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Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1999 - 2003

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1993 - 1996

Undergraduate, Erciyes University, Fen Edebiyat Fakültesi, Matematik, Turkey 1988 - 1992

Research Areas

Mathematics, Differential Equations, Natural Sciences

Academic Titles / Tasks

Professor, Erciyes University, Fen Fakültesi, Matematik, 2020 - Continues

Assistant Professor, Erciyes University, Fen Fakültesi, Matematik, 2003 - Continues

Associate Professor, Erciyes University, Fen Fakültesi, Matematik, 2014 - 2020

Academic and Administrative Experience

Erciyes University, 2016 - Continues

Assistant Director of the Institute, Erciyes University, Fen Bilimleri Enstitüsü, 2016 - 2022

Erciyes University, 2008 - 2010

Courses

Genel Programlamaya Giriş II, Undergraduate, 2013 - 2014

Adi Türevli Denklemler II, Postgraduate, 2013 - 2014

Diferensiyel Denklemler, Undergraduate, 2013 - 2014

Advising Theses

- ŞENEL M. T., NÖTRAL DİFERENSİYEL DENKLEMLERİN SALINIM YAPMAYAN ÇÖZÜMLERİNİN VARLIĞI, Doctorate, B.ÇINA(Student), 2017
- ŞENEL M. T., Zaman Skalasında Dinamik Denklemlerin Çözümlerinin Davranışı Üzerine, Doctorate, N.Utku(Student), 2014
- ŞENEL M. T., Zaman Skalasında Yüksek Mertebeden Dinamik Denklemlerin Çözümlerini Davranışı, Postgraduate, E.Özkan(Student), 2012
- ŞENEL M. T., Zaman Skalasında Nötral Gecikmeli Dinamik Denklemlerin Salınımsız Çözümlerinin Varlığı, Postgraduate, İ.Ulusoy(Student), 2011
- ŞENEL M. T., İkinci Basamaktan Yarı lineer Diferensiyel Denklemlerin Çözümlerinin Davranışı Üzerine, Postgraduate, E.Aktaş(Student), 2009
- ŞENEL M. T., İkinci Basamaktan Diferensiyel Denklemlerin Çözümlerinin Davranışı Üzerine, Postgraduate, E.Tokel(Student), 2009
- ŞENEL M. T., İkinci Mertebeden Diferensiyel Denklemlerin Çözümlerinin Davranışı, Postgraduate, N.Balaban(Student), 2007

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A mathematical modeling of patient-derived lung cancer stem cells with fractional-order derivative**
ÖZKÖSE F., YILMAZ S., ŞENEL M. T., Yavuz M., Townley S., Dogan Sarıkaya M.
Physica Scripta, vol.99, no.11, 2024 (SCI-Expanded)
- II. **A novel fractional order model of SARS-CoV-2 and Cholera disease with real data**
ÖZKÖSE F., Habbireeh R., ŞENEL M. T.
Journal of Computational and Applied Mathematics, vol.423, 2023 (SCI-Expanded)
- III. **Fractional order modelling of omicron SARS-CoV-2 variant containing heart attack effect using real data from the United Kingdom**
ÖZKÖSE F., Yavuz M., ŞENEL M. T., Habbireeh R.
Chaos, Solitons and Fractals, vol.157, 2022 (SCI-Expanded)
- IV. **A Fractional Modeling of Tumor-Immune System Interaction Related to Lung Cancer with Real Data**
Ozkose F., Yilmaz S., Yavuz M., Ozturk I., Şenel M. T., Bagci B. S., Dogan M., Önal Ö.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.137, no.1, 2021 (SCI-Expanded)
- V. **Synchronization of bidirectional N-coupled fractional-order chaotic systems with ring connection based on antisymmetric structure**
Jiang C., Zada A., ŞENEL M. T., Li T.
ADVANCES IN DIFFERENCE EQUATIONS, vol.2019, no.1, 2019 (SCI-Expanded)
- VI. **Existence of nonoscillatory solutions of second-order nonlinear neutral differential equations with distributed deviating arguments**
ŞENEL M. T., Candan T., ÇINA B.
JOURNAL OF TAIBAH UNIVERSITY FOR SCIENCE, vol.13, no.1, pp.998-1005, 2019 (SCI-Expanded)
- VII. **On Novel Nonhomogeneous Multivariable Grey Forecasting Model NHMGM**
Wang H., Wang P., ŞENEL M. T., Li T.
MATHEMATICAL PROBLEMS IN ENGINEERING, vol.2019, 2019 (SCI-Expanded)
- VIII. **Kamenev-type criteria for nonlinear second-order delay dynamic equations**
ŞENEL M. T., Utkut N., El-Sheikh M. M. A., Li T.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.47, no.2, pp.339-345, 2018 (SCI-Expanded)
- IX. **An asymptotic criterion for third-order dynamic equations with positive and negative coefficients**
Utku N., Li T., ŞENEL M. T.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.44, no.5, pp.1157-1162, 2015 (SCI-Expanded)
- X. **Oscillation criteria for third-order neutral dynamic equations with continuously distributed delay**
ŞENEL M. T., Utku N.
ADVANCES IN DIFFERENCE EQUATIONS, 2014 (SCI-Expanded)
- XI. **Oscillation of second-order half-linear differential equations with several neutral terms**

