### Assoc. Prof. GİZEM SEYHAN ÖZTEPE

Office Phone: <u>+90 312 216 8978</u>

Fax Phone: <u>+90 312 223 5000</u>

Email: gseyhan@ankara.edu.tr

Web: https://avesis.ankara.edu.tr/gseyhan

Address: Ankara Üniversitesi Fen Fakültesi, Matematik Bölümü Degol Cad.

06100 Tandoğan-Çankaya /Ankara International Researcher IDs

ScholarID: V3o35SkAAAAJ ORCID: 0000-0002-8170-7029

Publons / Web Of Science ResearcherID: B-9001-2018

ScopusID: 56003553200

Yoksis Researcher ID: 121360



#### **Education Information**

- I. Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2009 2013
- II. Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), Turkey 2006 2009
- III. Postgraduate, Gazi University, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Enstitüsü, Turkey 2005 2007
- IV. Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 2001 2005

# Foreign Languages

I. English, B2 Upper Intermediate

#### Dissertations

- I. Doctorate, Parçalı sürekli argümentli impulsive diferensiyel denklemler, Ankara University, Fen Bilimleri Enstitüsü,
   Matematik (Dr), 2013
- II. Postgraduate, Parçalı sürekli argümentli diferensiyel denklemler, Ankara University, Fen Bilimleri Enstitüsü,Matematik (Yl) (Tezli), 2009

#### Research Areas

Differential Equations, Functional Equations

# Academic Titles / Tasks

- I. Associate Professor, Ankara University, Fen Fakültesi, Matematik Bölümü, 2020 Continues
- II. Assistant Professor, Ankara University, Fen Fakültesi, Matematik Bölümü, 2017 2020
- III. Research Assistant, Ankara University, Fen Fakültesi, Matematik Bölümü, 2008 2017

- I. Difference Equations, Undergraduate, 2024 2025, 2023 2024, 2022 2023, 2021 2022, 2020 2021
- II. Differential Equations, Undergraduate, 2024 2025, 2023 2024, 2022 2023, 2021 2022, 2020 2021, 2019 2020
- III. Difference Equations, Undergraduate, 2024 2025, 2023 2024, 2022 2023, 2021 2022, 2020 2021, 2019 2020, 2018 2019
- IV. Differential Equations, Undergraduate, 2024 2025, 2023 2024, 2022 2023
- V. Systems of Difference Equations, Undergraduate, 2022 2023, 2021 2022
- VI. Diferansiyel Denklemler, Undergraduate, 2022 2023, 2021 2022, 2020 2021, 2019 2020
- VII. Systems of Difference Equations, Undergraduate, 2022 2023
- VIII. Difference Equations, Doctorate, 2022 2023, 2021 2022, 2020 2021, 2019 2020, 2018 2019, 2017 2018
  - IX. Differential Equations, Undergraduate, 2021 2022, 2020 2021
  - X. Mathematics, Undergraduate, 2021 2022
- XI. Mathematics I, Undergraduate, 2021 2022
- XII. Calculus II, Undergraduate, 2020 2021
- XIII. Mathematics I, Undergraduate, 2021 2022
- XIV. Mathematical Modelling, Undergraduate, 2019 2020
- XV. Differential Equations, Undergraduate, 2019 2020, 2018 2019, 2017 2018
- XVI. Mathematics II, Undergraduate, 2018 2019
- XVII. Calculus II, Undergraduate, 2018 2019
- XVIII. Calculus I, Undergraduate, 2019 2020, 2018 2019, 2017 2018, 2016 2017
  - XIX. Calculus I, Undergraduate, 2017 2018
  - XX. Calculus -II, Undergraduate, 2017 2018
  - XXI. Mathematics I, Undergraduate, 2018 2019

# **Advising Theses**

I. Seyhan Öztepe G., Sürekli dinamik sistemlerin kararlılık ve çatallanma analizi, Postgraduate,
 N.BURKANKULU(Student), 2022

### Jury Memberships

- I. Post Graduate, Post Graduate, Ankara Üniversitesi, January, 2024
- II. Doctoral Examination, Doctoral Examination, Ankara Üniversitesi, July, 2023
- III. Doctorate, Doctorate, Ankara Üniversitesi, July, 2023
- IV. PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, January, 2021

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

- I. An investigation on the Lasota-Wazewska model with a piecewise constant argument SEYHAN ÖZTEPE G.
  - HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.50, no.5, pp.1500-1508, 2021 (SCI-Expanded)
- II. Oscillation of first-order differential equations with several non-monotone retarded arguments BEREKETOĞLU H., KARAKOÇ F., SEYHAN ÖZTEPE G., Stavroulakis I. P. GEORGIAN MATHEMATICAL JOURNAL, vol.27, no.3, pp.341-350, 2020 (SCI-Expanded)
- III. BEHAVIOR OF SOLUTIONS OF A NONLINEAR IMPULSIVE SYSTEM WITH PIECEWISE CONSTANT MIXED

#### **ARGUMENTS**

Buyukkahraman M. L., SEYHAN ÖZTEPE G., BEREKETOĞLU H.

