



## Assoc. Prof. MUSTAFA KUDU

### Personal Information

**Email:** mkudu@erzincan.edu.tr

**Web:** <https://avesis.ebyu.edu.tr/mkudu>

**Address:** Erzincan Binali Yıldırım Üniversitesi Fen-Edebiyat Fakültesi  
Matematik Bölümü

### International Researcher IDs

ORCID: 0000-0002-6610-0587

Publons / Web Of Science ResearcherID: C-6721-2015

ScopusID: 8629386700

Yoksis Researcher ID: 40877



### Education Information

1995 - 2003	Doctorate, Yüzüncü Yıl Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Anabilimdalı, Turkey
1993 - 1995	Postgraduate, Yüzüncü Yıl Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Anabilimdalı, Turkey
1987 - 1992	Undergraduate, Yüzüncü Yıl Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey

### Foreign Languages

French, B1 Intermediate

### Certificates, Courses and Trainings

2024	Eğiticilerin Eğitimi, Vocational Training, Erzincan Binali Yıldırım Üniversitesi
------	--

### Dissertations

2003	PARAMETREYE BAĞLI SİNGULAR PERTURBE OLMUŞ DİFERANSİYEL DENKLEMLERİN NÜMERİK ÇÖZÜMÜ, Yüzüncü Yıl Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Anabilimdalı, Doctorate
1995	MODÜLÜS FANKSİYONU ÜZERİNE, Yüzüncü Yıl Üniversitesi, Fen Enstitüsü Bilimleri, Matematik Anabilimdalı, Postgraduate

### Research Areas

Mathematics, Differential Equations, Functional Equations, Integral Equations, Natural Sciences

### Academic Titles / Tasks

2020 - Continues	Associate Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Matematik Bölümü
------------------	--

2018 - 2020	Assistant Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Matematik Bölümü
2006 - 2018	Assistant Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Matematik Bölümü
2006 - 2006	Assistant Professor, Ataturk University, Erzincan Fen_Edebiyat Fakültesi, Matematik Bölümü
2003 - 2006	Research Assistant PhD, Dicle University, Siirt Eğitim Fakültesi, İlköğretim Matematik Öğretmenliği Bölümü
1998 - 2003	Research Assistant, Dicle University, Siirt Eğitim Fakültesi, İlköğretim Matematik Öğretmenliği Bölümü
1994 - 1998	Research Assistant, Yüzüncü Yıl Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Bölümü

## Academic and Administrative Experience

2011 - 2014	Head of Department, Erzincan Binali Yıldırım Üniversitesi, Fen-Edebiyat Fakültesi
2007 - 2010	Head of Department, Erzincan Binali Yıldırım Üniversitesi, Fenedebiyat Fakültesi, Matematik

## Advising Theses

2019	KUDU M., Postgraduate, G.Yürücüoğlu(Student), Parametreye Bağlı Başlangıç Katı İçeren Diferansiyel Problemlerin Sonlu Fark Çözümleri
2019	KUDU M., Postgraduate, P.Kurnaz(Student), : Birinci ve İkinci Mertebeden Lineer Singular Perturbe Problemleri için Asimptotik Açılımlar ve Nümerik Çözümler

## Jury Memberships

April 2012	Academic Staff Examination, Jüri Üyeliği, Erzincan Üniversitesi Fen Edebiyat Fakültesi
April 2010	Academic Staff Examination, Jüri Üyeliği, Erzincan Üniversitesi Fen Edebiyat Fakültesi
April 2010	Academic Staff Examination, Jüri Üyeliği, Munzur Üniversitesi Mühendislik Fakültesi
March 2009	Academic Staff Examination, Jüri Başkanı, Erzincan Üniversitesi Fen Edebiyat Fakültesi
March 2008	Academic Staff Examination, Jüri Üyeliği, Erzincan Üniversitesi Fen Edebiyat Fakültesi
June 2007	Post Graduate, Jüri Üyeliği, Kafkas Üniversitesi

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

- I. **Method of Exact Difference Schemes for the Numerical Solution of Parameterized Singularly Perturbed Problem**  
YAPMAN Ö., KUDU M., Amiraliev G. M.  
Mediterranean Journal of Mathematics, vol.20, no.3, 2023 (SCI-Expanded)
- II. **An efficient numerical method for a singularly perturbed Volterra-Fredholm integro-differential equation**  
Durmaz M. E., YAPMAN Ö., KUDU M., Amiraliev G. M.  
Hacettepe Journal of Mathematics and Statistics, vol.52, no.2, pp.326-339, 2023 (SCI-Expanded)
- III. **A second order accurate method for a parameterized singularly perturbed problem with integral boundary condition**  
KUDU M., Amiraliev I., AMİRALİ G.  
Journal of Computational and Applied Mathematics, vol.404, 2022 (SCI-Expanded)
- IV. **Numerical solution of a singularly perturbed Fredholm integro differential equation with Robin boundary condition**

Durmaz M. E., Amiraliyev G. M., KUDU M.

