

## Asst. Prof. Gülseren ÇİÇEK

### Personal Information

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### International Researcher IDs

ScholarID: p7MvfYkAAAAJ

ORCID: 0000-0002-3012-3939

Publons / Web Of Science ResearcherID: AAE-6013-2020

ScopusID: 57212452586

Yoksis Researcher ID: 115873

### Education Information

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Matematik/Matematik, Turkey 1999 - 2005

Postgraduate, Istanbul University, Institute of Graduate Studies In Sciences, Matematik/Matematik, Turkey 1996 - 1999

Undergraduate, Istanbul University, Faculty Of Science, Matematik, Turkey 1991 - 1995

### Foreign Languages

English, B2 Upper Intermediate

Bulgarian, C1 Advanced

Russian, B1 Intermediate

### Dissertations

Doctorate, Diferansiyel Dahiletmelerde Bolza Problemi ve Dualitesi, Istanbul University, Institute of Graduate Studies In Sciences, Matematik/Matematik, 2005

Postgraduate, Metriklenibilme Teorisinden Sonuçlar , Istanbul University, Institute of Graduate Studies In Sciences, Matematik/Matematik, 1999

### Research Areas

Mathematics, Optimization, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Istanbul University, Faculty of Science, Department of Mathematics, 2018 - Continues

Assistant Professor, Istanbul University, Faculty of Science, Department of Mathematics, 2006 - 2018

## Academic and Administrative Experience

### Courses

Optimal Süreçler I, Postgraduate, 2024 - 2025, 2020 - 2021  
Analiz 3, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023  
KONVEKS PROGRAMLAMA VE OPTİMİZASYON, Doctorate, 2024 - 2025, 2023 - 2024  
OPTİMAL SÜREÇLER I, Postgraduate, 2023 - 2024  
Kişisel Proje 4, Undergraduate, 2022 - 2023  
Matematik, Undergraduate, 2022 - 2023  
KOMPLEKS ANALİZ I, Undergraduate, 2023 - 2024, 2014 - 2015  
Analiz 4, Undergraduate, 2022 - 2023  
İleri Analiz, Undergraduate, 2022 - 2023  
Analitik Fonksiyonlar Teorisi I, Postgraduate, 2021 - 2022, 2020 - 2021  
Fonksiyonel Analiz, Undergraduate, 2021 - 2022  
Kişisel Proje III, Undergraduate, 2022 - 2023  
Optimal Processes I, Postgraduate, 2021 - 2022, 2019 - 2020  
Karmaşık Analiz, Undergraduate, 2021 - 2022  
Optimal Süreçler 1, Postgraduate, 2021 - 2022  
İleri analiz, Undergraduate, 2019 - 2020  
Analiz IV, Undergraduate, 2019 - 2020  
Analiz IV, Undergraduate, 2019 - 2020  
Analiz II, Undergraduate, 2019 - 2020  
İleri Analiz, Undergraduate, 2019 - 2020  
Analiz III, Undergraduate, 2020 - 2021  
Analiz I, Undergraduate, 2020 - 2021  
Analiz II, Undergraduate, 2019 - 2020  
Analiz III(II.öğr), Undergraduate, 2019 - 2020  
Analiz III(A+F), Undergraduate, 2019 - 2020  
Analiz I(A+M), Undergraduate, 2019 - 2020  
ANALYTIC FUNCTIONS THEORY I, Postgraduate, 2018 - 2019  
Analiz III(M), Undergraduate, 2019 - 2020  
Analiz II(II.öğr.), Undergraduate, 2017 - 2018, 2016 - 2017  
ANALİZ II, Undergraduate, 2017 - 2018, 2016 - 2017, 2014 - 2015  
Analitik Fonksiyonlar Teorisi I, Postgraduate, 2017 - 2018, 2014 - 2015, 2013 - 2014  
Analiz III(F), Undergraduate, 2018 - 2019  
Analiz III(A), Undergraduate, 2018 - 2019  
İleri Analiz, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2013 - 2014  
İleri Analiz (II.Öğretim), Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2013 - 2014  
Analiz III(M), Undergraduate, 2018 - 2019  
ANALİZ II (II.Öğr.), Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Analiz I(F+A), Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
ANALİZ I, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Analiz I(II.öğr.), Undergraduate, 2017 - 2018  
Analiz II(örgün), Undergraduate, 2015 - 2016  
Matematik II, Undergraduate, 2015 - 2016  
Analiz I(M), Undergraduate, 2016 - 2017  
MATEMATİK II, Undergraduate, 2014 - 2015  
KOMPLEKS ANALİZ II, Undergraduate, 2014 - 2015  
ANALİZ I (II.Öğr.), Undergraduate, 2015 - 2016, 2014 - 2015

