

Assoc. Prof.  
Yonca SEZER



### Personal Information

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### International Researcher IDs

ORCID: 0000-0003-3072-8302  
Publons / Web Of Science  
ResearcherID: AAC-8076-2021  
ScopusID: 36553265800  
Yoksis Researcher ID: 188265

### Education Information

Doctorate, Yildiz Technical  
University, Turkey 2002 - 2007  
Postgraduate, Yildiz Technical  
University, Faculty Of Arts & Science,  
Department Of Mathemeatics,  
Turkey 2000 - 2002  
Undergraduate, Marmara University,  
Faculty Of Arts And Sciences,  
Mathematics, Turkey 1995 - 1999

### Research Areas

Mathematics, Functional Analysis, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2000 - Continues

### Academic and Administrative Experience

Vice Dean, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2023 - Continues  
Deputy Head of Department, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2022 - 2023  
Bölüm Stratejik Plan Komisyonu Başkanı, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics,  
2017 - 2020  
Bölüm Kalite Komisyonu Üyesi, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, 2014 - 2017

### Courses

Diferansiyel Denklemler 2 , Undergraduate, 2022 - 2023  
SEMİNER, Doctorate, 2022 - 2023  
Differential Equations, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021  
TASARIMCILAR İÇİN MATEMATİK, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Mathematics 2, Undergraduate, 2021 - 2022, 2020 - 2021  
MATEMATİK 1, Undergraduate, 2021 - 2022, 2018 - 2019  
Hilbert Uzayları, Postgraduate, 2020 - 2021  
Hilbert Space, Postgraduate, 2020 - 2021  
Mathematics For Designers, Undergraduate, 2019 - 2020, 2018 - 2019  
Lineer Operatörler 2, Postgraduate, 2018 - 2019  
DİFERANSİYEL DENKLEMLER, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
LİNEER CEBİR, Undergraduate, 2019 - 2020  
İleri Lineer Operatörler 1, Postgraduate, 2018 - 2019  
MATEMATİK 2, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016

## Advising Theses

Sezer Y., Kesirli Diferansiyel Denklemler İçin Nümerik Metotlar, Postgraduate, M.ERTÜRK(Student), 2023  
Sezer Y., Kesirli Diferansiyel Denklemlere Genel Bakış, Postgraduate, B.BAĞLIK(Student), 2023  
Sezer Y., KARAR ALMA SÜREÇLERİNDE BÜYÜK VERİ KULLANIMI VE MATEMATİKSEL MODELLEME, Postgraduate, B.AKDAŞ(Student), 2022

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

- I. **The Second Regularized Trace of Even Order Differential Operators with Operator Coefficient**  
BAKŞİ Ö., SEZER Y.  
FILOMAT, vol.36, no.4, pp.1069-1080, 2022 (SCI-Expanded)
- II. **On Higher Regularized Traces of a Differential Operator with Bounded Operator Coefficient Given in a Finite Interval**  
SEZER Y., BAKŞİ Ö., KARAYEL S.  
MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.18, no.3, 2021 (SCI-Expanded)
- III. **Second regularized trace of a differential operator with second order unbounded operator coefficient given in a finite interval**  
Bakşi Ö., Karayel S., Sezer Y.  
Operators and Matrices, vol.11, pp.735-747, 2017 (SCI-Expanded)
- IV. **THE ASYMPTOTIC FORMULAS FOR THE SUM OF SQUARES OF NEGATIVE EIGENVALUES OF A SINGULAR STURM-LIOUVILLE OPERATOR**  
Sezer Y.  
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, vol.79, no.4, pp.69-82, 2017 (SCI-Expanded)
- V. **The regularized trace formula for a fourth order differential operator given in a finite interval**  
Karayel S., Sezer Y.  
JOURNAL OF INEQUALITIES AND APPLICATIONS, 2015 (SCI-Expanded)
- VI. **The regularized trace of a self adjoint differential operator of higher order with unbounded operator coefficient**  
Adiguzelov E., Sezer Y.  
APPLIED MATHEMATICS AND COMPUTATION, vol.218, pp.2113-2121, 2011 (SCI-Expanded)
- VII. **The second regularized trace of a self adjoint differential operator given in a finite interval with bounded operator coefficient**  
Adiguzelov E., Sezer Y.  
MATHEMATICAL AND COMPUTER MODELLING, vol.53, pp.553-565, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Solvability of Riemann Boundary Value Problems and Applications to Approximative Properties of Perturbed Exponential System in Orlicz Spaces**  
Bilalov B. T., SEZER Y., Alizadeh F. A., Ildiz U.  
Azerbaijan Journal of Mathematics, vol.14, no.1, pp.164-185, 2024 (ESCI)
- II. **TRACE REGULARIZATION PROBLEM FOR HIGHER ORDER DIFFERENTIAL OPERATOR**  
Sezer Y., Bakşı Ö., Karayel S.  
Maltepe Journal of Mathematics, vol.2, no.1, pp.27-37, 2020 (Peer-Reviewed Journal)
- III. **The sum of subtraction of the eigenvalues of two self adjoint differential operators with unbounded operator coefficient**  
BAKŞI Ö., SEZER Y., KARAYEL S.  
INTERNATIONAL JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.3, no.63, pp.255-268, 2010 (Scopus)
- IV. **The sum of subtraction of the eigenvalues of two self-adjoint differential operators with unbounded operator coefficient**  
Karayel S., Bakşı Ö., Sezer Y.  
International Journal of Pure and Applied Mathematics, vol.3, no.63, pp.255-268, 2010 (Peer-Reviewed Journal)
- V. **On Spektrum of a Self Adjoint Differential Operator of Higher Order with Unbounded Operator Coefficient and Asymptotic Behaviour of Eigenvalues**  
Adiguzelov E., Sezer Y.  
Sigma Journal of Engineering and Natural Sciences, vol.2006, no.4, pp.32-48, 2006 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **SOLUTION OF FRACTIONAL DIFFERENTIAL EQUATION WITH SHEHU TRANSFORM**  
SEZER Y., Bağlık B.  
9th International Congress on Fundamental and Applied Sciences 2022 (ICFAS2022), İstanbul, Turkey, 28 June 2022, pp.170
- II. **APPLICATION OF ADOMIAN DECOMPOSITION METHOD AND DIFFERENTIAL TRANSFORMATION METHOD IN SOLVING BAGLEY-TORVIK EQUATION**  
SEZER Y., Ertürk M.  
9th International Congress on Fundamental and Applied Sciences 2022 (ICFAS2022), İstanbul, Turkey, 28 June 2022, pp.169
- III. **Using Big Data in Decision Making Processes and Mathematical Modelling**  
SEZER Y., AKDAŞ B.  
5th INTERNATIONAL E-CONFERENCE ON MATHEMATICAL ADVANCES AND ITS APPLICATIONS, İstanbul, Turkey, 11 May 2022, pp.45
- IV. **The Second Regularized Trace of Even Order Differential Operators with Operator Coefficient**  
SEZER Y., BAKŞI Ö.  
FOURTH INTERNATIONAL CONFERENCE OF MATHEMATICAL SCIENCES, İstanbul, Turkey, 17 June 2020, vol.1, pp.39
- V. **About Second Regularized Trace Of A Differential Operator**  
Sezer Y.  
European Women in Mathematics General Meeting 2018, Graz, Austria, 3 - 07 September 2018, pp.1
- VI. **On Trace Of Second Order Differential Operator Equation. ,İstanbul Gelişim Üniversitesi**  
SEZER Y.  
4th International Conference on Pure and Applied sciences:Renewable Energy, 23 - 25 November 2017
- VII. **On Regularization of The Trace Of The Differential Operator**  
SEZER Y.  
Third International Conference On Pure And Applied Science Dubai, 2 - 06 February 2017
- VIII. **About The Regularized Trace of A Self Adjoint Differential Operator**  
SEZER Y.  
The Eight Congress of Romain Mathematics, 26 June - 01 July 2015