Turkish Journal of Mathematics, vol.46, no.1, pp.207-224, 2022 (SCI-Expanded)

- V. **A Fitted Second-Order Difference Method for a Parameterized Problem with Integral Boundary Condition Exhibiting Initial Layer**  
KUDU M., AMİRALİ İ., AMİRALİ G.  
MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.18, no.3, 2021 (SCI-Expanded)
- VI. **A NUMERICAL METHOD FOR A SECOND ORDER SINGULARLY PERTURBED FREDHOLM INTEGRO-DIFFERENTIAL EQUATION**  
AMİRALİ G., Durmaz M. E., KUDU M.  
MISKOLC MATHEMATICAL NOTES, vol.22, no.1, pp.37-48, 2021 (SCI-Expanded)
- VII. **Fitted second order numerical method for a singularly perturbed Fredholm integro-differential equation**  
Amiraliyev G., Durmaz M. E., Kudu M.  
BULLETIN OF THE BELGIAN MATHEMATICAL SOCIETY-SIMON STEVIN, vol.27, no.1, pp.71-88, 2020 (SCI-Expanded)
- VIII. **A fitted approximate method for a Volterra delay-integro-differential equation with initial layer**  
Amiraliyev G., Yapman Ö., Kudu M.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.48, pp.1417-1429, 2019 (SCI-Expanded)
- IX. **A parameter uniform difference scheme for the parameterized singularly perturbed problem with integral boundary condition**  
Kudu M.  
ADVANCES IN DIFFERENCE EQUATIONS, 2018 (SCI-Expanded)
- X. **UNIFORM NUMERICAL APPROXIMATION FOR PARAMETER DEPENDENT SINGULARLY PERTURBED PROBLEM WITH INTEGRAL BOUNDARY CONDITION**  
KUDU M., Amiralı I., Amiraliyev G. M.  
MISKOLC MATHEMATICAL NOTES, vol.19, no.1, pp.337-353, 2018 (SCI-Expanded)
- XI. **A finite-difference method for a singularly perturbed delay integro-differential equation**  
KUDU M., Amiralı I., AMIRALIYEV G.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.308, pp.379-390, 2016 (SCI-Expanded)
- XII. **Asymptotic Estimates for Second-Order Parameterized Singularly Perturbed Problem**  
KUDU M.  
Applied Mathematics, no.5, pp.1988-1992, 2014 (SCI-Expanded)
- XIII. **A numerical treatment for singularly perturbed differential equations with integral boundary condition**  
Amiraliyev G., AMIRALIYEVA I. G., Kudu M.  
APPLIED MATHEMATICS AND COMPUTATION, vol.185, no.1, pp.574-582, 2007 (SCI-Expanded)
- XIV. **Uniform difference method for a parameterized singular perturbation problem**  
AMİRALİYEVE G., KUDU M., DURU H.  
APPLIED MATHEMATICS AND COMPUTATION, vol.175, no.1, pp.89-100, 2006 (SCI-Expanded)
- XV. **Finite-difference method for parameterized singularly perturbed problem**  
Amiraliyev G., Kudu M., DURU H.  
Journal of Applied Mathematics, vol.2004, no.3, pp.191-199, 2004 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Computer Programming Students' Attitudes in Distanceeducation**  
OF M., AYDIN S., KUDU M.  
The Online Journal of Distance Education and e-Learning, vol.6, no.2, pp.41-45, 2018 (Peer-Reviewed Journal)
- II. **UNIFORM CONVERGENCE RESULTS FOR SINGULARLY PERTURBED FREDHOLM INTEGRO-DIFFERENTIAL EQUATION**

