# ALİ KONURALP

# PROF.



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Publons / Web Of Science ResearcherID: I-1780-2016
ScopusID: 11840535600
Yoksis Researcher ID: 9772

## Education

| | |
|---|---|
| Doctorate<br>2009 - 2012 | Manisa Celal Bayar University, Fen Bilimleri Enstitüsü, Matematik, Turkey |
| Postgraduate<br>2002 - 2005 | Manisa Celal Bayar University, Fen Bilimleri Enstitüsü, Matematik, Turkey |
| Postgraduate<br>2002 - 2004 | Manisa Celal Bayar University, Fen Bilimleri Enstitüsü, Matematik, Turkey |
| Undergraduate<br>1998 - 2002 | Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Matematik, Turkey |

## Foreign Languages

English

## Dissertations

Doctorate, Kaotik davranışa sahip kesirli diferansiyel denklem sistemleri ve nümerik çözümü, Manisa Celal Bayar University, Lisansüstü Eğitim Enstitüsü, Lisansüstü Eğitim Enstitüsü, 2012
Postgraduate, dx/dt=yz, dy/dt=axz, dz/dt=bzx(y-c) sisteminde hopf bifurkasyonu üzerine, Manisa Celal Bayar University, Fen Bilimleri Enstitüsü, Matematik, 2005

## Academic Positions

| | |
|---|---|
| Professor<br>2021 - Present | Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Matematik |
| Associate Professor<br>2016 - 2021 | Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Matematik |
| Assistant Professor<br>2012 - 2017 | Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Matematik |
| Research Assistant<br>2004 - 2012 | Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Matematik |

## Funded Projects

1. KONURALP A., AÇİL M., ÖZALTUN G., Project Supported by Higher Education Institutions, Kapalı Kümeler Üzerinde Ters Sturm-Liouville Problemlerinin İncelenmesi, 2020 - 2023
2. GÜROĞLU A. T., KAZAZ M., KONURALP A., ÖZTUNÇ S., KAHRAMAN T., ŞAHİNER B., Project Supported by Other Official Institutions, Manisa Celal Bayar Üniversitesi Cebir Günleri Çalıştayı, 2019 - 2020
3. GÜROĞLU A. T., ÇOŞKUN H., KONURALP A., KOCAYİĞİT H., ÖZDEMİR A., KAZAZ M., Project Supported by Other Official Institutions, 16. Uluslararası Geometri Sempozyumu, 2018 - 2019
4. KONURALP A., BİLDİK N., Project Supported by Higher Education Institutions, Üç Boyutlu Uzaydaki Bir Sistemin Hopf Bifurkasyonu Üzerine, 2004 - 2006

## Awards

1. Konuralp A., Yayın Teşvik Ödülü, UBYT, Tübitak, January 2021
2. Konuralp A., Yayın Teşvik Ödülü, UBYT, Tübitak, January 2018
3. KONURALP A., Bilimsel Yayını Teşvik Programı Kapsamınca Teşvik Ödülü, TÜBİTAK, January 2014
4. KONURALP A., 2011 Yılı Atıf Ödülü, CELAL BAYAR ÜNİVERSİTESİ, January 2012
5. KONURALP A., 2010 Yılı Yıllık Yayın Performans Ödülü, CELAL BAYAR ÜNİVERSİTESİ, January 2011
6. KONURALP A., Bilimsel Yayını Teşvik Programı Kapsamınca Teşvik Ödülü, TÜBİTAK, January 2010
7. KONURALP A., Bilimsel Yayını Teşvik Programı Kapsamınca Teşvik Ödülü, TÜBİTAK, January 2009
8. KONURALP A., Bilimsel Yayını Teşvik Programı Kapsamınca Teşvik Ödülü, TÜBİTAK, January 2007

