

## Prof. Hakkı Duru

### Personal Information

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### Education Information

Doctorate, Van Yüzüncü Yil University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1990 - 1995

Post Graduate, Ataturk University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1987 - 1990

Under Graduate, Istanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Mühendisliği, Turkey 1976 - 1986

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Singüler pertürbe olmuş başlangıç-sınır-değer Sobolev Problemi için fark şemaları, Van Yüzüncü Yil University, Fen Bilimleri Enstitüsü, Matematik, 1995

Post Graduate, David Turner derleyicisi için algoritmik yaklaşım, Ataturk University, Fen Bilimleri Enstitüsü, Matematik, 1990

### Research Areas

Mathematics, Computer Science, Differential Equations, Numerical Analysis, Natural Sciences

### Academic Titles / Tasks

Professor, Van Yüzüncü Yil University, Fen Fakültesi, Matematik, 2019 - Continues

Associate Professor, Van Yüzüncü Yil University, Fen Fakültesi, Matematik, 2009 - 2019

Assistant Professor, Van Yüzüncü Yil University, Fen-Edebiyat Fakültesi, Matematik, 1997 - 2009

Research Assistant, Van Yüzüncü Yil University, Fen-Edebiyat Fakültesi, Matematik, 1987 - 1997

### Professional Experience

Staj Başkanı, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, İnşaat Bölümü, 2020 - Continues

Head of Department, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, İnşaat Bölümü, 2020 - Continues

Meslek Yüksekokulu Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, İnşaat Bölümü, 2020 - Continues

Meslek Yüksekokulu Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Terapi ve Rehabilitasyon Bölümü, 2020 - Continues

Head of Department, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Terapi ve Rehabilitasyon Bölümü, 2020 - Continues

Staj Başkanı, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Muhasebe Ve Vergi Bölümü, 2019 - Continues

Head of Department, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Muhasebe Ve Vergi Bölümü, 2019 - Continues

Staj Başkanı, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Finans-Bankacılık Ve Sigortacılık Bölümü, 2019 - Continues

Meslek Yüksekokulu Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Muhasebe Ve Vergi Bölümü, 2019 - Continues

Head of Department, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Finans-Bankacılık Ve Sigortacılık Bölümü, 2019 - Continues

Meslek Yüksekokulu Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Finans-Bankacılık Ve Sigortacılık Bölümü, 2019 - Continues

Director of Vocational School, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, 2019 - Continues

Member of the Senate, Van Yüzüncü Yil University, 2019 - Continues

Meslek Yüksekokulu Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Finans-Bankacılık Ve Sigortacılık Bölümü, 2019 - Continues

Meslek Yüksekokulu Yönetim Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, 2019 - Continues

Head of Department, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Pazarlama ve Reklamcılık Bölümü, 2019 - 2020

Head of Department, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Bitkisel Ve Hayvansal Üretim Bölümü, 2019 - 2020

Meslek Yüksekokulu Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Bitkisel Ve Hayvansal Üretim Bölümü, 2019 - 2020

Meslek Yüksekokulu Kurulu Üyesi, Van Yüzüncü Yil University, Erciş Meslek Yüksekokulu, Pazarlama ve Reklamcılık Bölümü, 2019 - 2020

## Advising Theses

Duru H., SNGÜLER PERTÜRBE ÖZELLİKLİ GECKMELİ SOBOLEV PROBLEMLER İÇİN NÜMERİK METODLAR, Doctorate, A.Baratichiyaneh(Student), 2017

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Uniform difference method for singularly perturbed delay Sobolev problems**  
Baratichiyaneh A., Durus H.  
QUAESTIONES MATHEMATICAE, vol.43, pp.1713-1736, 2020 (Journal Indexed in SCI)
- II. **On adaptive mesh for the initial boundary value singularly perturbed delay Sobolev problems**  
Baratichiyaneh A., Duru H.  
NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.36, pp.228-248, 2020 (Journal Indexed in SCI)
- III. **A parameter-uniform numerical method for a Sobolev problem with initial layer**  
AMIRALIYEV G. M. , Duru H., AMIRALIYEVA I. G.  
NUMERICAL ALGORITHMS, vol.44, pp.185-203, 2007 (Journal Indexed in SCI)
- IV. **Uniform difference method for a parameterized singular perturbation problem**  
AMIRALIYEV G. M. , KUDU M., Duru H.  
APPLIED MATHEMATICS AND COMPUTATION, vol.175, pp.89-100, 2006 (Journal Indexed in SCI)
- V. **A note on a parameterized singular perturbation problem**  
AMIRALIYEV G., Duru H.

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.182, pp.233-242, 2005 (Journal Indexed in SCI)