- Zhang C., ŞENEL M. T., Li T.
Journal of Applied Mathematics and Computing, vol.44, pp.511-518, 2014 (SCI-Expanded)
- XII. **Oscillation Behavior of Third-Order Nonlinear Neutral Dynamic Equations on Time Scales with Distributed Deviating Arguments**
ŞENEL M. T., Utku N.
FILOMAT, vol.28, no.6, pp.1211-1223, 2014 (SCI-Expanded)
- XIII. **Oscillation Behavior Of Third-Order Quasilinear Neutral Delay Dynamic Equations On Time Scales**
Utku N., ŞENEL M. T.
FILOMAT, vol.28, no.7, pp.1425-1436, 2014 (SCI-Expanded)
- XIV. **On the Behavior of Solutions of a Third-Order Nonlinear Dynamic Equation on Time Scales**
Senel M. T.
UKRAINIAN MATHEMATICAL JOURNAL, vol.65, no.7, pp.1111-1121, 2013 (SCI-Expanded)
- XV. **Oscillation Theorems for Second-Order Nonlinear Dynamic Equation on Time Scales**
Senel M. T.
APPLIED MATHEMATICS & INFORMATION SCIENCES, vol.7, no.6, pp.2189-2193, 2013 (SCI-Expanded)
- XVI. **OSCILLATION OF SOLUTIONS TO SECOND-ORDER HALF-LINEAR DIFFERENTIAL EQUATIONS WITH NEUTRAL TERMS**
LI T., ŞENEL M. T., ZHANG C.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2013 (SCI-Expanded)
- XVII. **Behavior of solutions of a third-order dynamic equation on time scales**
Senel M. T.
JOURNAL OF INEQUALITIES AND APPLICATIONS, 2013 (SCI-Expanded)
- XVIII. **Oscillation results of second order damped non-linear dynamic equation on time scales**
ŞENEL M. T.
Applied Math. Inf. Sciences Letters, vol.1, pp.29-34, 2013 (SCI-Expanded)
- XIX. **Oscillation of second order nonlinear neutral differential equation**
ŞENEL M. T., Candan T.
JOURNAL OF COMPUTATIONAL ANALYSIS AND APPLICATIONS, vol.14, no.6, pp.1112-1117, 2012 (SCI-Expanded)
- XX. **Kamenev-Type Oscillation Criteria for the Second-Order Nonlinear Dynamic Equations with Damping on Time Scales**
Senel M. T.
ABSTRACT AND APPLIED ANALYSIS, 2012 (SCI-Expanded)
- XXI. **On Behaviour of Solutions for Third Order Nonlinear Ordinary Differential Equations with Damping Terms**
ŞENEL M. T., TEMTEK P.
JOURNAL OF COMPUTATIONAL ANALYSIS AND APPLICATIONS, vol.11, no.2, pp.346-355, 2009 (SCI-Expanded)
- XXII. **Nonoscillation theorems for a class of third order differential equations**
Temtek P., Senel M. T.
INDIAN JOURNAL OF PURE & APPLIED MATHEMATICS, vol.35, no.4, pp.455-461, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. **Existence of Nonoscillatory Solutions of Higher Order Nonlinear Neutral Differential Equations**
ÇINA B., CANDAN T., ŞENEL M. T.
European Journal of Pure and Applied Mathematics, vol.16, 2023 (ESCI)
- II. **Fractional-order mathematical modelling of cancer cells-cancer stem cells-immune system interaction with chemotherapy**
ÖZKÖSE F., ŞENEL M. T., Habbireeh R.
Mathematical Modelling and Numerical Simulation with Applications, vol.1, no.2, pp.67-83, 2021 (Scopus)
- III. **Kayseri’de Tramvay Hattı Boyunca Gerçekleşen Trafik Kazalarının İncelenmesi**