Matematik I, Undergraduate, 2015 - 2016  
Analiz I(II.Öğretim), Undergraduate, 2015 - 2016, 2013 - 2014  
MATEMATİK I, Undergraduate, 2014 - 2015  
Analiz II, Undergraduate, 2013 - 2014  
Matematik II, Undergraduate, 2013 - 2014  
KOMPLEKS ANALİZ I, Undergraduate, 2014 - 2015  
Matematik I, Undergraduate, 2013 - 2014  
Mesleki İngilizce (II.Öğretim), Undergraduate, 2013 - 2014  
Analiz I(Tek), Undergraduate, 2013 - 2014  
Optimal Süreçler I, Postgraduate, 2013 - 2014  
Mesleki İngilizce, Undergraduate, 2013 - 2014  
Analiz II, Undergraduate, 2011 - 2012  
Öğretmenlik Uygulaması, Undergraduate, 2012 - 2013  
Matematik I, Undergraduate, 2012 - 2013  
Analiz II(II.Öğretim), Undergraduate, 2012 - 2013  
Optimal Süreçler I, Postgraduate, 2012 - 2013  
Analiz I, Undergraduate, 2012 - 2013  
Matematik II, Undergraduate, 2011 - 2012  
Analiz I(II.Öğretim), Undergraduate, 2012 - 2013  
Mesleki İngilizce, Undergraduate, 2012 - 2013  
Fonksiyonel Analiz(II.Öğretim), Undergraduate, 2011 - 2012  
Mesleki İngilizce, Undergraduate, 2012 - 2013  
Analizden Konular, Postgraduate, 2011 - 2012  
Diferansiyel Denklemler I(F), Undergraduate, 2011 - 2012, 2010 - 2011  
Diferansiyel Denklemler I(F-II.Öğr.), Undergraduate, 2011 - 2012, 2010 - 2011  
Analiz I(F-II.Öğret.), Undergraduate, 2010 - 2011  
Lineer Cebir I, Undergraduate, 2010 - 2011  
Analiz I(F), Undergraduate, 2010 - 2011  
Matematik I(Orm.F.), Undergraduate, 2008 - 2009  
Kompleks Analiz II, Undergraduate, 2007 - 2008, 2006 - 2007  
Matematik I(Orm.Fak), Undergraduate, 2008 - 2009  
Matematik I(Orm.F.), Undergraduate, 2008 - 2009  
Kompleks Analiz I, Undergraduate, 2008 - 2009, 2007 - 2008, 2006 - 2007  
Sayısal Analiz, Undergraduate, 2007 - 2008

## Advising Theses

Çiçek G., İkinci mertebeden bir tarama sürecinin optimalliği için gerekli koşullar, Postgraduate, B.AKGÜN(Student), 2022  
Çiçek G., OPTIMIZATION PROBLEM WITH SECOND ORDER SEMILINEAR DIFFERENTIAL INCLUSION, Postgraduate, Ş.Keskin(Student), 2019  
Çiçek G., İkinci Mertebeden Diferansiyel İçermeli Optimizasyon Problemleri, Postgraduate, G.BOZCU(Student), 2016  
Çiçek G., Uludağ A. M., Lp uzaylarında Konvolüsyon ve Süreklilik, Postgraduate, N.Günçavdı(Student), 2011

## Jury Memberships

Academic Staff Examination, Anabilim Dalı Araştırma Görevlisi Sınavı, İstanbul Üniversitesi, October, 2018  
Post Graduate, Tez Savunma Jürisi, Marmara Üniversitesi, June, 2018  
Doctorate, Tez Savunma Jürisi, İstanbul Üniversitesi, May, 2018  
Post Graduate, Tez Savunma Jürisi, Marmara Üniversitesi, April, 2012

