

# Prof. ÇİĞDEM ALABAŞ USLU

## Personal Information

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## Biography

Dr. Çiğdem Alabaş Uslu lisans ve yüksek lisans derecelerini Gazi Üniversitesi Endüstri Mühendisliği anabilim dalında tamamladı. 2004-2011 yıllarında Maltepe Üniversitesi ve Okan Üniversitesi'nde yardımcı doçent olarak çalıştı. 2011-2014 yıllarında Marmara Üniversitesi Endüstri Mühendisliği Bölümünde doçent olarak ve 2015 yılından bu yana aynı bölümde profesör olarak çalışmaktadır. Dr. Alabaş Uslu, temel olarak, şebekelerin topolojik tasarımı, çizelgeleme, rotalama, tesis yerleştirme gibi karmaşık problemlerin matematiksel modelleme ve sezgisel algoritmalar kullanılarak çözülmesi üzerinde çalışmaktadır. Bir başka çalışma alanı da simulasyon optimizasyonudur.

## Education Information

Doctorate, Gazi Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 2000 - 2004

Post Graduate, Gazi Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1996 - 1999

Under Graduate, Gazi Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1990 - 1995

## Foreign Languages

English, C1 Advanced

## Research Areas

Engineering and Technology

## Academic Titles / Tasks

Professor, Marmara University, Faculty of Engineering, Industrial Engineering, 2016 - Continues

Associate Professor, Marmara University, Faculty of Engineering, Industrial Engineering, 2011 - Continues

Assistant Professor, Maltepe Üniversitesi, Mühendislik Ve Doğa Bilimleri Fakültesi, Endüstri Mühendisliği Bölümü, 2004 - 2009

## Professional Experience

Deputy Head of Department, Marmara University, Faculty of Engineering, Industrial Engineering, 2014 - Continues

## Advising Theses

Alabaş Uslu Ç., OFFSHORE WIND FARM LAYOUT OPTIMIZATION USING MATHEMATICAL APPROACHES AND HEURISTIC

TECHNIQUES, Doctorate, İ.Ülkü(Student), Continues

ALABAŞ USLU Ç., Mathematical models and heuristic approaches to batch processing machine scheduling problem, Doctorate, B.Öğün(Student), 2019

ALABAŞ USLU Ç., Heuristic solution to the product targeting problem based on mathematical programming, Doctorate, F.ÇETİN(Student), 2016

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

- I. **Optimization of cable layout designs for large offshore wind farms**  
Ulku I., ALABAŞ USLU Ç.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.44, pp.6297-6312, 2020 (Journal Indexed in SCI)
- II. **A new mathematical programming approach to wind farm layout problem under multiple wake effects**  
Ulku I., Alabas-Uslu Ç.  
RENEWABLE ENERGY, vol.136, pp.1190-1201, 2019 (Journal Indexed in SCI)
- III. **Modified self-adaptive local search algorithm for a biobjective permutation flow shop scheduling problem**  
ALABAŞ USLU Ç., Dengiz B., Aglan C., SABUNCUOĞLU İ.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, pp.2730-2745, 2019 (Journal Indexed in SCI)
- IV. **Uçağa yolcu alma problemi için benzetim temelli bir karar destek sistemi**  
Azuz E., Tatar T., ALABAŞ USLU Ç.  
Journal Of The Faculty Of Engineering And Architecture Of Gazi University, 2019 (Journal Indexed in SCI Expanded)
- V. **Heuristic solution to the product targeting problem based on mathematical programming**  
Cetin F., ALABAŞ USLU Ç.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.55, pp.3-17, 2017 (Journal Indexed in SCI)
- VI. **A self-tuning heuristic for the design of communication networks**  
DENGİZ B., ALABAŞ USLU Ç.  
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.66, pp.1101-1114, 2015 (Journal Indexed in SCI)
- VII. **A Self-Adaptive Heuristic Algorithm for Combinatorial Optimization Problems**  
ALABAŞ USLU Ç., DENGİZ B.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, vol.7, pp.827-852, 2014 (Journal Indexed in SCI)
- VIII. **A self adaptive local search algorithm for the classical vehicle routing problem**  
ALABAŞ USLU Ç., DENGİZ B.  
Expert Systems With Applications, vol.38, pp.8990-8998, 2011 (Journal Indexed in SCI Expanded)
- IX. **Optimization of manufacturing systems using a neural network metamodel with a new training approach**  
DENGİZ B., ALABAŞ USLU Ç., Dengiz O.  
Journal Of The Operational Research Society, vol.60, pp.1191-1197, 2008 (Journal Indexed in SSCI)
- X. **A tabu search algorithm for the training of neural networks**  
DENGİZ B., ALABAŞ USLU Ç., dengiz o.  
Journal Of The Operational Research Society, vol.60, pp.282-291, 2008 (Journal Indexed in SSCI)
- XI. **A self tuning heuristic for a multi objective vehicle routing problem**  
ALABAŞ USLU Ç.  
Journal Of The Operational Research Society, vol.59, pp.988-996, 2007 (Journal Indexed in SSCI)
- XII. **A comparison of the performance of artificial intelligence techniques for optimizing the number of kanbans**  
ALABAŞ USLU Ç., ALTIPARMAK F., DENGİZ B.