## Articles

1. **Solutions of Volterra-Fredholm type fractional integro-differential equations in terms of shifted Gegenbauer wavelets compared with the solutions by Genocchi polynomial method**
   Abali S., KONURALP A.
   JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.476, 2026 (SCI-Expanded, Scopus)
2. **Gegenbauer wavelet solutions of fractional integro-differential equations**
   Özaltun G., Konuralp A., Gümgüm S.
   Journal of Computational and Applied Mathematics, vol.420, 2023 (SCI-Expanded, Scopus)
3. **AN EFFICIENT ALGORITHM FOR EVALUATION OF OSCILLATORY INTEGRALS HAVING CAUCHY AND JACOBI TYPE SINGULARITY KERNELS**

Kayijuka I., Ege Ş. M., Konuralp A., Topal F. S.
Journal of Applied Mathematics and Informatics, vol.40, no.1-2, pp.267-281, 2022 (Scopus)

4. **Reconstruction of potential function in inverse Sturm-Liouville problem via partial data**
Açil M., Konuralp A.
International Journal of Optimization and Control: Theories and Applications, vol.11, no.2, pp.186-198, 2021 (Scopus, TRDizin)
5. **Clenshaw–Curtis algorithms for an efficient numerical approximation of singular and highly oscillatory Fourier transform integrals**
Kayijuka I., Ege Ş., Konuralp A., Topal F.
Journal of Computational and Applied Mathematics, vol.385, 2021 (SCI-Expanded, Scopus)
6. **Fast gauss-related quadrature for highly oscillatory integrals with logarithm and cauchy-logarithmic type singularities**
Kayijuka I., Ege S. M., Konuralp A., Topal F. S.
International Journal of Numerical Analysis and Modeling, vol.18, no.4, pp.442-457, 2021 (SCI-Expanded, Scopus)
7. **Numerical Solutions Based on a Collocation Method Combined with Euler Polynomials for Linear Fractional Differential Equations with Delay**
Konuralp A., Öner S.
International Journal of Nonlinear Sciences and Numerical Simulation, vol.21, no.6, pp.539-547, 2020 (SCI-Expanded, Scopus)
8. **Optimal perturbation iteration method for solving fractional model of damped burgers' equation**
Deniz S., Konuralp A., la Sen M. D.
Symmetry, vol.12, no.6, 2020 (SCI-Expanded, Scopus)
9. **FAST APPROXIMATION OF ALGEBRAIC AND LOGARITHMIC HYPERSINGULAR TYPE SINGULAR INTEGRALS WITH HIGHLY OSCILLATORY KERNEL**
Kayijuka I., Ege S. M., Konuralp A., Topal F. S.
International Journal of Analysis and Applications, vol.18, no.6, pp.965-980, 2020 (ESCI, Scopus)
10. **Fractional variational iteration method for time-fractional non-linear functional partial differential equation having proportional delays**
Dogan Durgun D., Konuralp A.
Thermal Science, vol.22, 2018 (SCI-Expanded, Scopus)
11. **Finding the Lie Symmetries of Some First-Order Odes via Induced Characteristic**
AÇİL M., KONURALP A., BİLDİK N.
CBU J. of Sci., vol.13, no.2, pp.275-278, 2017 (TRDizin)
12. **Variational Iteration Method for Volterra Functional Integrodifferential Equations with Vanishing Linear Delays**
Konuralp A., Sorkun H. H.
Journal of Applied Mathematics, vol.2014, 2014 (Scopus)
13. **The Numerical Solutions for the Damped Generalized Regularized Long wave Equation by Variational Method**
DÖNMEZ DEMİR D., BİLDİK N., KONURALP A., DEMİR A.
World Applied Sciences Journal, vol.13, pp.8-17, 2011 (Peer-Reviewed Journal)
14. **THE SOLUTION OF THE FRACTIONAL DIFFERENTIAL EQUATION WITH THE GENERALIZED TAYLOR COLLOCATIN METHOD**
YALÇINBAŞ S., KONURALP A., DÖNMEZ DEMİR D., Sorkun H. H.
International Journal of Research and Reviews in Applied Sciences, vol.4, no.3, pp.296-303, 2010 (Peer-Reviewed Journal)
15. **The Solution of the Fractional Differential Equation with the Generalized Taylor Collocation Method**
YALÇINBAŞ S., KONURALP A., DÖNMEZ DEMİR D., SORKUN H. H.
International Journal of Research and Reviews in Applied Sciences, vol.4, no.3, pp.296-303, 2010 (Peer-Reviewed Journal)
16. **The approximate solution of steady temperature distribution in a rod: Two-point boundary value**

