

## Assoc. Prof. Berna BOLAT

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, Turkey  
2001 - 2006

Undergraduate, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering,  
Turkey 1998 - 2000

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical  
Engineering, 2010 - Continues

Lecturer PhD, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering,  
2005 - 2010

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical  
Engineering, 1998 - 2005

### Advising Theses

Bolat B., Mekanik dübellerin dinamik yük etkiler altında yapısal olarak incelenmesi, Postgraduate, G.Samet(Student),  
Continues

Bolat B., Makina konstrüksiyonunda imalat ve tasarımın eş zamanlı uygulamasının incelenmesi, Postgraduate,  
O.Tenekeci(Student), Continues

Bolat B., Vinç halatlarının modellenmesi, test ve analizi, Postgraduate, B.Bayraktaroğlu(Student), 2018

Bolat B., Helezon konveyör sistemlerinde oluk boşluğunun ve eğimin iletim kapasitesine etkisi , Postgraduate,  
O.Dedeoğlu(Student), 2018

Bolat B., Dengelenmemiş kütlelerin mekanik sistemler üzerindeki etkileri, Postgraduate, M.Özbek(Student), 2016

Bolat B., Yıkayıcı kurutucularda kurutma veriminin artırılması ve tasarımı, Postgraduate, V.Kayışdağı(Student), 2016

Bolat B., Asansör kılavuz ray konsollarının bilgisayar destekli gerilme analizi , Postgraduate, E.Savaş(Student), 2011

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

1. Investigation of the effects of radial clearance on the screw conveyor performances for different inclinations

Bolat B., Aşçıoğlu Temiztaş B., Sezer E.

PARTICUOLOGY, vol.92, pp.72-80, 2024 (SCI-Expanded)

- II. **Maximum Safety Limits of Laminectomy of the C1 Vertebra for Chiari Malformation Surgery: A Finite Element Analysis**  
Kayalar A. E., Yaltrık C. K., Kalyoncu E., Aşçıoğlu Temiztaş B., Bolat B., Eti M. U., Çalışaneller A. T., Naderi S.  
INDIAN JOURNAL OF ORTHOPAEDICS, vol.57, pp.1-10, 2023 (SCI-Expanded)
- III. **Investigation of numerical belt sag and conveyor capacities in inclined belt conveyors: An iterative approach**  
Bolat B., Aşçıoğlu Temiztaş B., Sezer E., Solak A.  
POWDER TECHNOLOGY, vol.1, pp.118394-118395, 2023 (SCI-Expanded)
- IV. **Numerical investigation of the mechanical behavior of the vertical stabilizer leading edge with wavy honeycomb sandwich structure under bird strike**  
Solak A., Aşçıoğlu Temiztaş B., Bolat B.  
JOURNAL OF SANDWICH STRUCTURES AND MATERIALS, vol.1, no.1, pp.1-14, 2022 (SCI-Expanded)
- V. **Mass flow rate prediction of screw conveyor using artificial neural network method**  
Kalay E., Bog M. E., BOLAT B.  
POWDER TECHNOLOGY, vol.408, 2022 (SCI-Expanded)
- VI. **Investigation of the effect of wavy honeycomb on the bending performance of the sandwich structure**  
Solak A., Aşçıoğlu Temiztaş B., Bolat B.  
JOURNAL OF SANDWICH STRUCTURES AND MATERIALS, vol.24, no.5, pp.1905-1919, 2022 (SCI-Expanded)
- VII. **Estimation of wavy honeycombs' compression performance via a machine learning algorithm**  
Solak A., Aşçıoğlu Temiztaş B., Bolat B.  
LATIN AMERICAN JOURNAL OF SOLIDS AND STRUCTURES, vol.18, no.8, 2021 (SCI-Expanded)
- VIII. **A particle swarm optimization algorithm for optimal car-call allocation in elevator group control systems**  
BOLAT B., ALTUN O., Cortes P.  
APPLIED SOFT COMPUTING, vol.13, no.5, pp.2633-2642, 2013 (SCI-Expanded)
- IX. **Investigation of empirical correlations on the determination of condensation heat transfer characteristics during downward annular flow of R134a inside a vertical smooth tube using artificial intelligence algorithms**  
Balcilar M., DALKILIC A. S., BOLAT B., WONGWISES S.  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.25, no.10, pp.2683-2701, 2011 (SCI-Expanded)
- X. **Genetic and tabu search approaches for optimizing the hall call- Car allocation problem in elevator group systems**  
Bolat B., Cortes P.  
Applied Soft Computing, vol.11, no.2, pp.1792-1800, 2010 (SCI-Expanded)
- XI. **OPTIMAL CAR DISPATCHING FOR ELEVATOR GROUPS USING GENETIC ALGORITHMS**  
Bolat B., Cortes P., Yalcin E., Alisverisci M.  
INTELLIGENT AUTOMATION AND SOFT COMPUTING, vol.16, pp.89-99, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **AN EXPERIMENTAL INVESTIGATION OF THE SPEED LOSSES IN POLY-V BELT SYSTEMS ON HOUSEHOLD DRYERS**  
Mutludoğan M., Bolat B., Aşçıoğlu Temiztaş B.  
Kahramanmaraş Sütçü İmam Üniversitesi Fen ve Mühendislik Dergisi, vol.26, no.4, pp.1017-1025, 2023 (Peer-Reviewed Journal)
- II. **Virtual testing of aluminum and Nomex® honeycomb core structures using ls-dyna and Python/Seaborn**  
Solak A., Aşçıoğlu Temiztaş B., Bolat B.

