

## Dr. Öğr. Üyesi Onur Saldır

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Yoksis Araştırmacı ID: 34961

### Eğitim Bilgileri

Doktora, Van Yüzüncü Yıl Üniversitesi, Fen Bilimleri Enstitüsü, Matematik, Türkiye 2012 - 2018

Yüksek Lisans, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Matematik, Türkiye 2010 - 2012

Lisans, Kahramanmaraş Sütçü İmam Üniversitesi, Fen Edebiyat Fakültesi, Matematik, Türkiye 2006 - 2010

### Yabancı Diller

İngilizce, B2 Orta Üstü

### Araştırma Alanları

Matematik, Diferansiyel denklemler, Sayısal Analiz, Temel Bilimler

### Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Van Yüzüncü Yıl Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2019 - Devam Ediyor

Araştırma Görevlisi Dr., Van Yüzüncü Yıl Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2018 - 2019

Araştırma Görevlisi, Van Yüzüncü Yıl Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2012 - 2018

### Verdiği Dersler

#### Ön Lisans

Matematik, Ön Lisans, 2018 - 2019

Matematik I, Ön Lisans, 2018 - 2019

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

#### I. A novel numerical approach for the third order Emden–Fowler type equations

Sakar M. G., Saldır O., Aydin F., Rece M. Y.

ZAMM ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK, cilt.104, sa.10, ss.1-19, 2024 (SCI-Expanded)

- II. **An effective approach for numerical solution of linear and nonlinear singular boundary value problems**  
 Saldır O., Sakar M. G.  
 MATHEMATICAL METHODS IN THE APPLIED SCIENCES, cilt.46, sa.1, ss.1395-1410, 2023 (SCI-Expanded)
- III. **A New Reproducing Kernel Approach for Nonlinear Fractional Three-Point Boundary Value Problems**  
 Sakar M. G., Saldır O.  
 FRACTAL AND FRACTIONAL, cilt.4, sa.4, 2020 (SCI-Expanded)
- IV. **A novel iterative solution for time-fractional Boussinesq equation by reproducing kernel method**  
 Sakar M. G., Saldır O.  
 JOURNAL OF APPLIED MATHEMATICS AND COMPUTING, cilt.64, sa.1-2, ss.227-254, 2020 (SCI-Expanded)
- V. **Numerical Solution of Fractional Order Burgers' Equation with Dirichlet and Neumann Boundary Conditions by Reproducing Kernel Method**  
 Saldır O., Sakar M. G., Erdoğan F.  
 FRACTAL AND FRACTIONAL, cilt.4, sa.2, 2020 (SCI-Expanded)
- VI. **Numerical solution of time-fractional Kawahara equation using reproducing kernel method with error estimate**  
 Saldır O., Sakar M. G., Erdoğan F.  
 COMPUTATIONAL & APPLIED MATHEMATICS, cilt.38, sa.4, 2019 (SCI-Expanded)
- VII. **A Novel Technique for Fractional Bagley-Torvik Equation**  
 Sakar M. G., Saldır O., AKGÜL A.  
 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES INDIA SECTION A-PHYSICAL SCIENCES, cilt.89, sa.3, ss.539-545, 2019 (SCI-Expanded)
- VIII. **An iterative approximation for time-fractional Cahn-Allen equation with reproducing kernel method**  
 Sakar M. G., Saldır O., Erdoğan F.  
 COMPUTATIONAL & APPLIED MATHEMATICS, cilt.37, sa.5, ss.5951-5964, 2018 (SCI-Expanded)
- IX. **Improving Variational Iteration Method with Auxiliary Parameter for Nonlinear Time-Fractional Partial Differential Equations**  
 Sakar M. G., Saldır O.  
 JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, cilt.174, sa.2, ss.530-549, 2017 (SCI-Expanded)

## Diger Dergilerde Yayınlanan Makaleler

- I. **Finite and Infinite Dimensional Reproducing Kernel Hilbert Space Approach for Bagley-Torvik Equation**  
 Ata A., Sakar M. G., Saldır O., Şenol M.  
 International Journal of Applied and Computational Mathematics, cilt.11, sa.18, ss.1-23, 2025 (Hakemli Dergi)
- II. **Numerical Solution of Nonlinear Advection Equation Using Reproducing Kernel Method**  
 Saldır O.  
 Journal of mathematical sciences and modelling (Online), cilt.7, sa.3, ss.157-167, 2024 (Hakemli Dergi)
- III. **Numerical investigations to design a novel model based on the fifth order system of Emden-Fowler equations**  
 Zulqurnain S., Sakar M. G., Yeskindirova M., Saldır O.  
 THEORETICAL AND APPLIED MECHANICS LETTERS, cilt.10, sa.5, ss.333-342, 2020 (ESCI)
- IV. **A finite difference method on layer-adapted mesh for singularly perturbed delay differential equations**  
 Erdoğan F., Sakar M. G., Saldır O.  
 Applied Mathematics and Nonlinear Sciences , cilt.5, sa.1, ss.425-436, 2020 (Scopus)
- V. **A Hybrid Method for Singularly Perturbed Convection-Diffusion Equation**  
 Sakar M. G., Saldır O., Erdoğan F.