## Articles Published in Other Journals

- I. **Mathematical Models for a Batch Scheduling Problem to Minimize Earliness and Tardiness**  
Ogun B., ALABAŞ USLU Ç.  
JOURNAL OF INDUSTRIAL ENGINEERING AND MANAGEMENT-JIEM, vol.11, pp.390-405, 2018 (Journal Indexed in ESCI)
- II. **Performance evaluation of Projects in Software Development**  
çetin f., ALABAŞ USLU Ç.  
Journal of Aeronautics and Space Technologies, vol.8, pp.1-6, 2015 (Refereed Journals of Other Institutions)

## Books & Book Chapters

- I. **Parameter Tuning Problem in Metaheuristics: A Self-Adaptive Local Search Algorithm for Combinatorial Problems**  
Alabaş Uslu Ç.  
in: Women in Industrial and Systems Engineering. Women in Engineering and Science, Alice Smith, Editor, Springer, Colorado, pp.93-111, 2019
- II. **Solution Approaches for Reverse Logistics Considering Recovery Options: A Literature Review**  
KATRANCIOĞLU S., KILIÇ H. S. , ALABAŞ USLU Ç.  
in: Handbook of Research on Green Engineering Techniques for Modern Manufacturing, M. Uthayakumar, S. Aravind Raj, Tae Jo Ko, S. Thirumalai Kumaran, J. Paulo Davim, Editor, IGI Global, pp.192-210, 2019
- III. **Modül C Ulaştırma Modelleri**  
ALABAŞ USLU Ç.  
in: Üretim Yönetimi Sürdürülebilirlik ve Tedarik Zinciri Yönetimi, Umut Rifat Tuzkaya, Editor, Palme Yayıncılık, pp.717-734, 2017

## Refereed Congress / Symposium Publications in Proceedings

- I. **A holistic approach for the optimization of offshore wind farm layouts considering cable layouts**  
ÜLKÜ İ., ALABAŞ USLU Ç.  
The 2nd International Conference on Renewable Energy and Environment Engineering (REEE2019), Munich, Germany, 19 - 22 August 2019
- II. **A Novel Neighborhood Generation Method for Heuristics and Application to Traveling Salesman Problem**  
Alabaş Uslu Ç., Öztürk M.  
Intelligent and Fuzzy Systems, İstanbul, Turkey, 23 - 25 July 2019, vol.1029, pp.1215-1221
- III. **Cantor Set Based Neighborhood Generation: An Application to Quadratic Assignment Problem**  
ÖZTÜRK M., ALABAŞ USLU Ç.  
Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Turkey, 12 - 14 June 2019
- IV. **Rüzgâr Enerji Santrallerinin Kurulumunda Türbin Yerlerinin ve Elektrik Kablo Bağlantılarının Optimizasyonu**  
ÜLKÜ İ., ALABAŞ USLU Ç.  
39. Yöneylem Araştırması ve Endüstri Mühendisliği (YA/EM) Ulusal Kongresi, Ankara, Turkey, 12 - 14 June 2019
- V. **Wind farm layout optimization to maximize total power production**  
ÜLKÜ İ., ALABAŞ USLU Ç.  
3rd International Conference on Sustainable and Renewable Energy Engineering, Zamora, Ecuador, 9 - 11 May