- Amiraliyev G. M., Durmaz M. E., KUDU M.  
JOURNAL OF MATHEMATICAL ANALYSIS, vol.9, no.6, pp.55-64, 2018 (ESCI)
- III. **Analysis of the Layer Behavior to the Parameterized Problem with Integral Boundary Condition**  
KUDU M.  
Erzincan Universitesi Fen Bilimleri Dergisi, vol.10, no.2, pp.296-302, 2017 (Peer-Reviewed Journal)
- IV. **Analogies of Algebraic Concepts: Examples from High School and University Mathematics**  
AYDIN S., GENEL Y., AKCA Ü., SOYDAŞ H., KUDU M., TÜRKERİ K.  
TURKISH ONLINE JOURNAL OF EDUCATIONAL TECHNOLOGY, 2017 (Scopus)
- V. **On the Effective Teaching in Vocational School**  
SOYDAŞ H., AKCA Ü., KUDU M., GENEL Y., TÜRKERİ K., AYDIN S.  
TURKISH ONLINE JOURNAL OF EDUCATIONAL TECHNOLOGY, 2017 (Scopus)
- VI. **Students' Image of Science and Scientists: Kocaeli Vocational School Sample**  
AKCA Ü., KUDU M., GENEL Y., SOYDAŞ H., TÜRKERİ K., AYDIN S.  
TURKISH ONLINE JOURNAL OF EDUCATIONAL TECHNOLOGY, 2017 (Scopus)
- VII. **Online Assessment for Mathematics Lecture**  
KUDU M., GENEL Y., SOYDAŞ H., AKCA Ü., TÜRKERİ K., AYDIN S.  
TURKISH ONLINE JOURNAL OF EDUCATIONAL TECHNOLOGY, 2017 (Scopus)
- VIII. **A LAYER ANALYSIS OF PARAMETERIZED SINGULARLY PERTURBED BOUNDARY VALUE PROBLEMS**  
KUDU M., AMIRALI I., AMİRALİ G.  
International Journal of Applied Mathematics, vol.29, no.4, pp.439-449, 2016 (Scopus)
- IX. **Convergence analysis of the numerical method for a singularly perturbed periodical boundary value problem**  
CAKIR M., AMIRALI I., KUDU M., AMİRALİYEV G.  
JOURNAL OF MATHEMATICS AND COMPUTER SCIENCE-JMCS, vol.16, no.2, pp.248-255, 2016 (Scopus)
- X. **A Priori Estimates of Solution of Parametrized Singularly Perturbed Problem**  
KUDU M., Amirali İ.  
Journal of Applied Mathematics and Physics, vol.4, pp.73-78, 2016 (Peer-Reviewed Journal)
- XI. **Method of Lines for Third Order Partial Differential Equations**  
KUDU M., Amirali İ.  
Journal of Applied Mathematics and Physics, no.2, pp.33-36, 2014 (Peer-Reviewed Journal)
- XII. **LİSE ÖĞRENCİLERİNİN ALGILARINA GÖRE MATEMATİKBAŞARISINI OLUMSUZ YÖNDE ETKİLEYEN FAKTÖRLER THE FACTORS NEGATIVELY EFFECTING HIGH SCHOOLSTUDENTS MATHEMATICAL SUCCESS ACCORDING TOTHEIR PERCEPTIONS**  
Dane A., KUDU M., Balkı N.  
Erzincan University Journal of Science and Technology, vol.2, no.1, pp.17-34, 2009 (Peer-Reviewed Journal)
- XIII. **OKUL DENEYİMİ- I UYGULAMASINA İLİŞKİN ÖĞRENCİ ALGILARI (DİCLE ÜNİVERSİTESİ ÖRNEĞİ)**  
KUDU M., Özbek R., Bindak R.  
Elektronik Sosyal Bilimler Dergisi, vol.5, no.15, pp.99-109, 2006 (Peer-Reviewed Journal)
- XIV. **OKUL DENEYİMİ I UYGULAMASINA İLİŞKİN ÖĞRENCİ ALGILARI DİCLE ÜNİVERSİTESİ ÖRNEĞİ THE STUDENTS PERCEPTIONS ABOUT PRACTICE OF SCHOOL EXPERİENCE I THE DICLE UNIVERSITY SAMPLE**  
KUDU M., ÖZBEK R., BİNDK R.  
Elektronik Sosyal Bilimler Dergisi www.e-sosder.com, vol.5, no.15, pp.99-109, 2006 (Peer-Reviewed Journal)
- XV. **ÖĞRETMEN ADAYLARININ YETENEK ve İLGİLERİ, ABILITY AND INTERESTS OF STUDENT TEACHERS**  
Pesen C., Odabaş A., Bindak R., KUDU M.  
Yüzüncü Yıl Üniversitesi, Eğitim Fakültesi Dergisi, vol.2, no.1, pp.1-9, 2005 (Peer-Reviewed Journal)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **A New Difference Method For The Singularly Perturbed Fredholm Integro-Differential Equation With**

## **Robin Boundary Condition On A Shishkin Mesh**

DURMAZ M. E., KUDU M., AMİRALİ G.