- International Journal of Applied and Computational Mathematics, cilt.5, sa.5, 2019 (Scopus)
- VI. **Numerical Solution of Fractional Bratu Type Equations with Legendre Reproducing Kernel Method**  
Sakar M. G., Saldır O., Akgül A.  
International Journal of Applied and Computational Mathematics, cilt.4, 2018 (Scopus)

## Hakemli Bilimsel Toplantılarda Yayımlanmış Bildiriler

- I. **A NEW APPROACH FOR NUMERICAL SOLUTION OF FOURTH ORDER EMDEN-FOWLER EQUATION**  
Saldır O.  
6th International Conference on Computational Mathematics and Engineering Sciences, Ordu, Türkiye, 20 - 22 Mayıs 2022, ss.278, (Özet Bildiri)
- II. **A NUMERICAL APPROACH FOR SINGULAR BOUNDARY VALUE PROBLEM**  
Saldır O., Sakar M. G.  
6th International Conference on Computational Mathematics and Engineering Sciences, Ordu, Türkiye, 20 - 22 Mayıs 2022, ss.277, (Özet Bildiri)
- III. **Fitted Difference Schemes for Delay Convection-Diffusion Problems with Small Parameter**  
Erdoğan F., SAKAR M. G., Saldır O.  
9. International Youth Science Forum Litteris et Artibus, Lviv, Ukrayna, 21 - 23 Kasım 2019, ss.65-68, (Tam Metin Bildiri)
- IV. **REPRODUCİNG KERNEL METHOD WITH CHEBYSHEV POLYNOMIALS FOR FRACTIONAL TWO-POINT BOUNDARY VALUE PROBLEM**  
Sakar M. G., SALDIR O., Erdoğan F.  
4th International Conference on Computational Mathematics and Engineering Sciences, Antalya, Türkiye, 20 - 22 Mayıs 2019, ss.200, (Özet Bildiri)
- V. **LAYER ADAPTED MESHES FOR SINGULARLY PERTURBED CONVECTION-DIFFUSION PROBLEM WITH DELAY**  
Erdoğan F., SAKAR M. G., SALDIR O.  
4th International Conference on Computational Mathematics and Engineering Sciences, Antalya, Türkiye, 20 - 22 Mayıs 2019, ss.148, (Özet Bildiri)
- VI. **A NEW NUMERICAL SOLUTION FOR SINGULARLY PERTURBED BOUNDARY VALUE PROBLEMS**  
SALDIR O., Sakar M. G., Erdoğan F.  
4th International Conference on Computational Mathematics and Engineering Sciences, Antalya, Türkiye, 20 - 22 Mayıs 2019, ss.56, (Özet Bildiri)
- VII. **Reproducing kernel method with Bernstein polynomials for fractional boundary value problems**  
Sakar M. G., Saldır O., Erdoğan F.  
2nd International Conference on Pure and Applied Mathematics (ICPAM-VAN 2018), Van, Türkiye, 11 - 13 Eylül 2018, ss.116, (Özet Bildiri)
- VIII. **A numerical approach for time-fractional Kawahara equation with reproducing kernel method**  
Saldır O., Sakar M. G., Erdoğan F.  
2nd International Conference on Pure and Applied Mathematics (ICPAM-VAN 2018), Van, Türkiye, 11 - 13 Eylül 2018, ss.117, (Özet Bildiri)
- IX. **An Iterative Approximation for Time-Fractional Clannish Random Walker's Parabolic Equation in Reproducing Kernel Space**  
Sakar M. G., Erdoğan F., Saldır O.  
7TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Kiev, Ukrayna, 28 - 31 Ağustos 2018, ss.116, (Özet Bildiri)
- X. **Reproducing Kernel Method for Time Fractional Allen- Cahn Equation**  
Saldır O., Sakar M. G., Erdoğan F.  
3rd International Conference on Computational Mathematics and Engineering Sciences, Girne, Kıbrıs (Kktc), 4 - 06 Mayıs 2018, ss.2-3, (Özet Bildiri)

