. M.
SUSTAINABLE LOGISTICS AND TRANSPORTATION: OPTIMIZATION MODELS AND ALGORITHMS, vol.129, pp.1-17, 2017 (Journal Indexed in SCI)
- XIII. **Closed-loop Inventory Routing Problem for returnable transport items**
SOYSAL M.
TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT, vol.48, pp.31-45, 2016 (Journal Indexed in SCI)
- XIV. **The time-dependent two-echelon capacitated vehicle routing problem with environmental considerations**
Soysal M., BLOEMHOF-RUWAARD J. M. , Bektas T.
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, vol.164, pp.366-378, 2015 (Journal Indexed in SCI)
- XV. **Modeling an Inventory Routing Problem for perishable products with environmental considerations and demand uncertainty**
Soysal M., BLOEMHOF-RUWAARD J. M. , HAIJEMA R., VAN DER VORST J. G. A. J.

- INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, vol.164, pp.118-133, 2015 (Journal Indexed in SCI)
- XVI. **Modelling food logistics networks with emission considerations: The case of an international beef supply chain**
Soysal M., BLOEMHOF-RUWAARD J. M. , VAN DER VORST J. G. A. J.
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, vol.152, pp.57-70, 2014 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Modeling heterogeneous fleet vehicle allocation problem with emissions considerations**
Kazanç H. C. , SOYSAL M., ÇİMEN M.
Open Transportation Journal, vol.15, no.1, pp.93-107, 2021 (Refereed Journals of Other Institutions)
- II. **Enhancing the Quality of a Higher Education Course: Quality Function Deployment and Kano Model Integration**
ÖMÜRGÖNÜLŞEN M., ERYİĞİT C., Tektas O. O. , SOYSAL M.
YUKSEKOGRETİM DERGISI, vol.10, no.3, pp.312-327, 2020 (Journal Indexed in ESCI)
- III. **Üretim Sistemlerinde Endüstri 4.0'in Envanter Maliyetlerine Etkisi Üzerine Bir Senaryo İncelemesi**
BELBAĞ S., ÇİMEN M., SOYSAL M.
Verimlilik Dergisi, no.2, pp.125-143, 2020 (Other Refereed National Journals)
- IV. **Performance Comparison of Two Recent Heuristics for Green Time Dependent Vehicle Routing Problem**
SOYSAL M., ÇİMEN M., ÖMÜRGÖNÜLŞEN M., BELBAĞ S.
INTERNATIONAL JOURNAL OF BUSINESS ANALYTICS, vol.4, no.6, pp.1-11, 2019 (Journal Indexed in ESCI)
- V. **Sabit Üretim Hazırlık Maliyetinin Süreç Esnekliğinde Stok Optimizasyonuna Etkisi**
SOYSAL M., ÇİMEN M., BELBAĞ S.
Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, vol.36, no.1, pp.117-139, 2018 (Other Refereed National Journals)
- VI. **Yeni sanayi devrimi Endüstri 4.0 üzerine bir inceleme**
PAMUK N. S. , SOYSAL M.
Verimlilik Dergisi, no.1, pp.41-66, 2018 (Other Refereed National Journals)
- VII. **Süreç Esnekliği Tasarımlarının Farklı Talep Yapıları Altında Envanter Maliyeti Performansları Üzerine**
SOYSAL M., ÇİMEN M.
Finans Politik Ekonomik Yorumlar, vol.54, no.633, pp.83-95, 2017 (Other Refereed National Journals)
- VIII. **Üretimde esneklik ve stok yönetimi: Stok optimizasyonu için bir karar destek modeli**
ÇİMEN M., BELBAĞ S., SOYSAL M.
İşletme Araştırmaları Dergisi, vol.8, no.1, pp.360-379, 2016 (Other Refereed National Journals)
- IX. **A research on non-stationary stochastic demand inventory systems**
SOYSAL M.
International Journal of Business and Social Science, vol.7, no.3, pp.153-158, 2016 (Refereed Journals of Other Institutions)
- X. **Kapasite kısıtlı stokastik stok problemi için benzetimsel dinamik programlama sezgiseli**
ÇİMEN M., BELBAĞ S., SOYSAL M.
Gazi İktisat ve İşletme Dergisi, vol.2, no.1, pp.43-64, 2016 (Other Refereed National Journals)
- XI. **A review on quantitative models for sustainable food logistics management**
SOYSAL M., Bloemhof Ruwaard J. M. , Meuwissen M. P. , van der Vorst J. G.
International Journal on Food System Dynamics, vol.3, no.2, pp.136-155, 2012 (Refereed Journals of Other Institutions)
- XII. **E-procurement: A case study about the health sector in Turkey**
ÇALIPINAR H., SOYSAL M.
International Journal of Business and Social Science, vol.3, no.7, pp.232-244, 2012 (Refereed Journals of Other

Institutions)

XIII. Kalite fonksiyon yayılımı yönteminin GSM operatöründe uygulanması

ÇALIPINAR H., SOYSAL M.

Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, vol.28, no.2, pp.95-115, 2010 (Other Refereed National Journals)

XIV. Türk turizm sektöründe talep tahmini üzerine bir uygulama

SOYSAL M., ÖMÜRGÖNÜLŞEN M.

Anatolia: Turizm Araştırmaları Dergisi, vol.21, no.1, pp.128-136, 2010 (Other Refereed National Journals)

Books & Book Chapters

I. A Sustainable Inventory Optimization Problem under Process Flexibility

BELBAĞ S., ÇİMEN M., SOYSAL M., ÇELİK A. K.

in: Sustainable Procurement in Supply Chain Operations, Kumar, Anil Mangla, Sachin Kumar Luthra, Sunil Rana, Nripendra P., Editor, CRC Press (Taylor and Francis Group), pp.443-464, 2019

II. Towards Sustainable Logistics

SOYSAL M., Bloemhof Ruwaard J. M.

in: Sustainable Logistics and Transportation: Optimization Models and Algorithms, Didem Çinar, Konstantinos Gakis, Panos M. Pardalos, Editor, SPRINGER, pp.1-17, 2018

III. Sustainable food supply chain design

Bloemhof Ruwaard J. M. , SOYSAL M.

in: Sustainable Supply Chains, Yann Bouchery , Charles J. Corbett, Jan C. Fransoo, Tarkan Tan, Editor, SPRINGER, pp.395-412, 2017

IV. Decision Support Modeling for Sustainable Food Logistics Management

SOYSAL M.

Wageningen University, Wageningen, 2015

Refereed Congress / Symposium Publications in Proceedings

I. Sürdürülebilir Araç Rotalama için bir Literatür Taraması

DÜNDAR H., SOYSAL M., ÖMÜRGÖNÜLŞEN M.

18. Yöneyem Araştırması / Endüstri Mühendisliği Kongresi, Eskişehir, Turkey, 26 - 29 June 2018, pp.24

II. Akıllı şehirlerde araç rotalama: Benzetimsel Dinamik Programlama tabanlı bir sezgisel yöntem

ÇİMEN M., SOYSAL M., SEL Ç.

International Symposium on Industry 4.0 and Applications (ISIA 2017), Karabük, Turkey, 12 - 14 October 2017

III. Endüstri 4.0 üzerine bir literatür taraması

SOYSAL M., ÇİMEN M., SEL Ç.

International Symposium on Industry 4.0 and Applications (ISIA 2017), Karabük, Turkey, 12 - 14 October 2017

IV. An Approximate Dynamic Programming Based Heuristic for the Stochastic Lot-Sizing Problem in Remanufacturing Systems

BELBAĞ S., ÇİMEN M., SOYSAL M., TARIM Ş. A.

International Conference on Operations Research, Berlin, Germany, 6 - 08 September 2017

V. An Approximate Dynamic Programming Based Heuristic for Stochastic Time-Dependent Vehicle Routing Problems

ÇİMEN M., SOYSAL M., SEL Ç., BELBAĞ S.

International Conference on Operations Research, Berlin, Germany, 6 - 08 September 2017

VI. A decision support model for sustainable management of catering supply chains

SEL Ç., ÇİMEN M., SOYSAL M.

International Conference on Operations Research, Berlin, Germany, 6 - 08 September 2017