MISKOLC MATHEMATICAL NOTES, vol.21, no.2, pp.733-746, 2020 (SCI-Expanded)

IV. Existence and qualitative properties of solutions of a second order mixed type impulsive differential equation with piecewise constant arguments

Oztepe G.

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.46, no.6, pp.1077-1091, 2017 (SCI-Expanded)

V. QUALITATIVE PROPERTIES OF A THIRD-ORDER DIFFERENTIAL EQUATION WITH A PIECEWISE CONSTANT ARGUMENT

Bereketoğlu H., Lafci M., Seyhan Öztepe G.

ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, vol.2017, 2017 (SCI-Expanded)

VI. On the Oscillation of a Third Order Nonlinear Differential Equation with Piecewise Constant Arguments

BEREKETOĞLU H., Lafci M., SEYHAN ÖZTEPE G.

MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.14, no.3, 2017 (SCI-Expanded)

VII. ASYMPTOTIC CONVERGENCE OF SOLUTIONS OF A SCALAR q-DIFFERENCE EQUATION WITH DOUBLE DELAYS

Bereketoglu H., KAVGACI M. E., Oztepe G.

ACTA MATHEMATICA HUNGARICA, vol.148, no.2, pp.279-293, 2016 (SCI-Expanded)

VIII. Asymptotic constancy for impulsive differential equations with piecewise constant argument Bereketoğlu H., Seyhan Öztepe G.

BULLETIN MATHEMATIQUE DE LA SOCIETE DES SCIENCES MATHEMATIQUES DE ROUMANIE, vol.57, no.2, pp.181-192, 2014 (SCI-Expanded)

IX. CONVERGENCE OF THE SOLUTION OF AN IMPULSIVE DIFFERENTIAL EQUATION WITH PIECEWISE CONSTANT ARGUMENTS

BEREKETOĞLU H., SEYHAN ÖZTEPE G.

MISKOLC MATHEMATICAL NOTES, vol.14, no.3, pp.801-815, 2013 (SCI-Expanded)

X. On a second order differential equation with piecewise constant mixed arguments

Bereketoglu H., Seyhan G., Karakoc F.

CARPATHIAN JOURNAL OF MATHEMATICS, vol.27, no.1, pp.1-12, 2011 (SCI-Expanded)

XI. Oscillatory and Periodic Solutions of Impulsive Differential Equations with Piecewise Constant Argument

KARAKOÇ F., BEREKETOĞLU H., SEYHAN ÖZTEPE G.

ACTA APPLICANDAE MATHEMATICAE, vol.110, no.1, pp.499-510, 2010 (SCI-Expanded)

XII. Advanced Impulsive Differential Equations with Piecewise Constant Arguments

Bereketoglu H., Seyhan G., Ogun A.

MATHEMATICAL MODELLING AND ANALYSIS, vol.15, no.2, pp.175-187, 2010 (SCI-Expanded)

# Articles Published in Other Journals

I. Bifurcations and Dynamics in Modified Two Population Neuronal Network Models

Choudhury S. R., Oztepe G.

Discontinuity, Nonlinearity, and Complexity, vol.10, no.2, pp.237-257, 2021 (Scopus)

II. Oscillation and Periodicity of a Second Order Impulsive Delay Differential Equation with a Piecewise Constant Argument

S. Oztepe G., Karakoç F., Bereketoğlu H.

Communications in Mathematics, vol.25, no.2, pp.89-98, 2017 (Scopus)

III. CONVERGENCE OF SOLUTIONS OF AN IMPULSIVE DIFFERENTIAL SYSTEM WITH A PIECEWISE CONSTANT ARGUMENT

Oztepe G.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.66, no.2, pp.115-129, 2017 (ESCI)

IV. Multiple scales and energy analysis of coupled Rayleigh Van der Pol oscillators with time delayed displacement and velocity feedback Hopf bifurcations and amplitude death

Seyhan Öztepe G., Choudhury S. R., Bhatt A.