- XI. **Uniform Difference Schemes for Singularly Perturbed Delay Differential Equations with Delay**  
Erdoğan F., Sakar M. G., Saldır O.  
3rd International Conference on Computational Mathematics and Engineering Sciences, Girne, Kıbrıs (Kktc), 4 - 06 Mayıs 2018, ss.1-2, (Özet Bildiri)
- XII. **Reproducing Kernel Method for Time Fractional Advection equation**  
SAKAR M. G., SALDIR O., Erdoğan F.  
3rd International Conference on Computational Mathematics and Engineering Sciences, Girne, Kıbrıs (Kktc), 4 - 06 Mayıs 2018, ss.1-3, (Özet Bildiri)
- XIII. **Uniform Numerical Methods for Singularly Perturbed Integro-Differential Equations With Delay**  
Erdoğan F., Sakar M. G., Saldır O.  
Ukrainian Conference on Applied Mathematics, Lviv, Ukrayna, 28 - 30 Eylül 2017, ss.1, (Özet Bildiri)
- XIV. **A new numerical approach for fractional boundary value problems**  
Saldır O., Sakar M. G.  
Cucasian Mathematics Conference II (CMC II), Van, Türkiye, 22 - 24 Ağustos 2017, ss.121-122, (Özet Bildiri)
- XV. **Non uniform haat wavelet method for singularly perturbed convection diffusion equations**  
Sakar M. G., Saldır O., Erdoğan F.  
The 2nd International Symposium on Computational Mathematics and Engineering Sciences, İstanbul, Türkiye, 20 - 22 Mayıs 2017, ss.1, (Özet Bildiri)
- XVI. **Legendre Reproducing Kernel Method for Fractional Two Point Boundry Value Problem**  
Saldır O., Sakar M. G., Erdoğan F.  
The 2nd International Symposium on Computational Mathematics and Engineering Sciences, İstanbul, Türkiye, 20 - 22 Mayıs 2017, ss.1, (Özet Bildiri)
- XVII. **Higher Order Difference Schemes for Singularly Perturbed Delay Differential Equations with Delay**  
Erdoğan F., Sakar M. G., Saldır O.  
, The 2st International Symposium on Computational Mathematics and Engineering Sciences, İstanbul, Türkiye, 20 - 22 Mayıs 2017, ss.1, (Özet Bildiri)
- XVIII. **Numerical Solution of Fractional Bratu Type Equation by Legendre-Reproducing Kernel Method**  
Sakar M. G., AKGÜL A., Saldır O.  
International Workshop on Mathematical Methods in Engineering, Ankara, Türkiye, 27 - 29 Nisan 2017, ss.117, (Özet Bildiri)
- XIX. **A New Technique for Numerical Solution of Fractional BVP's**  
Sakar M. G., AKGÜL A., Saldır O.  
International Workshop on Mathematical Methods in Engineering, Ankara, Türkiye, 27 - 29 Nisan 2017, ss.117, (Özet Bildiri)
- XX. **An Iterative Reproducing Kernel Method for Time and Space Fractional Burgers Equation**  
Saldır O., Sakar M. G.  
International Workshop on Mathematical Methods in Engineering, Ankara, Türkiye, 27 - 29 Nisan 2017, ss.118, (Özet Bildiri)
- XXI. **HOMOTOPY PERTURBATION METHOD FOR TIME-FRACTIONAL PDEs WITH PROPORTIONAL DELAYS**  
Saldır O., Sakar M. G.  
Mathematical Analysis, Differential Equations and their Applications (MADEA 7), Baku, Azerbaijan, 8 - 13 Eylül 2015, ss.147, (Özet Bildiri)
- XXII. **A fitted numerov method for singularly perturbed reaction-diffusion equations**  
Erdoğan F., SAKAR M. G., SALDIR O.  
International Conference on Pure and Applied, Van, Türkiye, 25 - 28 Ağustos 2015, ss.1, (Özet Bildiri)
- XXIII. **An exponential fitted method for singularly perturbed reactin-diffusion equations**  
SAKAR M. G., Erdoğan F., Saldır O.  
International Conference on Pure and Applied, Van, Türkiye, 25 - 28 Ağustos 2015, ss.10, (Özet Bildiri)
- XXIV. **A NEW NUMERICAL APPROACH FOR SOLVING TIME-FRACTIONAL PARTIAL DIFFERENTIAL EQUATIONS**  
Sakar M. G., Saldır O.