2018

- VI. **Optimizing the design of offshore wind farm cable routing**  
ÜLKÜ İ., ALABAŞ USLU Ç.  
6 th Eur. Conf. Ren. Energy Sys, 25 - 27 July 2018
- VII. **Rüzgar Türbinlerinin Yerleşim Problemi İçin Yeni Bir Matematiksel Model**  
ÜLKÜ İ., ALABAŞ USLU Ç.  
38. Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi (YAEM), Eskişehir, Turkey, 26 - 29 June 2018
- VIII. **Optimization of offshore wind farm cable layouts**  
ÜLKÜ İ., ALABAŞ USLU Ç.  
Sixth European Conference on Renewable Energy Systems (ECRES2018), İstanbul, Turkey, 25 - 27 June 2018
- IX. **OFFSHORE WIND FARM LAYOUT OPTIMIZATION USING MATHEMATICAL MODELING**  
ÜLKÜ İ., ALABAŞ USLU Ç.  
International Conference on Engineering and Natural Sciences, 24 - 28 May 2016
- X. **A mathematical programming based heuristic model for the product targeting problem**  
Çetin F., ALABAŞ USLU Ç.  
CIE 44 IMSS'14 Proceedings, 14 - 16 November 2014
- XI. **A Local Search Heuristic with Self-tuning Parameter for Permutation Flow-Shop Scheduling Problem**  
ALABAŞ USLU Ç., DENGİZ B., SABUNCUOĞLU İ.  
IEEE Symposium on Computational Intelligence in Scheduling, 30 March - 02 April 2009
- XII. **Self-controlled local search heuristic for the design of communication networks**  
DENGİZ B., ALABAŞ USLU Ç.  
Proceeding of the 35th International Computers and Industrial Engineering, 19 - 22 July 2005
- XIII. **An improved simulated annealing algorithm for the vehicle routing problem**  
DENGİZ B., ALABAŞ USLU Ç.  
Logistics Congress, 2 - 03 November 2004
- XIV. **A continuous tabu search training algorithm for neural networks**  
DENGİZ B., ALABAŞ USLU Ç.  
Euro/Informs Joint International Meeting, 6 - 10 July 2003
- XV. **A simulated annealing algorithm for design of computer communication networks**  
DENGİZ B., ALABAŞ USLU Ç.  
5th World Multiconference on Systemics, Cybernetics and Informatics, Communication Systems and Internet: Part I, 22 - 25 July 2001
- XVI. **Simulation optimization using tabu search**  
DENGİZ B., ALABAŞ USLU Ç.  
Winter Simulation Conference, 10 - 13 December 2000
- XVII. **The optimization of number of kanbans with genetic algorithms, simulated annealing and tabu search**  
ALABAŞ USLU Ç., ALTIPARMAK F., DENGİZ B.  
Proceedings of the 2000 Congress on Evolutionary Computation, 16 - 19 July 2000
- XVIII. **A tabu search algorithm for computer networks design**  
DENGİZ B., ALABAŞ USLU Ç.  
4th World Multiconference on Circuits, Systems, Communications and Computers, 10 - 15 July 2000
- XIX. **Comparison on the Performance of Modern Heuristics for the Communication Network Design Problems**  
DENGİZ B., ALABAŞ USLU Ç.  
Industrial Engineering Research Conference, 23 - 25 May 1999

## Citations

Total Citations (WOS):72

h-index (WOS):6