- IX. **On the Asymptotic Behavior of Eigenvalues of yhe Sturm- Liouville Operator**  
Sezer Y.  
The 10 th AIMS Conference on Dynamical Systems, Madrid, Spain, 7 - 11 July 2014, pp.503
- X. **On The Regularized Trace of an Even Order Differential Operator Given in a Finite Interval**  
Sezer Y.  
Operator Theory, Analysis and Mathematical Physics, Centre De Rcerca Matematica, Barcelona, Spain, 12 - 14 June 2012, pp.1
- XI. **The Regularized Trace Formula For a Differential Operator of Fourth order with bounded operator Coefficient**  
SEZER Y., BAKŞI Ö., KARAYEL S.  
International Conference on Mathematical Sciences, Bolu, Turkey, 23 - 27 November 2010
- XII. **The Asymptotic Formula for the Subtraction of eigenvalues of a second order Differential operator**  
Bakşı Ö., Karayel S., Sezer Y.  
International Symposium on Analysis and theory of Functions, İstanbul Kültür University, İstanbul, Turkey, 24 - 26 August 2009, pp.41-42
- XIII. **The Second Regularized Trace of a Differential Operator with Operator Coefficien**  
Sezer Y.  
XVI International Congress on Mathematical Physics, Prague, Praha, Czech Republic, 3 - 08 August 2009, vol.50, no.10201, pp.1
- XIV. **The Regularized Trace of a Differential Operator of even Order with Operator Coefficient**  
Adiguzelov E., Sezer Y.  
Fifth International Conference of Applied Mathematics and Computing , University of Chemical Technology and Metallurgy, Plovdiv, Bulgaria, 12 - 18 August 2008, pp.11
- XV. **Çift Mertebeden Operatör Katsayılı Bir Diferansiyel Operatörün Spektrumunun İncelenmesi ve Özdeğerleri İçin Asimtotik Formül**  
Sezer Y.  
19. Ulusal Matematik Sempozyumu, Kütahya, Turkey, 21 - 25 August 2006, pp.1

## Supported Projects

GÜL E., KIZILBUDAK ÇALIŞKAN S., SEZER Y., BAKŞI Ö., KARAYEL S., Project Supported by Higher Education Institutions, Zaman-Sıralı Hiperbolik ve Parabolik Evolüsyon Sistemleri, 2023 - 2024  
SEZER Y., BAKŞI Ö., Project Supported by Higher Education Institutions, Yüksek Mertebeden Diferansiyel Operatörün Banach Uzayı Üzerinde Özdeğerlerinin Toplamı için Asimptotik Formüller, 2023 - 2024

## Scientific Refereeing

İĞDIR ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, Other Indexed Journal, March 2019

## Scientific Research / Working Group Memberships

Howard-Yıldız Analysis Research Group, Yildiz Technical University, Türkiye, <https://avesis.yildiz.edu.tr/arastirma-grubu/arg>, 2021 - Continues

## Metrics

Publication: 28  
Citation (WoS): 11  
Citation (Scopus): 12  
H-Index (WoS): 2

H-Index (Scopus): 2

### **Congress and Symposium Activities**

4th International Conference on Pure and Applied sciences:Renewable Energy, Attendee, İstanbul, Turkey, 2017

### **Non Academic Experience**

Yeditepe Üniversitesi

Türkiye Medipol Üniversitesi