Far East Journal of Dynamical Systems, vol.26, no.1, pp.31-59, 2015 (Peer-Reviewed Journal)

V. Convergence in an impulsive advanced differential equations with piecewise constant argument Seyhan Öztepe G., Bereketoğlu H.

BULLETIN OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.4, no.3, pp.57-70, 2012 (ESCI)

# Refereed Congress / Symposium Publications in Proceedings

I. Complex Behaviors of a Predator-Prey Model Discretized by Piecewise Constant Arguments Seyhan Öztepe G.

29th International Conference on Difference Equations and Applications 24-28 Jun 2024 Paris (France), Paris, France, 24 - 28 June 2024, pp.95

II. Some Bifurcations of a Fractional Order Discrete Prey-Predator Model

Seyhan Öztepe G., Lafcı M.

2nd International E-Conference on Mathematical and Statistical Science: A Selcuk Meeting, Konya, Turkey, 5 - 07 June 2023, pp.195

III. Detection of The Bifurcation of Chen's Chaotic Attractor

Seyhan Öztepe G.

8th International Conference on Intuitionistic Fuzzy Sets and Contemporary Mathematics (IFSCOM-2022), Mersin, Turkey, 16 - 19 June 2022, pp.58

IV. An Investigation on the Lasota-Wazewska model with a Piecewise Constant Argument Seyhan Öztepe G.

8th International Conference on Intuitionistic Fuzzy Sets and Contemporary Mathematics (IFSCOM-2022), Mersin, Turkey, 16 - 19 June 2022, pp.57

V. Some Properties of a Differential Equation with Piecewise Constant Arguments SEYHAN ÖZTEPE G., LAFCI M., BEREKETOĞLU H.

The 25th International Conference on Difference Equations and Applications (ICDEA 2019), 24 - 28 June 2019

VI. Oscillation of a Third Order Nonlinear Differential Equation with Piecewise Constant Arguments LAFCI M., BEREKETOĞLU H., SEYHAN ÖZTEPE G.

International Conference on Mathematics and Mathematics Education (ICMME 2017), 11 - 13 May 2017

VII. Oscillation of a second order impulsive delay differential equation with a piecewise constant argument

SEYHAN ÖZTEPE G., KARAKOÇ F., BEREKETOĞLU H.

International Conference on Applied Mathematics and Analysis, 11 - 16 July 2016

VIII. Some Results on a Third Order Differential Equation with a Piecewise Constant Argument LAFCI M., BEREKETOĞLU H., SEYHAN ÖZTEPE G.

The 11th Aims Conference in Dynamical Systemsi Differential Equations and Applications, 1 - 05 July 2016

IX. İleri tipten parçalı sürekli argümentli impulsive denklemlerin çözümlerinin yakınsaklığı SEYHAN ÖZTEPE G.

11. Ankara Matematik Günleri, Turkey, 26 - 27 May 2016

X. Oscillation of Mixed Type Third Order Nonlinear Differential Equation with Piecewise Constant Arguments

LAFCI M., SEYHAN ÖZTEPE G.

International Conference on Pure and Applied Mathematics (ICPAM 2015), 25 - 28 August 2015

XI. Parçalı Sürekli Argümentli Impulsive Diferensiyel Denklemler

SEYHAN ÖZTEPE G.

Ankara Üniversitesi Matematik Bölüm Semineri, Turkey, 23 October 2013

XII. Parçalı Sürekli Argümentli Diferensiyel Denklemlerin Çözümlerinin Yakınsaklığı Üzerine SEYHAN ÖZTEPE G., BEREKETOĞLU H.

8. Ankara Matematik Günleri, Turkey, 13 - 14 June 2013

XIII. Advanced Impulsive Differential Equations with Piecewise Constant Arguments SEYHAN ÖZTEPE G.

The International Conference on the Theory, Methods and Applications of Nonlinear Equations, 17 - 21 December 2012

XIV. Oscillatory and Periodic Solutions of Impulsive Differential Equations with Piecewise Constant Argument

Karakoç F., Bereketoğlu H., Seyhan Öztepe G.

The 11th International Workshop on Dynamical Systems and Applications, Ankara, Turkey, 26 - 28 June 2012, pp.16

XV. Oscillation of Impulsive Diferential Equations with Piecewise Constant Argment

KARAKOÇ F., BEREKETOĞLU H., SEYHAN ÖZTEPE G.