- III. **Farklı Eğimlerdeki Bantlı Konveyörlerde Kapasitenin Ayrık Elemanlar Metoduyla (DEM) İncelenmesi**  
Bolat B., Aşçıoğlu Temiztaş B., Sezer E.  
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.13, no.4, pp.709-714, 2022 (Peer-Reviewed Journal)
- IV. **Experimental and Numerical Analysis of Steel wires used in Materials Handling Systems**  
Bolat B., Aşçıoğlu Temiztaş B., Boğoçlu M. E., Bayraktaroğlu B.  
Dicle Üniversitesi Mühendislik Fakültesi, vol.11, no.3, pp.1093-1101, 2020 (Peer-Reviewed Journal)
- V. **A Comparison of Metaheuristics for the Allocation of Elevators to Calls in Buildings**  
BOLAT B., ALTUN O., Cortes P., Yildiz Y. E., Topal A. O.  
JOURNAL OF POLYTECHNIC-POLİTEKNİK DERGISI, vol.20, no.3, pp.519-529, 2017 (ESCI)
- VI. **Asansörlerde kullanılan çift pabuçlu fren sistemlerinin dinamik davranışlarının deneysel yöntemle incelenmesi**  
BOLAT B., BOĞOÇLU M. E.  
DUMF Mühendislik Dergisi, vol.8, pp.181-190, 2017 (Peer-Reviewed Journal)
- VII. **THE DYNAMICAL BEHAVIOUR OF THE DOUBLE SHOES BRAKE USED IN ELEVATORS**  
BOLAT B., BOĞOÇLU M. E.  
Sigma Journal Engineering and Natural Sciences, vol.3, pp.379-390, 2016 (Peer-Reviewed Journal)
- VIII. **A comparison of metaheuristics for the allocation of elevators to calls in buildings**  
BOLAT B.  
POLİTEKNİK DERGİSİ, vol.20, no.3, pp.519-529, 2016 (Peer-Reviewed Journal)
- IX. **Asansör Kuyu Ara Bölmesindeki Çelik Profil Hesaplaması**  
ÖZTÜRK M., BOLAT B., BOĞOÇLU M. E., AŞÇIOĞLU TEMİZTAŞ B.  
Asansör Vizyon, no.51, pp.35-40, 2016 (Non Peer-Reviewed Journal)
- X. **Genetik Algoritma ile Asansör Kontrol Sistemlerinin Simülasyonu ve Optimizasyonu**  
Bolat B.  
Sigma, vol.2, pp.14-20, 2006 (Peer-Reviewed Journal)
- XI. **Mühendislik Uygulamalarında Genetik Algoritmalar ve Operatörlerin İşlevleri**  
Bolat B., İmrak C. E., Erol O. K.  
Sigma, vol.4, pp.264-271, 2004 (Peer-Reviewed Journal)
- XII. **Konvansiyonel ve Bilgisayar Esaslı Asansör Kontrol Sistemlerinin İncelenmesi**  
BOLAT B., İMRAK C. E.  
Asansör Dünyası, 2004 (Non Peer-Reviewed Journal)
- XIII. **Klasik Asansör Kontrol Sistemleri ve Optimum Trafik Kontrollü Sistemlerindeki Gelişmeler**  
Bolat B., İmrak C. E.  
Sigma, vol.8, no.1, pp.24-32, 2003 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **THEORETICAL AND NUMERICAL INVESTIGATION OF THE BELT SAG AND ANGLE FACTOR IN BELT CONVEYORS**  
BOLAT B., AŞÇIOĞLU TEMİZTAŞ B., SEZER E.  
International Conference on Advanced Technologies (ICAT'22), Van, Turkey, 25 November 2022, pp.166
- II. **The Modern Lift Control Systems in Multi Stores Building 10th International Research Expert Conference Trends in the Development of Machinery and Associated Technology**  
BOLAT B., İMRAK C. E.  
Trends in the Development of Machinery and Associated Technology, 11 - 15 September 2006
- III. **Increasing Engineering Education Quality through University and Industry Cooperation**  
BOLAT B., Bolat T., Erce H., İMRAK C. E.  
1.Uluslararası Mesleki ve Teknik Eğitim Teknolojileri Kongresi (MTET), 5 - 07 October 2005