- VII. **The Time Dependent Vehicle Routing Problem: A Simulation Based Dynamic Programming Approach**
SOYSAL M., ÇİMEN M., SEL Ç., BELBAĞ S.
International Conference on Operations Research, Berlin, Germany, 6 - 08 September 2017
- VIII. **A comparison of two heuristics for time dependent vehicle routing problem**
SOYSAL M., ÇİMEN M., ÖMÜRGÖNÜLŞEN M., BELBAĞ S.
Uluslararası Katılımlı 16. Üretim Araştırmaları Sempozyumu, İstanbul, Turkey, 12 - 14 October 2016, pp.987-992
- IX. **Zamana bağlı kapasite kısıtlı araç rotalama problemleri için bir benzetimsel dinamik programlama algoritması**
ÇİMEN M., SOYSAL M., SEL Ç., BELBAĞ S.
Uluslararası Katılımlı 16. Üretim Araştırmaları Sempozyumu, İstanbul, Turkey, 12 - 14 October 2016, pp.355-360
- X. **Kapasite kısıtı altında stokastik zamana bağımlı araç rotalama problemi için bir benzetimsel dinamik programlama yaklaşımı**
ÇİMEN M., SOYSAL M.
Yöneylem Araştırması Endüstri Mühendisliği (YAEM) 36. Ulusal Kongresi, İzmir, Turkey, 13 - 15 July 2016
- XI. **Closed inventory routing problem for returnable transport items**
SOYSAL M.
28th European Conference on Operational Research (EURO 2016), Poznan, Poland, 3 - 06 July 2016
- XII. **An approximate dynamic programming approach for stochastic time-dependent capacitated vehicle routing problems**
ÇİMEN M., SOYSAL M.
28th European Conference on Operational Research (EURO 2016), Poznan, Poland, 3 - 06 July 2016
- XIII. **A mixed-integer linear programming model for invigilator scheduling problems**
BELBAĞ S., ÇİMEN M., SOYSAL M.
28th European Conference on Operational Research (EURO 2016), Poznan, Poland, 3 - 06 July 2016
- XIV. **Kuadratik programlama modeli ile gözetmen atama kararlarının verilmesi**
BELBAĞ S., ÇİMEN M., SOYSAL M.
Yöneylem Araştırması ve Endüstri Mühendisliği (YAEM) 35. Ulusal Kongresi, Ankara, Turkey, 9 - 11 September 2015
- XV. **Modeling a green inventory routing problem for perishable products with horizontal collaboration**
SOYSAL M., Bloemhof J., Haijema R., van der Vorst J.
POMS 26th Annual Conference, Washington, Kiribati, 8 - 11 May 2015
- XVI. **The inventory routing problem for perishable products: A green approach**
Bloemhof J., SOYSAL M., van der Vorst J.
20th Conference of the International Federation of Operational Research Societies (IFORS), Barcelona, Spain, 13 - 18 July 2014
- XVII. **The time-dependent two-echelon capacitated vehicle routing problem with environmental considerations**
SOYSAL M., Bloemhof J., Haijema R., van der Vorst J.
20th Conference of the International Federation of Operational Research Societies (IFORS), Barcelona, Spain, 13 - 18 July 2014
- XVIII. **The time-dependent two-echelon capacitated vehicle routing problem with emissions consideration**
SOYSAL M., Bloemhof J., Haijema R., van der Vorst J.
39th Conference on The Mathematics of Operations Research, LUNTEREN, Netherlands, 14 - 16 January 2014
- XIX. **How to improve sustainability performance of food supply chains**
SOYSAL M., Bloemhof J., Haijema R., van der Vorst J.
26th European Conference on Operational Research (EURO 2013), Rome, Italy, 1 - 04 July 2013
- XX. **Minimizing emissions in the time and location dependent capacitated vehicle routing problem**
SOYSAL M., Bloemhof J., Haijema R., van der Vorst J.
26th European Conference on Operational Research (EURO 2013), Rome, Italy, 1 - 04 July 2013
- XXI. **An integrated model for sustainable food logistics management**
SOYSAL M., Bloemhof J., Haijema R., van der Vorst J.

25th European Conference on Operational Research (EURO 2012), Vilnius, Lithuania, 8 - 11 July 2012

XXII. **Tersine tedarik zinciri yönetimi ve Türkiye'de gazlı içecek sektöründe faaliyet gösteren bir firma üzerinde örnek inceleme**

ÖMÜRGÖNÜLŞEN M., SOYSAL M., Şahin N., Çoskun T.

9. Ulusal Üretim Araştırmaları Sempozyumu, Eskişehir, Turkey, 15 - 17 October 2009, pp.475-482

Supported Projects

ÇİMEN M., SOYSAL M., SEL Ç., Project Supported by Higher Education Institutions, Akıllı Şehirlerde Araç Rotalama Benzetimsel Dinamik Programlama Tabanlı Bir Sezgisel Yöntem, 2017 - 2017

SOYSAL M., ÇİMEN M., SEL Ç., Project Supported by Higher Education Institutions, Endüstri 4.0 üzerine bir literatür taraması, 2017 - 2017

SOYSAL M., ÇİMEN M., Project Supported by Higher Education Institutions, Zamana bağlı araç rotalama problemi: Bir simülasyon tabanlı dinamik programlama yaklaşımı, 2017 - 2017

ÇİMEN M., SOYSAL M., Project Supported by Higher Education Institutions, Stokastik Zamana Bağımlı Araç Rotalama Problemleri için Bir Benzetimsel Dinamik Programlama Algoritması, 2017 - 2017

SOYSAL M., Project Supported by Higher Education Institutions, Geri verilebilir dağıtım malzemeleri için Kapalı Envanter Rotalama Problemi, 2017 - 2017

SOYSAL M., ÖMÜRGÖNÜLŞEN M., BELBAĞ S., ÇİMEN M., Project Supported by Higher Education Institutions, Zamana bağlı araç rotalama problemi için iki sezgiselin karşılaştırması, 2016 - 2017

ÇİMEN M., SEL Ç., BELBAĞ S., SOYSAL M., Project Supported by Higher Education Institutions, Zamana Bağlı Kapasite Kısıtlı Araç Rotalama Problemleri İçin Bir Benzetimsel Dinamik Programlama Algoritması, 2016 - 2017

SOYSAL M., Project Supported by Higher Education Institutions, Geri verilebilir dağıtım malzemeleri için Kapalı Envanter Rotalama Problemi, 2016 - 2016

Citations

Total Citations (WOS):408

h-index (WOS):8

Scholarships

Awarded research assistantship during graduate study, University, 2011 - 2015

National Scholarship Programme for Ph.D. Students, TUBITAK, 2010 - 2011

National Scholarship Programme for M.Sc. Students, TUBITAK, 2008 - 2010

Awards

Soysal M., An outstanding PhD Thesis in the field of Sustainable Supply Chains, The Euro Working Group On Sustainable Supply Chains, June 2017