International Dumlupınar Science And Mathematics Congress (Idusmac-2022), Kütahya, Turkey, 05 September 2022

- II. **Birinci Mertebeden Adi Diferansiyel Denklemler İçin Başlangıç-Değer Probleminin Nümerik Çözümü Üzerine**  
KUDU M., Duman A. S.  
ANATOLIAN CONGRESSES 8TH INTERNATIONAL APPLIED SCIENCES CONGRESS, Diyarbakır, Turkey, 25 December 2021
- III. **A Uniformly Convergent Difference Scheme for Singularly Perturbed Fredholm Integro-Differential Equation on Shishkin Mesh**  
DURMAZ M. E., KUDU M., AMİRALİ G.  
1. Academia International Conference on Mathematics and Mathematics Education (AICMME-2021), Siirt, Turkey, 1 - 03 December 2021
- IV. **Sınır Katına Sahip Başlangıç Değer Probleminin Çözümünün Asimptotik Davranışları**  
KUDU M., KURNAZ P., AMİRALİ G.  
UMTEB IV. Uluslararası Mesleki ve Teknik Bilimler Kongresi 7-9 Aralık 2018 ERZURUM, Erzurum, Turkey, 7 - 09 December 2018, vol.1, pp.1306-1314
- V. **A numerical study on the parameterized singularly perturbed problem with integral boundary condition**  
KUDU M., AMİRALİ G.  
INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELING, İstanbul, Turkey, 20 - 24 June 2018
- VI. **ANALOGIES OF ALGEBRAIC CONCEPTS: EXAMPLES FROM HIGH SCHOOL AND UNIVERSITY MATHEMATICS**  
AYDIN S., GENEL Y., AKCA Ü., SOYDAŞ H., KUDU M., TÜRKERİ K.  
International Teacher Education Conference, 16 - 19 August 2017
- VII. **BOUNDARY LAYER ANALYSIS OF PARAMETERIZED BOUNDARYVALUE PROBLEM**  
KUDU M., AMİRALİ G.  
Caucasian Mathematics Conference (CMC-II), Van, Turkey, 22 - 24 August 2017
- VIII. **NUMERICAL SOLUTION FOR QUASILINEAR INITIAL VALUE PROBLEM WITH BOUNDARY LAYER**  
AMİRALİ İ., KUDU M.  
International International Conference on Differential Difference Equations and Applications 2017(ICDDEA 2017), Amadora, PORTEKIZ, June 5-9, Amadora, Portugal, 5 - 09 June 2017, pp.143
- IX. **A PARAMETERIZED SINGULARLY PERTURBED BOUNDARY VALUE PROBLEM**  
KUDU M., AMİRALİ G.  
INTERNATIONAL CONFERENCE ON ANALYSIS AND ITS APPLICATIONS, Kırşehir, Turkey, 12 - 15 July 2016, pp.210
- X. **Difference Differential Scheme For Delay Pseudo Parabolic Equations December 10 11 2015 P 5 8 Baku Azerbaijan**  
AMİRALİ G., KUDU M.  
International Conference Devoted To The 85th Anniversaty Of Professor Yahya Mamedov, 10 - 11 December 2015
- XI. **NUMERICAL METHOD FOR A SINGULARLY PERTURBED DELAY INTEGRO DIFFERENTIAL EQUATION**  
AMİRALİ İ., KUDU M., AMİRALİ G.  
International Conference on Differential Difference Equations and Applications 2015(ICDDEA 2015), Amadora, PORTEKIZ, 18 - 22 May 2015
- XII. **Analysis of difference approximations to delay pseudo-parabolic equations**  
AMİRALİYEV G., KUDU M., AMİRALİ İ.  
International Conference on Differential & Difference Equations and Applications 2015 (ICDDEA 2015), Amadora, Portugal, 18 - 22 May 2015, pp.80
- XIII. **Asympototic Estimates for Singularly perturbed Boundary Value Problems Depending on a Parameter**  
KUDU M., AMİRALİ G.

International Conference on Differential & Difference Equations and Applications 2015(ICDDEA 2015). Amadora, Portugal, 18 - 22 May 2015

## Metrics

Publication: 44  
Citation (WoS): 62  
Citation (Scopus): 86  
H-Index (WoS): 4  
H-Index (Scopus): 4

## Non Academic Experience

1998 - 2006	DİCLE ÜNİVERSİTESİ SİİRT EĞİTİM FAKÜLTESİ
1994 - 1998	Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü (Matematik Anabilim Dalı)
1993 - 1994	Zeve İlköğretim Okulu-Van
1992 - 1994	Ardahan-Hanak Lisesi