- IV. **Computer Aided Design in Mechanical Engineering**  
BOLAT B.  
Sempozyum, 25 - 27 June 2014
- V. **Increasing of screw conveyor capacity**  
BOĞOÇLU M. E., BOLAT B.  
Trends in the Development of Machinery and Associated Technology, 9 October - 09 December 2012, vol.16
- VI. **PSO and Tabu Search Approaches for the car allocation problem in multi car elevator system**  
BOLAT B., Cortes P.  
12th Trends in the Development of Machinery and Associated Technology, 10 December - 12 October 2012
- VII. **Increasing of Screw Conveyor**  
BOLAT B., BOĞOÇLU M. E.  
12 th Trends in the Development of Machinery and Associated Technology, 10 December - 12 October 2012
- VIII. **Optimization of the relationship between the two-phase friction factor and reynolds equivalent number model by means of genetic algorithm**  
BOLAT B., Balcılar M., DALKILIÇ A. S., WONGWISES S.  
ASME/JSME 2011 8th Thermal Engineering Joint Conference, AJTEC 2011, Honolulu, HI, United States Of America, 13 - 17 March 2011
- IX. **Optimization of the relationship between the two-phase friction factor and Reynolds equivalent number model by the means of Genetic Algorithm**  
Bolat B., Balcılar M., Dalkılıç A. S., Wongwises S.  
ASME/JSME 2011 8th Thermal Engineering Joint Conference, Hawaii, United States Of America, 13 - 17 April 2011, pp.1-15
- X. **Strategies for Controlling Elevator Group Systems**  
BOLAT B., İSTİF İ., ALIŞVERİŞÇİ M.  
TMT 2007, Hammamet, Tunisia, 05 September 2007, vol.1, pp.775-778
- XI. **Strategies for Controlling Elevator Group Systems 11th International Research Expert Conference**  
BOLAT B., alışverişiçi m., İSTİF İ.  
Trends in the Development of Machinery and Associated Technology, 5 - 09 September 2007
- XII. **Reducing CO HC Emissions in Two Stroke Two Wheelers 11th International Research Expert Conference**  
BOLAT B., bolat t.  
Trends in the Development of Machinery and Associated Technology, 5 - 09 September 2007
- XIII. **Application of Genetic Algorithms on Ship Control Systems 10th International Research Expert Conference**  
BOLAT B., ALARÇİN F.  
10th International Research/Expert Conference, Trends in the Development of Machinery and Associated Technology, 11 - 15 October 2006
- XIV. **Reducing Average Journey Time in the Group of Elevators By Means of Simulation**  
BOLAT B., İMRAK C. E.  
Elevator Technology1, 26 - 30 June 2006
- XV. **Application of Genetic Algorithms on Elevator Traffic Control**  
BOLAT B., İMRAK C. E.  
5th Conference on Advanced Engineering Design (AED), 11 - 13 June 2006
- XVI. **Genetic Algorithms Embedded Elevator Traffic Control System**  
BOLAT B., İMRAK C. E.  
Uluslararası Sempozyum, 23 - 25 October 2005
- XVII. **The Simulation and Optimization of Lift Control Systems with Genetic Algorithms**  
BOLAT B., Ersun Y., İMRAK C. E.  
Uluslararası Sempozyum, 26 - 30 September 2005
- XVIII. **An Application of Genetic Algorithms for Multiple Car Group Control in Elevator Systems**  
söke a., İMRAK C. E., BİNGÜL Z., BOLAT B.

