

## Prof. MEHMET SOYSAL

### Personal Information

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### International Researcher IDs

ScholarID: A53vK5AAAAAJ

ORCID: 0000-0002-1570-660X

Publons / Web Of Science ResearcherID: I-8472-2013

ScopusID: 56333106100

Yoksis Researcher ID: 169579

### Education Information

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

Postgraduate, Hacettepe University, Social Sciences, Production Management And Quantitative Methods, Turkey 2008 - 2010

Undergraduate, Hacettepe University, 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

Postgraduate, 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

Professor, Hacettepe University, İktisadi Ve İdari Bilimler Fakültesi, İşletme Bölümü, 2024 - Continues

Associate Professor, Hacettepe University, İktisadi Ve İdari Bilimler Fakültesi, İşletme Bölümü, 2020 - 2024

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

## Courses

PRODUCTION AND OPERATIONS MANAGEMENT I, Undergraduate, 2017 - 2018

SUPPLY CHAIN MANAGEMENT, Undergraduate, 2017 - 2018

Introduction to Business Administration, Undergraduate, 2017 - 2018

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Modeling a closed-loop inventory routing problem for returnable transport items under horizontal logistics collaborations and dynamic demand structure**  
Yavrucu E., SOYSAL M., Sel C., ÇİMEN M., Hamzadayı A.  
TRANSPORTATION LETTERS-THE INTERNATIONAL JOURNAL OF TRANSPORTATION RESEARCH, 2024 (SCI-Expanded)
- II. **A probabilistic bi-objective model for a humanitarian location-routing problem under uncertain demand and road closure**  
Temiz S., KAZANÇ H. C., SOYSAL M., ÇİMEN M.  
INTERNATIONAL TRANSACTIONS IN OPERATIONAL RESEARCH, 2024 (SCI-Expanded)
- III. **Sustainable vehicle allocation decisions under a vertical logistics collaboration setting**  
Benli D., ÇİMEN M., SOYSAL M.  
Journal of Cleaner Production, vol.453, 2024 (SCI-Expanded)
- IV. **A many-to-many pick-up and delivery problem under stochastic battery depletion of electric vehicles**  
İbis Bozyel M., SOYSAL M., ÇİMEN M.  
TRANSPORTATION LETTERS-THE INTERNATIONAL JOURNAL OF TRANSPORTATION RESEARCH, 2023 (SCI-Expanded)
- V. **Optimizing food logistics through a stochastic inventory routing problem under energy, waste and workforce concerns**  
Köseli İ., SOYSAL M., ÇİMEN M., Sel Ç.  
Journal of Cleaner Production, vol.389, 2023 (SCI-Expanded)
- VI. **Dynamic routing optimization with electric vehicles under stochastic battery depletion**  
Ünal V., SOYSAL M., ÇİMEN M., Koç Ç.  
Transportation Letters, vol.15, no.10, pp.1376-1388, 2023 (SCI-Expanded)
- VII. **Managing returnable transport items in a vendor managed inventory system**  
SOYSAL M., Koç Ç., ÇİMEN M., İbiş M.  
Socio-Economic Planning Sciences, vol.86, 2023 (SCI-Expanded)
- VIII. **A review on sustainability, Industry 4.0 and collaboration implications in vehicle allocation operations**  
ÇİMEN M., Benli D., İbiş Bozyel M., SOYSAL M.  
International Journal of Logistics Management, 2023 (SSCI)

## Articles Published in Other Journals

- I. **A Model Proposal For The Network Design Problem With Heterogeneous Customer Segments And Demand Uncertainty Assumptions**  
Kazanç H. C., Yavrucu E., SOYSAL M.  
Üçüncü Sektör Sosyal Ekonomi, vol.58, no.3, pp.1945-1971, 2023 (Peer-Reviewed Journal)
- II. **An Analysis on Sustainable One-to-One Pickup and Delivery Problem with Heterogeneous Vehicles**  
Taşdan E., MENTEN C., SOYSAL M., ÇİMEN M.  
Verimlilik Dergisi, vol.57, no.1, pp.23-44, 2023 (Peer-Reviewed Journal)
- III. **SÜREÇ ESNEKLİĞİ SİSTEMLERİNDE OPERASYONEL MALİYETLERE DAYALI SİSTEM TASARIMI OPTİMİZASYONU**  
İBİŞ M., ÇİMEN M., SOYSAL M.

Verimlilik Dergisi, vol.2, pp.305-316, 2022 (Peer-Reviewed Journal)

- IV. **Elektrikli Araçlar İçin Dinamik Gezgin Satıcı Problemi Üzerine Bir Çalışma**  
ÜNAL V., YAVRUCU E., SOYSAL M., ÇİMEN M.  
Üçüncü Sektör Sosyal Ekonomi, vol.57, no.2, pp.970-996, 2022 (Peer-Reviewed Journal)
- V. **Analyses on the Effects of Time Window Choices on Sustainable Vehicle Allocation Problems**  
BENLİ D., Aydın A., ÇİMEN M., SOYSAL M.  
Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, vol.12, no.1, pp.157-175, 2022 (Peer-Reviewed Journal)
- VI. **Horizontal Collaboration among SMEs through a Supply and Distribution Cooperative**  
SOYSAL M., Belbağ S., Erişkan S.  
Open Transportation Journal, vol.16, 2022 (Scopus)
- VII. **Enhancing the Quality of a Higher Education Course: The Quality Function Deployment Methodology and Kano Model Integration**  
ÖMÜRGÖNÜLŞEN M., ERYİĞİT C., ÖZKAN TEKTAŞ Ö., SOYSAL M.  
YÜKSEKÖĞRETİM DERGISI, vol.10, no.3, pp.312-327, 2020 (ESCI)
- VIII. **SABİT ÜRETİM HAZIRLIK MALİYETİNİN SÜREÇ ESNEKLİĞİNDE STOK OPTİMİZASYONUNA ETKİSİ**  
SOYSAL M., ÇİMEN M., BELBAĞ S.  
Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, vol.36, no.1, pp.117-139, 2018 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **An Approximate Dynamic Programming Approach for a Routing Problem with Simultaneous Pick-Ups and Deliveries in Urban Areas**  
ÇİMEN M., SEL Ç., SOYSAL M.  
in: Food Supply Chains in Cities Modern Tools for Circularity and Sustainability, Emel Aktaş, Michael Bourlakis, Editor, Springer, Cham, pp.101-144, 2020
- II. **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
- III. **Towards Sustainable Logistics**  
SOYSAL M., Bloemhof Ruwaard J. M.  
in: Sustainable Logistics and Transportation: Optimization Models and Algorithms, Didem Çınar, Konstantinos Gakis, Panos M. Pardalos, Editor, SPRINGER, pp.1-17, 2018
- IV. **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
- V. **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

## Metrics

- Publication: 76  
Citation (WoS): 643  
Citation (Scopus): 859  
H-Index (WoS): 10  
H-Index (Scopus): 11

## **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

## **Non Academic Experience**

Wageningen University - The Netherlands