KÜL A., ŞENEL M. T.

Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.37, no.2, 2021 (Peer-Reviewed Journal)

IV. EXISTENCE OF NONOSCILLATORY SOLUTIONS OF SECOND-ORDER NEUTRAL DIFFERENTIAL EQUATIONS

ÇINA B., CANDAN T., ŞENEL M. T.

TWMS JOURNAL OF APPLIED AND ENGINEERING MATHEMATICS, vol.9, no.3, pp.666-674, 2019 (ESCI)

V. Positive Solutions of Second-order Neutral Differential Equations with Distributed Deviating Arguments

Şenel M. T., Çına B.

Erciyes Üniversitesi Fen Bilimleri Enstitüsü Fen Bilimleri Dergisi, vol.34, no.1, pp.22-26, 2018 (Peer-Reviewed Journal)

VI. ON OSCILLATION OF THIRD ORDER FUNCTIONAL DIFFERENTIAL EQUATION

ŞENEL M. T.

Electronic Journal of Mathematical Analysis and Applications, vol.6, 2018 (Peer-Reviewed Journal)

VII. Oscillation of third-order quasilinear neutral dynamic equations on time scales with distributed deviating arguments

ŞENEL M. T., Utku N.

JOURNAL OF MATHEMATICS AND COMPUTER SCIENCE-JMCS, vol.17, no.1, pp.41-52, 2017 (ESCI)

VIII. Oscillation theorems for the second order damped nonlinear dynamic equation on the time scales

ŞENEL M. T.

CONTEMPORARY ANALYSIS AND APPLIED MATHEMATICS, vol.1, pp.167-180, 2013 (Peer-Reviewed Journal)

IX. Oscillation Theorems for Dynamic Equation on Time Scales

Şenel M. T.

BULLETIN OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.4, pp.101-105, 2011 (ESCI)

X. On Oscillation of Second-Order Functional Differential Equations with Damping Term

ŞENEL M. T.

Pacific Journal of Applied Mathematics, vol.2, pp.1-5, 2010 (Peer-Reviewed Journal)

XI. On nonoscillation of nonhomogeneous third order differential equations with damping terms.

ŞENEL M. T., TEMTEK P.

Appl. Math. Sci. (Ruse), vol.2, pp.995-1004, 2008 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. Solvability of infinite system of second-order differential equations

Karakuş E., Şenel M. T.

International Workshop on Dynamical Systems and Applications: In Memory of Prof. Dr. Aydın Tiryaki, Ankara, Turkey, 3 - 04 May 2019, pp.18

II. Positive Solutions of Second-order Nonlinear Differential Equations

ÇINA B., CANDAN T., ŞENEL M. T.

II. International Scientific and Vocational Studies Congress, Nevşehir, Turkey, 5 - 08 July 2018

III. Positive Solutions of Higher Order Nonlinear Functional Differential Equations

ÇINA B., CANDAN T., ŞENEL M. T.

II. International Scientific and Vocational Studies Congress, Nevşehir, Turkey, 5 - 08 July 2018

IV. Positive solutions of second-order neutral differential equations with forcing term

Candan T., ŞENEL M. T., ÇINA B.

The international conference on Operators in Morrey-type Spaces and Applications, Kırşehir, Turkey, 10 - 13 June 2017, pp.69

V. Positive solutions of second-order neutral differential equations with distributed deviating arguments

ŞENEL M. T., Candan T., ÇINA B.