Uluslararası Bildiri, 15 - 18 June 2005

**XIX. Düşey Transport Sistemlerinin Tarihsel Gelişimi ve Geleceği**

BOLAT B., Alışverişçi M., İMRAK C. E.

II. İletim Teknolojileri Kongresi, Turkey, 27 - 28 May 2005

**XX. Engellilerin Düşey Taşımacılığında Kullanılan Sistemlerinin İncelenmesi**

BOLAT B., İMRAK C. E.

II. İletim Teknolojileri Kongresi, Turkey, 27 - 28 May 2005

**XXI. Transport Tekniği ve Mühendislik Lisans Programlarındaki Yeri**

BOLAT B., İMRAK C. E.

5. Ulusal Makina Mühendisliği Eğitim Sempozyumu, Turkey, 7 - 08 November 2003

**XXII. Konvansiyonel ve Bilgisayar Esaslı Asansör Kontrol Sistemlerinin İncelenmesi**

BOLAT B., İMRAK C. E.

İletim Teknolojileri Kongresi, Turkey, 15 - 18 October 2003

**XXIII. Makina Mühendisliğinde ve Tasarımda Teknik Resim**

BOLAT B., İMRAK C. E.

4. Ulusal Makina Mühendisliği Eğitim Sempozyumu, Turkey, 1 - 02 November 2001

**XXIV. Asansör Mühendisliği ve Eğitimi**

BOLAT B., İMRAK C. E.

4. Ulusal Makina Mühendisliği Eğitim Sempozyumu, Turkey, 1 - 02 October 2001

## Supported Projects

BOĞOÇLU M. E., BOLAT B., ASMAZ K., Project Supported by Higher Education Institutions, Helezon ileticilerde polimer granül malzeme iletiminde alternatif hacimsel akış modeli oluşturma, 2017 - 2020

Bolat B., Karakaya E., Project Supported by Other Private Institutions, Türk Hava Yolları Yeni Kargo Terminali Kapasite Analiz Projesi, 2018 - 2018

BOLAT B., Project Supported by Higher Education Institutions, Asansörlerde kullanılan fren balatalarının tasarım parametrelerinin belirlenmesi, 2012 - 2015

## Metrics

Publication: 53

Citation (WoS): 39

Citation (Scopus): 79

H-Index (WoS): 3

H-Index (Scopus): 5

## Non Academic Experience

KSI KLİMA SOĞUTMA LTD.ŞTİ