**problem with higher order nonlinearity**
Konuralp A.
Nonlinear Analysis: Real World Applications, vol.11, no.3, pp.1395-1401, 2010 (SCI-Expanded, Scopus)

17. **Comparison of Legendre polynomial approximation and variational iteration method for the solutions of general linear Fredholm integro-differential equations**
Bildik N., Konuralp A., Yalçinbaş S.
Computers and Mathematics with Applications, vol.59, no.6, pp.1909-1917, 2010 (SCI-Expanded, Scopus)
18. **The steady temperature distributions with different types of nonlinearities**
Konuralp A.
Computers and Mathematics with Applications, vol.58, no.11-12, pp.2152-2159, 2009 (SCI-Expanded, Scopus)
19. **Two-dimensional differential transform method, Adomian's decomposition method, and variational iteration method for partial differential equations**
Bildik N., Konuralp A.
International Journal of Computer Mathematics, vol.83, no.12, pp.973-987, 2006 (SCI-Expanded, Scopus)
20. **The use of variational iteration method, differential transform method and adomian decomposition method for solving different types of nonlinear partial differential equations**
Bildik N., Konuralp A.
International Journal of Nonlinear Sciences and Numerical Simulation, vol.7, no.1, pp.65-70, 2006 (SCI-Expanded, Scopus)
21. **Solution of different type of the partial differential equation by differential transform method and Adomian's decomposition method**
Bildik N., Konuralp A., Bek F. O., Küçükarslan S.
Applied Mathematics and Computation, vol.172, no.1, pp.551-567, 2006 (SCI-Expanded, Scopus)

## Papers Presented at Peer-Reviewed Scientific Conferences

1. **Optimizer Plugger and NoiseLayer: Elegant way of Deep Learning**
Ertuğrul M. S., Yapalı R., Taşdelen A., Konuralp A.
The 4th International Conference on Applied Mathematics in Engineering (ICAME'26), Balıkesir, Turkey, 2 - 04 September 2026, vol.1, pp.57, (Summary Text)
2. **The Effect of the Splitting Protocol on Performance in Dermatoscopic Skin Lesion Classification: A Controlled Measurement of Data Leakage**
Asankulova L., Konuralp A.
The 4th International Conference on Applied Mathematics in Engineering (ICAME'26), Balıkesir, Turkey, 2 - 04 September 2026, pp.155, (Summary Text)
3. **A Matrix Collocation Approach based on Pell-Lucas Plynomial for Solving Nonlinear Differential Equations**
DÖNMEZ DEMİR D., AÇIK A., KONURALP A.
Tenth International Conference on Computational Mathematics and Engineering Sciences (CMES-2026), İstanbul, Turkey, 24 - 26 April 2026, pp.157, (Summary Text)
4. **Fermat Collocation Method for Solving Fractional Order Differential Equations with Variable Coefficients**
TAŞTEKİN D., KONURALP A.
ICAME'24, Balıkesir, Turkey, 26 June 2024, (Summary Text)
5. **Pell-Lucas Collocation Method for High-Order Linear Differential Equations**
AÇIK A., DÖNMEZ DEMİR D., KONURALP A.
ICAME'24, Balıkesir, Turkey, 26 June 2024, (Summary Text)
6. **Solution of Fredholm Volterra Fractional Integro-Differential Equation in Terms of Gegenbauer Wavelets Compared with the Solutions by Genocchi Polynomial**
KONURALP A., ABALI S.