The international conference on Operators in Morrey-type Spaces and Applications, Kırşehir, Turkey, 10 - 13 June 2017, pp.68

- VI. **Existence of nonoscillatory solutions of second-order neutral differential equations with distributed deviating arguments**
ŞENEL M. T., Candan T., ÇINA B.
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, İstanbul, Turkey, 10 - 12 May 2017, pp.128
- VII. **Oscillation Theorems for Second-Order Damped Dynamic Equation on Time Scales**
Senel M. T.
1st International Conference on Analysis and Applied Mathematics (ICAAM), Gümüşhane, Turkey, 18 - 21 October 2012, vol.1470, pp.251-254
- VIII. **Zaman skalasında 3. mertebeden nötral dinamik denklemin çözümlerinin davranışı**
ŞENEL M. T., Utku N.
15. Ulusal Matematik Sempozyumu, Niğde, Turkey, 1 - 04 September 2012, pp.82
- IX. **Üçüncü Mertebeden Lineer Olmayan Diferensiyel Denklemlerin Çözümlerinin Davranışı**
TEMTEK P., ŞENEL M. T.
9. Dinamik Sistemler Çalıştayı, Turkey, 18 - 19 June 2009
- X. **Üçüncü Mertebeden Lineer Olmayan Diferensiyel Denklemlerin Çözümlerinin Davranışı**
ŞENEL M. T., TEMTEK P.
Dinamik Sistemler Çalıştayı, İzmir, Turkey, 1 - 04 June 2009, pp.18

Supported Projects

ŞENEL M. T., GÜNDOĞ M., ÖZKÖSE F., Project Supported by Higher Education Institutions, AKCİĞER KANSERİNİN MATEMATİKSEL MODELİ VE KARARLILIK ANALİZİ, 2021 - Continues

ŞENEL M. T., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA TÜMÖR BÜYÜMESİ MODELLEMELERİ, 2015 - 2016

ŞENEL M. T., TUBITAK Project, Zaman Skalasında Tümör Büyümesi Modellemeleri, 2014 - 2016

ŞENEL M. T., Project Supported by Higher Education Institutions, YÜKSEK MERTEBEDEN DİFERENSİYEL DENKLEMLERİN ZAMAN SKALASINDA SALINIMLI VE SALINIMSIZLIK ÖZELLİKLERİ, 2011 - 2014

ŞENEL M. T., TOKEL E., Project Supported by Higher Education Institutions, İKİNCİ BASAMAKTAN DİFERENSİYEL DENKLEMLERİN ÇÖZÜMLERİNİN DAVRANIŞI ÜZERİNE ., 2007 - 2009

Activities in Scientific Journals

Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, Editor, 2016 - Continues

Indian journal of mathematics and mathematical sciences, Editor, 2014 - Continues

Transnational Journal of Mathematical Analysis and Applications, Editor, 2013 - Continues

Scientific Refereeing

Journal Journal of Inequalities and Applications, SCI Journal, November 2014

Advances in Difference Equations, SCI Journal, October 2013

Journal of Applied Mathematics and Computing, Other Indexed Journal, May 2013

American Mathematical Society, Other Indexed Journal, January 2013

The Journal of Nonlinear Science and Applications(JNSA), Other Indexed Journal, December 2012

International Journal of Mathematics and Mathematical Sciences, Other Indexed Journal, October 2009

Metrics

Publication: 43

Citation (WoS): 114

Citation (Scopus): 179

H-Index (WoS): 6

H-Index (Scopus): 7

Congress and Symposium Activities

INTERNATIONAL CONFERENCE ON OPERATORS IN MORREY-TYPE SPACES AND APPLICATIONS, Attendee, Turkey, 2017

INTERNATIONAL CONFERENCE ON OPERATORS IN MORREY-TYPE SPACES AND APPLICATIONS, Attendee, Kırşehir, Turkey, 2017

INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, Attendee, İstanbul, Turkey, 2017

15. Ulusal Matematik Sempozyumu, Attendee, Niğde, Turkey, 2012

7. Ankara Matematik Günleri, Attendee, Ankara, Turkey, 2012

Yıldız Technical University International conference On Applied Analysis And Algebra, Attendee, İstanbul, Turkey, 2011

13. Ulusal Matematik Sempozyumu-Erciyes Üniversitesi, Attendee, Kayseri, Turkey, 2010

İzmir Üniversitesi - Dinamik Sistemler Çalıştayı, Attendee, İzmir, Turkey, 2009