Joint Mathematics Meetings, 6 - 09 January 2011

XVI. Oscillation of Impulsive Differential Equations with Piecewise Constant Argument

Karakoç F., Bereketoğlu H., Seyhan Öztepe G.

AMS-MAA 2011 Joint Mathematics Meeting, Louisiana, United States Of America, 6 - 09 January 2011, pp.167

XVII. On a Second Order Differential Equation with Piecewise Constant Mixed Arguments Seyhan Öztepe G., Bereketoğlu H., Karakoç F.

The 6th International Conference: Dynamical Systems and Applications, Antalya, Turkey, 10 - 14 July 2010

XVIII. Some Results on an Advanced Impulsive Differential Equation with Piecewise Constant Argument ÜNAL A., SEYHAN ÖZTEPE G., BEREKETOĞLU H.

International Conference of Mathematical Sciences, 4 - 10 August 2009

XIX. İkinci Basamaktan Parçalı Sürekli Argümentli Bir Diferensiyel Denklemin Salınımlı ve Periyodik Çözümleri Üzerine

SEYHAN ÖZTEPE G., BEREKETOĞLU H.

III. Ankara Matematik Günleri Sempozyumu, Turkey, 22 - 23 May 2008

#### Activities in Scientific Journals

I. COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, Assistant Editor/Section Editor, 2021 - Continues

### Memberships / Tasks in Scientific Organizations

- I. International Society of Difference Equations, Member, 2023 Continues, United States Of America
- II. American Mathematical Society, Member, 2016 Continues, United States Of America

# Scientific Refereeing

- I. CARPATHIAN JOURNAL OF MATHEMATICS, SCI Journal, May 2024
- II. HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, Journal Indexed in SCI-E, August 2023
- III. HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, SCI Journal, September 2022

#### Scientific Consultations

- I. TÜBİTAK, Project Consultancy, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey, 2022 Continues
- II. TÜBİTAK, Project Consultancy, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey, 2021 2021

#### Metrics

Publication: 36 Citation (WoS): 112 Citation (Scopus): 124 H-Index (WoS): 6 H-Index (Scopus): 6

### Congress and Symposium Activities

- 29th International Conference on Difference Equations and Applications 24-28 Jun 2024 Paris (France), Attendee, Paris, France, 2024
- II. 2nd International E-Conference on Mathematical and Statistical Science: A Selcuk Meeting, Attendee, Konya, Turkey, 2023
- III. 8th International Conference on Intuitionistic Fuzzy Sets and Contemporary Mathematics (IFSCOM-2022), Attendee, Mersin, Turkey, 2022
- IV. 8th International Conference on Intuitionistic Fuzzy Sets and Contemporary Mathematics (IFSCOM-2022), Attendee, Mersin, Turkey, 2022
- V. The 25th International Conference on Difference Equations and Applications (ICDEA 2019), Attendee, London, England, 2019
- VI. International Conference on Mathematical Advances and Applications (ICOMAA-2018), Attendee, İstanbul, Turkey, 2018
- VII. International Conference on Applied Mathematics and Analysis (ICAMA 2016), In memory of Prof. Hüseyin Şirin Hüseyin, Attendee, Ankara, Turkey, 2016
- VIII. 11. Ankara Matematik Günleri, Attendee, Ankara, Turkey, 2016
  - IX. Ankara Üniversitesi Matematik Bölüm Semineri, Invited Speaker, Ankara, Turkey, 2015
  - X. 8. Ankara Matematik Günleri, 13-14 Haziran 2013, Çankaya Üniversitesi., Attendee, Ankara, Turkey, 2013
  - XI. The International Conference on the Theory, Methods and Applications of Nonlinear Equations,, Attendee, Texas, United States Of America, 2012
- XII. The 6th International Conference: Dynamical Systems and Applications, Attendee, Antalya, Turkey, 2010
- XIII. International Conference of Mathematical Sciences 2009 (ICMS 2009), Attendee, İstanbul, Turkey, 2009
- XIV. 3. Ankara Matematik Günleri Sempozyumu, Attendee, Ankara, Turkey, 2008

# Scholarships

- I. 2219 Doktora Sonrası Araştırma Burs Programı, TUBITAK, 2014 2015
- II. 2211 Yurt İçi Doktora burs Programı, TUBITAK, 2009 2013