ICAMΣ'24, Balıkesir, Turkey, 26 June 2024, (Summary Text)

7. **Pell Lucas Collocation Method for High-order Linear Differential Equation**
   AÇIK A., DÖNMEZ DEMİR D., KONURALP A.
   The Third International Conference on Applied Mathematics in Engineering (ICAME'24), Balıkesir, Turkey, 28 May - 28 June 2024, pp.173, (Summary Text)
8. **Freud Polynomial Solutions of Linear First Order Generalized Pantograph Differential Equations**
   KONURALP A., HAYTA G.
   3rd International Students Science Congress, 3 - 04 May 2019, (Full Text)
9. **q-Homotopy Analysis Transform Method for Differential Equations having Quadratic Nonlinearity**
   KONURALP A., ÖZTAŞ Z.
   3rd International Students Science Congress, 3 - 04 May 2019, (Full Text)
10. **Solutions of First Order Linear Fredholm-Volterra Integro-Differential Equations by Morgan-Voyce Polynomials**
    KONURALP A., Aktaş N.
    2nd International Students Science Congress, 4 - 05 May 2018, (Summary Text)
11. **Improved Fermat Matrix Method for Generalized Functional Integral Equations**
    Taştekin D., KONURALP A.
    2nd International Students Science Congress, 4 - 05 May 2018, (Summary Text)
12. **An approximate Solution for Linear Fractional Differential Equations by Using Euler Polynomials**
    KONURALP A., Öner S.
    1. International University Industry Cooperation, RD and Innovation Congress, 18 - 19 December 2017, (Summary Text)
13. **Improved Euler-Taylor Matrix Method for Generalized Functional Integro Differential Equations**
    KONURALP A., SEZER M., Öner S.
    International Students Science Conference, 5 - 06 May 2017, (Summary Text)
14. **Fractional VIM Composed with Jumarie Type Derivative for Time-Fractional NonlinearFunctional PDEs having Proportional Delays**
    DURGUN D., KONURALP A.
    INTERNATIONAL WORKSHOP ONMATHEMATICAL METHODSIN ENGINEERING, 27 - 29 April 2017, (Summary Text)
15. **Using Fractional Order Chaotic Dynamical Systems in Order To Simulate The Models Of Economic and Financial Systems**
    KONURALP A., KONURALP Ç.
    Uluslararası Stratejik Araştırmalar Kongresi, ISRC 2016, 3 - 06 November 2016, (Full Text)
16. **FINDING THE LIE SYMMETRIES OF SOME FIRST ORDERODES VIA INDUCED CHARACTERISTIC**
    AÇİL M., KONURALP A.
    International ConferenceMathematics: Applied, 21 - 24 August 2016
17. **Finding The Lie Symmetries of Some First order ODES via Induced Characteristic**
    AÇİL M., KONURALP A.
    Mathematics: Applied, an International Conference, MA 2016, 21 - 24 August 2016, (Summary Text)
18. **Numerical Solution to the Damped Generalized Regularized Long Wave Equation**
    DÖNMEZ DEMİR D., BİLDİK N., KONURALP A.
    3rd Conference on Nonlinear Science and Complexity, Ankara, Turkey, 28 - 31 July 2010, pp.18-19, (Summary Text)
19. **Numerical solution to the van der Pol equation with fractional damping**
    Konuralp A., Konuralp Ç., YILDIRIM A.
    3rd International Workshop on Fractional Differentiation and its Applications, FDA08, Ankara, Turkey, 5 - 07 November 2008, vol.T136, (Full Text)

## Academic and Administrative Experience

| | | |
|---|---|---|
| 2025 - Present | **Director of The Institution** | Manisa Celal Bayar University, Lisansüstü Eğitim Enstitüsü, Lisansüstü Eğitim Enstitüsü |
| 2024 - Present | **Head of Department** | Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Matematik |
| 2021 - Present | **Head of Department** | Manisa Celal Bayar University, Lisansüstü Eğitim Enstitüsü, Lisansüstü Eğitim Enstitüsü |
| 2024 - 2027 | **Head of Department** | Manisa Celal Bayar University, MÜHENDİSLİK VE DOĞA BİLİMLERİ FAKÜLTESİ, MATEMATİK |
| 2023 - 2026 | **Assistant Manager of Research and Application Center** | Manisa Celal Bayar University |
| 2019 - 2025 | **Director of Vocational School** | Manisa Celal Bayar University, Kırkağaç Meslek Yüksekokulu |

