

## Assoc. Prof. İSMAİL SERDAR BAKAL

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-6466-2020

ScopusID: 15769174400

Yoksis Researcher ID: 163414

### Education Information

Doctorate, University of Florida, Endüstri Mühendisliği, United States Of America 2003 - 2007

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Endüstri Mühendisliği (YI) (Tezli), Turkey 2001 - 2003

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, Turkey 1996 - 2001

### Foreign Languages

English, C1 Advanced

### Research Areas

Industrial Engineering , Stochastic Modeling, Production Planning and Control, Supply Chain and Logistics Management, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2009 - Continues

Lecturer PhD, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2008 - 2009

### Advising Theses

BAKAL İ. S., Decentralized inventory planning with transshipments in a multi-project environment, Postgraduate, D.SOYLU(Student), 2021

BAYINDIR Z. P., BAKAL İ. S., A joint policy for preventive maintenance and spare part inventory control, Postgraduate, T.BERK(Student), 2021

Bakal I. S., Bayindir Z. P., Value of supplier flexibility and extension opportunity for perishable items in an EOQ environment, Postgraduate, S.CEREN(Student), 2019

BAKAL İ. S., Value of supplier flexibility and initial shelf life information for perishable items in an EOQ environment, Postgraduate, S.Ceren(Student), 2019

BAKAL İ. S., A remanufacturing system with imperfect sorting: Deterministic and probabilistic models, Postgraduate, M.TAN(Student), 2018

BAYINDIR Z. P., BAKAL İ. S., Effects of competition on product recovery decisions, Postgraduate, C.BARIŞ(Student), 2018

KARAER Ö., BAKAL İ. S., Competition of manufacturers for retailer shelf space, Postgraduate, B.DİLER(Student), 2016

BAKAL İ. S., Analysis of price-only and revenue sharing contracts in a reverse supply chain, Postgraduate, M.BIAZARAN(Student), 2016

SÜRAL H., BAKAL İ. S., The single-item lot sizing problem in SMT production lines, Postgraduate, H.SERİN(Student), 2014

BAKAL İ. S., BAYINDIR Z. P., Value of disruption information in an EOQ environment, Postgraduate, D.Esin(Student), 2014

BAYINDIR Z. P., BAKAL İ. S., An integrated model for preventive maintenance and spare part inventory planning, Postgraduate, P.KAYA(Student), 2014

BAYINDIR Z. P., BAKAL İ. S., Value of disruption information in an EOQ environmet, Postgraduate, D.ESİN(Student), 2014

BAKAL İ. S., Joint quantity flexibility under market information update, Postgraduate, M.GÜLDEN(Student), 2013

BAKAL İ. S., Analysis of an options contract in a dual sourcing supply chain under disruption risk, Postgraduate, H.KÖLE(Student), 2012

BAYINDIR Z. P., BAKAL İ. S., An assessment of a two-echelon inventory system against alternative systems, Postgraduate, S.ÖZPAMUKÇU(Student), 2011

BAYINDIR Z. P., BAKAL İ. S., Optimal pricing and production decisions in reusable container systems, Postgraduate, B.ATAMER(Student), 2010

BAKAL İ. S., Limited quantity flexibility in a decentralized supply chain, Postgraduate, S.KARAKAYA(Student), 2010

DURAN S., BAKAL İ. S., Tactical inventory and backorder decisions for systems with predictable production yield, Postgraduate, T.MART(Student), 2010

BAYINDIR Z. P., BAKAL İ. S., Centralization and advance quality information in remanufacturing, Postgraduate, M.ÜNAL(Student), 2009

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

- I. **Price competition between manufacturers selling to a common retailer under stock-out-based substitution**  
Kılıç B. D., KARAER Ö., BAKAL İ. S.  
Computers and Industrial Engineering, vol.174, 2022 (SCI-Expanded)
- II. **Optimization of the lubricating oil inventory policy applied in a mining company**  
Şenses S., Gölbaşı O., S. Bakal İ. S.  
INTERNATIONAL JOURNAL OF MINING RECLAMATION AND ENVIRONMENT, vol.35, no.6, pp.451-470, 2021 (SCI-Expanded)
- III. **Exact and heuristic approaches for joint maintenance and spare parts planning**  
Bulbul P., BAYINDIR Z. P., BAKAL İ. S.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.129, pp.239-250, 2019 (SCI-Expanded)
- IV. **Value of disruption information in an EOQ environment**  
BAKAL İ. S., BAYINDIR Z. P., Emer D. E.  
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.263, no.2, pp.446-460, 2017 (SCI-Expanded)
- V. **Value of information through options contract under disruption risk**  
Kole H., BAKAL İ. S.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.103, pp.85-97, 2017 (SCI-Expanded)
- VI. **Optimal pricing and production decisions in utilizing reusable containers**  
Atamer B., BAKAL İ. S., BAYINDIR Z. P.

- INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, vol.143, no.2, pp.222-232, 2013 (SCI-Expanded)
- VII. **Tactical inventory and backorder decisions for systems with predictable production yield**  
MART T., Duran S., Bakal I. S.  
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, vol.143, no.2, pp.294-303, 2013 (SCI-Expanded)
- VIII. **Joint quantity flexibility for multiple products in a decentralized supply chain**  
Karakaya S., BAKAL İ. S.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.64, no.2, pp.696-707, 2013 (SCI-Expanded)
- IX. **Value of supplier's capacity information in a two-echelon supply chain**  
BAKAL İ. S., ERKİP N. K., GÜLLÜ A. R.  
ANNALS OF OPERATIONS RESEARCH, vol.191, no.1, pp.115-135, 2011 (SCI-Expanded)
- X. **Order timing strategies in a single-supplier, multi-retailer system**  
BAKAL İ. S., Geunes J.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.48, no.8, pp.2395-2412, 2010 (SCI-Expanded)
- XI. **Analysis of order timing tradeoffs in multi-retailer supply systems**  
Bakal İ. S., Geunes J.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.47, no.11, pp.2841-2863, 2009 (SCI-Expanded)
- XII. **Market selection decisions for inventory models with price-sensitive demand**  
BAKAL İ. S., Geunes J., Romeijn H. E.  
JOURNAL OF GLOBAL OPTIMIZATION, vol.41, no.4, pp.633-657, 2008 (SCI-Expanded)
- XIII. **Effects of random yield in remanufacturing with price-sensitive supply and demand**  
Bakal İ. S., Akcali E.  
PRODUCTION AND OPERATIONS MANAGEMENT, vol.15, no.3, pp.407-420, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A spare parts inventory optimization study in mining**  
Senses S., GÖLBAŞI O., BAKAL İ. S.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSİTESİ MUHENDİSLİK BİLİMLERİ DERGİSİ, vol.28, no.1, pp.128-138, 2022 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Analysis of a Revenue Sharing Contract in a Reverse Supply Chain**  
BAKAL İ. S., BİAZARAN M.  
International Conference on Operations Research, 6 - 08 September 2017
- II. **Partial Cooperation Opportunities in a Two-Echelon Supply Chain**  
Bakal I. S., Diler B., Karaer Ö.  
OR 2016 Hamburg, Hamburg, Germany, 30 August - 02 September 2016, pp.50
- III. **Ürünlerin Perakende Satış Noktasında Raf Yeri İçin Rekabeti**  
Karaer Ö., Diler B., Bakal I. S.  
Yöneylem Araştırması ve Endüstri Mühendisliği Konferansı, İzmir, Turkey, 13 - 15 July 2016
- IV. **Two-Stage Versus Single-Stage Inventory Models with or without Repair Ability**  
BAKAL İ. S., OZPAMUKCU S., BAYINDIR Z. P.  
International Annual Conference of the German-Operations-Research-Society (GOR), Hannover, Germany, 5 - 07 September 2012, pp.555-560
- V. **Quantity Flexibility for Multiple Products in a Decentralized Supply Chain**  
BAKAL İ. S., Karakaya S.  
Annual International Conference of the German-Operations-Research-Society (GOR), Neubiberg, Germany, 1 - 03 September 2010, pp.411-416

## **VI. Early versus delayed order commitments in multi-retailer inventory systems**

Bakal İ. S., Geunes J.

IIE Annual Conference and Expo 2007 - Industrial Engineering's Critical Role in a Flat World, Nashville, TN, United States Of America, 19 - 23 May 2007, pp.602-607

### **Metrics**

Publication: 32

Citation (WoS): 349

Citation (Scopus): 435

H-Index (WoS): 8

H-Index (Scopus): 10

### **Non Academic Experience**

ORTA DOĞU TEKNİK ÜNİVERSİTESİ

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