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

- I. **Optimization of Mayer functional in problems with discrete and differential inclusions and viability constraints**  
Cicek G., Mahmudov E.  
TURKISH JOURNAL OF MATHEMATICS, vol.45, pp.2084-2102, 2021 (SCI-Expanded)
- II. **Optimization of differential inclusions of Bolza type and dualities**  
Mahmudov E. N., Cicek G.  
APPLIED AND COMPUTATIONAL MATHEMATICS, vol.6, no.1, pp.88-96, 2007 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The problem of mayer for discrete and differential inclusions with initial boundary constraints**  
ÇİÇEK G., Mahmudov E.  
Applied Mathematics and Information Sciences, vol.10, no.5, pp.1719-1728, 2016 (Scopus)
- II. **Some representations of Conjugate and Locally Conjugate Mappings**  
Çiçek G., Mahmudov E.  
İstanbul Üniversitesi Fen Fakültesi Matematik, Fizik ve Astronomi Dergisi, vol.1, pp.93-104, 2006 (Peer-Reviewed Journal)
- III. **Optimization of differential inclusions of Bolza type with state constraints and duality**  
Çiçek G., Mahmudov E.  
CUBO. A MATHEMATICAL JOURNAL, vol.7, no.2, pp.21-38, 2005 (ESCI)

## Books & Book Chapters

- I. **Seriler ve Rezidüler**  
Çiçek G., Uçar F., Günçan A. N., Gül E., Demir A., Yıldız İ., Kürem G., Dernek N.  
in: "A First Course in Complex Analysis with Applications" çevirisi-Kompleks Analiz ve Uygulamaları, Dernek A., Editor, Nobel Akademik Yayıncılık, Ankara, pp.271-350, 2013

## Refereed Congress / Symposium Publications in Proceedings

- I. **Optimization of Lagrange Problem with State Constraints**  
Çiçek G., Mahmudov E.  
9th International Conference on Control and Optimization with Industrial Applications, İstanbul, Turkey, 27 - 29 August 2024, pp.89
- II. **Optimization of the Hyperbolic Type Differential Inclusions Described by Polyhedral Set Valued Mappings**  
Çiçek G., Mahmudov E. N.  
2023 5th International Conference on Problems of Cybernetics and Informatics (PCI), Baku, Azerbaijan, 28 - 30 August 2023, pp.1-4
- III. **Optimization Of The Lagrange Problem With Second Order Differential Inclusions And Boundary Value Conditions**  
ÇİÇEK G.  
The 8.International Conference on Control and Optimization with Industrial Applications, Baku, Azerbaijan, 24 August 2022
- IV. **Optimization of Second Order Evolution Differential Inclusions Problem with Phase Con- straints**  
Çiçek G., Mahmudov E.

3 rd INTERNATIONAL CONFERENCE OF MATHEMATICAL SCIENCES, İstanbul, Turkey, 4 - 08 September 2019, pp.40