- INTERNATIONAL CONFERENCE ON PURE AND APPLIED MATHEMATICS (ICPAM 2015), Van, Türkiye, 25 - 28 Ağustos 2015, ss.115, (Özet Bildiri)
- XXV. A COMBINATION OF VIM AND ASYMPTOTIC EXPANSION FOR SINGULARLY PERTURBED CONVECTION-DIFFUSION PROBLEM**  
Saldır O., Sakar M. G.  
INTERNATIONAL CONFERENCE ON PURE AND APPLIED MATHEMATICS (ICPAM 2015), Van, Türkiye, 25 - 28 Ağustos 2015, ss.116, (Özet Bildiri)
- XXVI. On the numerical solution of singularly perturbed reaction-diffusion equations**  
Saldır O., SAKAR M. G., Erdoğan F.  
International Conference on Differential and Difference Equations & Applications, Lizbon, Portekiz, 18 - 22 Mayıs 2015, ss.84, (Özet Bildiri)
- XXVII. A novel approach to solution of singularly perturbed convection-diffusion problem**  
Erdoğan F., Yamaç K., SAKAR M. G., Saldır O.  
International Conference on Differential and Difference Equations & Applications, Lizbon, Portekiz, 18 - 22 Mayıs 2015, ss.106-107, (Özet Bildiri)
- XXVIII. Numerical Methods on a Shishkin Mesh for Singuarly Perturbed Delay Differential Equations**  
Erdoğan F., Sakar M. G., Saldır O.  
3. INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Vienna, Avusturya, 25 - 28 Ağustos 2014, ss.187, (Özet Bildiri)
- XXIX. A Finite Difference Analysis for Singularly Perturbed Differential Difference Equations with Delay and Advance**  
Erdoğan F., Saldır O.  
2. INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS (IECMSA-2013), Sarajevo, Bosna-Hersek, 26 - 29 Ağustos 2013, ss.163, (Özet Bildiri)
- XXX. An Iterative Scheme for the Solution of Singularly Perturbed Delay Differential Equation**  
Erdoğan F., Saldır O.  
2. INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS (IECMSA-2013), Sarajevo, Bosna-Hersek, 26 - 29 Ağustos 2013, ss.162, (Özet Bildiri)
- XXXI. Oscillation Theorems for Second-Order Nonlinear Dynamic Equation on Time Scales**  
ŞENEL M. T., Saldır O., UTKU N.  
INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND ALGEBRA, İstanbul, Türkiye, 29 Haziran - 02 Temmuz 2011, ss.145, (Özet Bildiri)

## Bilimsel Yayınlarında Hakemlikler

Fundamental Journal of Mathematics and Applications, Diğer İndekslerce Taranan Dergi, Kasım 2018

Journal of Advanced Physics, Diğer İndekslerce Taranan Dergi, Ekim 2018

Journal of Advanced Physics, Diğer İndekslerce Taranan Dergi, Eylül 2018

Journal of Advanced Physics, Diğer İndekslerce Taranan Dergi, Ağustos 2018

## Metrikler

Yayın: 46

Atıf (WoS): 96

Atıf (Scopus): 208

H-İndeks (WoS): 5

H-İndeks (Scopus): 8

## **Kongre ve Sempozyum Katılımı Faaliyetleri**

2nd International Conference on Pure and Applied Mathematics (ICPAM-VAN 2018), Oturum Başkanı, Van, Türkiye, 2018

Caucasian Mathematics Conference (CMC)-II, Katılımcı, Van, Türkiye, 2017

2. International Conference on Computational Mathematics and Engineering Sciences, Katılımcı, İstanbul, Türkiye, 2017

International Workshop on Mathematical Methods in Engineering, Katılımcı, Ankara, Türkiye, 2017

Mathematical Analysis, Differential Equations and their Applications - MADEA7, Katılımcı, Baku, Azerbaycan, 2015

INTERNATIONAL CONFERENCE ON PURE AND APPLIED MATHEMATICS (ICPAM 2015), Katılımcı, Van, Türkiye, 2015

INTERNATIONAL CONFERENCE ON DIFFERENTIAL AND DIFFERENCE EQUATIONS & APPLICATIONS 2015, Katılımcı, Lisboa, Portekiz, 2015

3. INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Katılımcı, Wien, Avusturya, 2014

2. INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Katılımcı, Sarajevo, Bosna-Hersek, 2013

INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND ALGEBRA, Katılımcı, İstanbul, Türkiye, 2011