# Asst. Prof. Gülseren ÇİÇEK

#### **Personal Information**

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#### **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, Metriklenebilme 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

#### Courses

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 3, Undergraduate, 2023 - 2024, 2022 - 2023 KONVEKS PROGRAMLAMA VE OPTİMİZASYON, Doctorate, 2023 - 2024 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 Optimal Süreçler I, Postgraduate, 2020 - 2021 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 ANALIZ 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 MATEMATIK II, Undergraduate, 2014 - 2015 KOMPLEKS ANALIZ 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 MATEMATIK I, Undergraduate, 2014 - 2015 Analiz II, Undergraduate, 2013 - 2014 Matematik II, Undergraduate, 2013 - 2014 KOMPLEKS ANALIZ 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 DIFFERANTIAL 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 Çiçek 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 (Scopus)

# **Books & Book Chapters**

I. Seriler ve Rezidüler
 Çiçek G., Uçar F., Güncan 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 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

II. 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

 $\label{eq:conditions} \text{III.} \quad \text{Optimality conditions of second order differential inclusions with viable constraint} \\ & \zeta \dot{I} \zeta E K \ G.$ 

International Conference on Applied Mathematics, Modeling and Life Sciences, İstanbul, Turkey, 03 October 2018, pp.51

IV. 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

## V. 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

VI. Optimality conditions for second order differential inclusions with viable constraint CİÇEK G.

International Conference on Applied Mathematics, Modeling and Life Scence Problems, İstanbul, Turkey, 3 - 05 October 2018, pp.51

# VII. 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

## VIII. Optimization of Second Order Differential Inclusions For Mayer Problem with Viable Constraint ÇİÇEK G.

7th International Conference on AppliedAnalysis and Mathematical Modeling, İstanbul, Turkey, 20 - 24 June 2018, pp.287

IX. 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

X. 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

# XI. 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

# XII.Optimization of second Order Discrete Approximation InclusionsÇİÇEK G., Mahmudov E.

13th Viennese Workshop on Optimal Control and Dynamic Games, Viyana, Austria, 13 - 16 May 2015, pp.130

XIII. 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

# XIV. 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

XV.Optimization of Differential Inclusions of Bolza Type and DualityÇİÇEK G., Mahmudov E.

Control and Optimization with Industrial Applications-COIA, Azerbaijan, 1 - 04 May 2005, vol.1, no.1, pp.65-66

# XVI. Optimization of Differential Inclusions of Bolza type with state constraints and Duality ÇİÇEK G., Mahmudov E. 16 Ulucel Metametik Somnoyunun Van Turkey, 1, 04 Sentember 2003, pp.44

16.Ulusal Matematik Sempozyumu, Van, Turkey, 1 - 04 September 2003, pp.44

# 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: 23 Citation (WoS): 1 H-Index (WoS): 1

#### **Congress and Symposium Activities**

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