- V. **Optimality conditions of second order differential inclusions with viable constraint**  
ÇİÇEK G.  
International Conference on Applied Mathematics, Modeling and Life Sciences, İstanbul, Turkey, 03 October 2018, pp.51
- VI. **Necessary and Sufficient Conditions for the Second Order Discrete and Differential Inclusions with Viable Constraints**  
Cicek G.  
2nd International Conference of Mathematical Sciences (ICMS), İstanbul, Turkey, 31 July - 06 August 2018, vol.2086
- VII. **Optimization of Second Order Evolution Differential Inclusions Problem with Phase Constraints**  
Cicek G., Mahmudov E.  
3rd International Conference of Mathematical Sciences (ICMS), İstanbul, Turkey, 4 - 08 September 2019, vol.2183
- VIII. **Optimality conditions for second order differential inclusions with viable constraint**  
ÇİÇEK G.  
International Conference on Applied Mathematics, Modeling and Life Science Problems, İstanbul, Turkey, 3 - 05 October 2018, pp.51
- IX. **Necessary and Sufficient Conditions for the Second order Differential Inclusions with Viable Constraint**  
ÇİÇEK G.  
2nd International Conference of Mathematical Sciences, İstanbul, Turkey, 31 July - 06 August 2018, pp.70
- X. **Optimization of Second Order Differential Inclusions For Mayer Problem with Viable Constraint**  
ÇİÇEK G.  
7th International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 20 - 24 June 2018, pp.287
- XI. **Viability Problem for Second Order Differential Inclusions**  
ÇİÇEK G., Mahmudov E.  
2nd International Conference on Analysis and its Applications, Kırşehir, Turkey, 12 - 15 July 2016, pp.128
- XII. **The Problem of Mayer for Discrete and Differential Incusions with Initial Boundary Constraints**  
ÇİÇEK G., Mahmudov E. N.  
5th International Conference on Control and Optimization with Industrial Applications, Baku, Azerbaijan, 27 - 29 August 2015, pp.56-58
- XIII. **The Problem of Mayer for Discrete and Differential Inclusions with Initial Boundary Constraints**  
ÇİÇEK G., Mahmudov E.  
5th International Conference on Control and Optimization with Industrial Applications, Baku, Azerbaijan, 27 - 29 August 2015, pp.56-58
- XIV. **Optimization of second Order Discrete Approximation Inclusions**  
ÇİÇEK G., Mahmudov E.  
13th Viennese Workshop on Optimal Control and Dynamic Games, Viyana, Austria, 13 - 16 May 2015, pp.130
- XV. **Optimization of Second Order Discrete and Differential Inclusions**  
ÇİÇEK G., Elimhan M.  
13.Viennese Workshop on Optimal Control and Dynamic Games, Viyana, Austria, 13 - 16 May 2015, pp.130
- XVI. **Değişmeli Zaman aralığında Bolza Tipinde Diferansiyel Dahil etmeli Optimal Kontrol**  
Çiçek G., Mahmudov E.  
19.Ulusal Matematik Sempozyumu, Kütahya, Turkey, 1 - 04 September 2006, vol.1, no.1, pp.228-239
- XVII. **Optimization of Differential Inclusions of Bolza Type and Duality**  
ÇİÇEK G., Mahmudov E.  
Control and Optimization with Industrial Applications-COIA, Azerbaijan, 1 - 04 May 2005, vol.1, no.1, pp.65-66
- XVIII. **Optimization of Differential Inclusions of Bolza type with state constraints and Duality**  
ÇİÇEK G., Mahmudov E.

## **Memberships / Tasks in Scientific Organizations**

Türk Matematik Derneği, Member, 1996 - Continues

## **Scientific Refereeing**

OPTIMIZATION, SCI Journal, March 2022

AN INTERNATIONAL JOURNAL OF OPTIMIZATION AND CONTROL: THEORIES & APPLICATIONS (IJOCTA), Other Indexed Journal, February 2021

## **Metrics**

Publication: 24

Citation (WoS): 1

Citation (Scopus): 4

H-Index (WoS): 1

H-Index (Scopus): 1

## **Congress and Symposium Activities**

The 9th International Conference on Control and Optimization with Industrial Applications, Attendee, İstanbul, Turkey, 2024

5th International Conference on Problems of Cybernetics and Informatics(PCI2023), Attendee, Baku, Azerbaijan, 2023

The 8th International Conference on Control and Optimization with Industrial Applications, Attendee, Baku, Azerbaijan, 2022

International Conference on Applied Mathematics, modeling and Life Sciences, Attendee, Turkey, 2018

2nd International Conference of Mathematical Sciences, Attendee, İstanbul, Turkey, 2018

7th International Conference on Applied Analysis and Mathematical Modeling, Attendee, İstanbul, Turkey, 2018

2nd International Conference on Analysis and its Applications, Attendee, Kırşehir, Turkey, 2016

5th International Conference on Control and Optimization with Industrial Applications, Attendee, Baku, Azerbaijan, 2015

13.th Viennese Workshop on Optimal Control and Dynamic Games, Attendee, Viyana, Austria, 2015

Bargem Fen Bilimleri 1. Sempozyumu, Attendee, İstanbul, Turkey, 2006

19.Ulusal Matematik Sempozyumu, Attendee, Kütahya, Turkey, 2006

Control and Optimization with Industrial Applications-COIA, Attendee, Bakü, Azerbaijan, 2005

16.Ulusal Matematik Sempozyumu, Attendee, Van, Turkey, 2003