- VI. **Finite-difference method for parameterized singularly perturbed problem**  
Amiraliyev G., Kudu M., Duru H.  
Journal of Applied Mathematics, vol.2004, pp.191-199, 2004 (Journal Indexed in SCI Expanded)
- VII. **Some specialties of the solutions of the differential equations in Banach space**  
Duru H., GULLE A.  
APPLIED MATHEMATICS AND COMPUTATION, vol.157, pp.667-675, 2004 (Journal Indexed in SCI)
- VIII. **The Hardy-Littlewood-Sobolev inequality for (beta, gamma)-distance Riesz potentials**  
Cinar I., DURU H.  
APPLIED MATHEMATICS AND COMPUTATION, vol.153, pp.757-762, 2004 (Journal Indexed in SCI)
- IX. **Difference schemes for the singularly perturbed Sobolev periodic boundary problem**  
Duru H.  
APPLIED MATHEMATICS AND COMPUTATION, vol.149, pp.187-201, 2004 (Journal Indexed in SCI)
- X. **A uniformly convergent difference method for the periodical boundary value problem**  
AMIRALIYEV G., Duru H.  
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.46, pp.695-703, 2003 (Journal Indexed in SCI)
- XI. **On continuity properties of potentials depending on lambda-distance**  
Cinar I., DURU H.  
APPLIED MATHEMATICS AND COMPUTATION, vol.139, pp.531-534, 2003 (Journal Indexed in SCI)
- XII. **A uniformly convergent finite difference method for a singularly perturbed initial value problem**  
AMIRALIYEV G., Duru H.  
APPLIED MATHEMATICS AND MECHANICS-ENGLISH EDITION, vol.20, pp.379-387, 1999 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **THE FINITE DIFFERENCE METHOD ON ADAPTIVE MESH FOR SINGULARLY PERTURBED NONLINEAR 1D REACTION DIFFUSION BOUNDARY VALUE PROBLEMS**  
Duru H., Güneş B.  
Journal of Applied Mathematics and Computational Mechanics, vol.19, pp.45-56, 2020 (Journal Indexed in ESCI)
- II. **Parçalı Düzgün Şebekede Singüler Pertürbe Özellikli Lineer Olmayan Reaksiyon Difüzyon Problemleri İçin Nümerik Çözümler**  
Duru H., Güneş B.  
Erzincan Üniversitesi Fen Bilimleri Dergisi, vol.12, pp.425-436, 2019 (Other Refereed National Journals)
- III. **Numerical Solutions For Singularly Perturbed Nonlinear Reaction Diffusion Boundary Value Problems**  
Duru H., Güneş B.  
IOSR Journal of Mathematics, vol.15, pp.35-49, 2019 (Refereed Journals of Other Institutions)
- IV. **Convergence of various iterations to solution of boundary value problem for abstract elliptic equation.**  
Duru H., gülle a., Mamedov Y. D.  
International Journal of Applied Mathematics, vol.2, no.11, pp.1273-1284, 2000 (Refereed Journals of Other Institutions)
- V. **Convergence of the iterative processes to the solution of the boundary problem with the parameter.**  
Gülle A., Duru H.  
Trans. Acad. Sci. Azerb. Ser. Phys.-Tech. Math. Sci., vol.18, pp.34-40, 1998 (International Refereed University Journal)

## Books & Book Chapters

- I. **Nümerik Analiz**  
Duru H., Amiralı G.  
Pegema, Ankara, 2002

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

- I. **FINITE DIFFERENCE SCHEMES ON ADAPTIVE MESH FOR THE SINGULARLY PERTURBED SOBOLEV INITIAL AND PERIODIC BOUNDARY PROBLEM**  
Duru H., Güneş B.  
4rd International Conference on computational Mathematics and Engineering Science (CMES-2019), Antalya, Turkey, 20 - 22 April 2019, vol.4, pp.116
- II. **Uniform Difference Method for Singularly Perturbed Nonlinear reaction Diffusion Problems.**  
Duru H., Güneş B.  
3rd International Conference on computational Mathematics and Engineering Science (CMES-2018), Girne, Cyprus (Kkct), 4 - 06 May 2018, vol.3, pp.177
- III. **FINITE DIFFERENCE SCHEMES ON SHISHKIN MESHE FOR THE INITIAL BOUNDARY VALUE SINGULARLY PERTURBED DELAY SOBOLEV PROBLEMS**  
Duru H., Baratichiyaneh A.  
I. INTERNATIONAL TURKISH WORLD ENGINEERING AND SCIENCE CONGRESS, Antalya, Turkey, 7 - 10 December 2017, pp.312
- IV. **On adaptive mesh for the initial boundary value singularly perturbed delay Sobolev problems**  
Duru H., Baratichiyaneh a.  
Caucasian Mathematics Conference (CMC)-II Van, Turkey, August 22-24, 2017, Van, Turkey, 22 - 24 August 2017, pp.58
- V. **UNIFORM DIFFERENCE METHOD FOR SINGULARLY PERTURBED DELAY SOBOLEV PROBLEMS**  
Duru H., Baratichiyaneh A.  
International Conference on Computational Mathematics and Engineering Sciences (CMES2017), İstanbul, Turkey, 20 - 22 May 2017, pp.112
- VI. **Uniform method for singularly perturbed Sobolev Problem**  
Duru H.  
ICPAM 2015 - INTERNATIONAL CONFERENCE ON PURE AND APPLIED MATHEMATICS, Van, Turkey, 25 - 28 August 2015, pp.112
- VII. **Numerical Methods for Sinfularly Perturbed Problem**  
Duru H.  
5. Mathematics Conference, Payam Noor University, Shiraz, Iran, 24 - 25 October 2012, pp.25

## **Supported Projects**

AMİRALİ G., Erdoğan F., Duru H., Çakır M., Şevgin S., Project Supported by Higher Education Institutions, Nonlinear dispersive dalga yayılım problemleri için matematiksel ve hesaplama metotları, 2005 - 2008

## **Invited Congress and Symposium Activities**

1. International Turkish World Engineering and Science Congress, Attendee, Antalya, Turkey, 2017  
Caucasian Mathematics Conference (CMC)-II Van, Turkey, August 22-24, 2017, Session Moderator, Van, Turkey, 2017  
Caucasian Mathematics Conference (CMC)-II Van, Turkey, August 22-24, 2017, Attendee, Van, Turkey, 2017  
International Conference on Computational Mathematics and Engineering Sciences (CMES2017), Session Moderator, İstanbul, Turkey, 2017

2nd International Conference on Computational Mathematics and engineering Sciences-CMES2017, Attendee, İstanbul, Turkey, 2017

5. Mathematics Conference Payame Noor University, Attendee, Shîrâz, Iran, 2012

## **Citations**

Total Citations (WOS):66

h-index (WOS):5