## Courses

**Undergraduate**

Kompleks Analiz, Undergraduate, 2019-2020, 2018-2019
Differential Equations, Undergraduate, 2019-2020, 2018-2019
Temel Bilgi Teknolojisi Kullanımı, Undergraduate, 2016-2017, 2015-2016
DİFERANSİYEL DENKLEMLER, Undergraduate, 2016-2017, 2015-2016
KISMİ DİFERERANSİYEL DENKLEMLER I, Undergraduate, 2016-2017
İntegral Denklemler, Undergraduate, 2015-2016, 2013-2014, 2012-2013
Matematik II, Undergraduate, 2015-2016
Temel Bilgisayar Bilimleri, Undergraduate, 2015-2016
Uygulamalı Matematik, Undergraduate, 2015-2016, 2013-2014
Bilimsel Hesaplama II, Undergraduate, 2014-2015
Bilimsel Hesaplama I, Undergraduate, 2014-2015, 2013-2014
Kısmi Difereransiyel Denklemler II, Undergraduate, 2012-2013
Analiz II, Undergraduate, 2012-2013

**Undergraduate Minor**

Diferansiyel Denklemler için Simetri Metodları I, Undergraduate Minor, 2013-2014

**Undergraduate Double Major**

Kesirli Diferansiyel Denklemler, Undergraduate Double Major, 2019-2020, 2018-2019, 2017-2018
İntegral ve İntegro-Diferansiyel Denklemler I, Undergraduate Double Major, 2016-2017
KESİRLİ DİFERANSİYEL DENKLEMLER I, Undergraduate Double Major, 2016-2017, 2015-2016, 2014-2015, 2013-2014
Fourier Serileri ve Sınır Değer Problemleri I, Undergraduate Double Major, 2014-2015

## Supervised Theses

Konuralp A., Bazı Kesirli Diferansiyel Denklemlerin Dalgacık Çözümleri ve Mühendislik Uygulamaları, Doctorate, S.ABALI(Student), in Progress
Konuralp A., Kanser Verilerinin Sınıflandırılmasında Farklı Derin Öğrenme Algoritmalarının Performans Karşılaştırması,

Postgraduate, L.ASANKULOVA(Student), 2025
KONURALP A., Hosoya polynomial based matrix method for higher order linear generalized pantograph differential equations, Postgraduate, G.KARAPELİT(Student), 2025
KONURALP A., On the numerical solutions of fredholm volterra integro-differential and integral equations with weakly singular kernel, Postgraduate, M.MWABA(Student), 2025
KONURALP A., Kesirli mertebeden değişken katsayılı diferansiyel denklem ve denklem sistemleri için fermat sıralama metodu ve residüel hata analizi, Doctorate, D.TAŞTEKİN(Student), 2022
KONURALP A., Romatizmal hastalıklara sahip bireylere uygulanabilecek binary lojistik regresyon modelinin geliştirilmesi, Postgraduate, H.ALSITARI(Student), 2022
KONURALP A., Tekil ve yüksek salınımlı problem uygulamalarının hesaplanması için sayısal algoritmalar, Doctorate, I.KAYIJUKA(Student), 2021
KONURALP A., Freud polinomlarına dayalı matris metodu ile diferansiyel denklemleri çözümleri üzerine, Postgraduate, G.HAYTA(Student), 2021
KONURALP A., İkinci ve üçüncü dereceden lineer olmayan terimlere sahip diferansiyel denklemlerin q-homotopi analiz dönüşüm metodu ile sayısal çözümleri, Postgraduate, Z.ÖZTAŞ(Student), 2019
KONURALP A., Çeşitli fonksiyonel integro diferansiyel denklemlerin nümerik çözümleri için matris tabanlı morgan-voyce polinom yaklaşımı, Postgraduate, N.YOLTAY(Student), 2019
KONURALP A., Kesirli mertebeden fonksiyonel integro-diferansiyel denklemlerin geniş bir sınıfı için yeni sayısal çözüm metodu, Postgraduate, S.ÖNER(Student), 2019

## Peer Reviews in Scientific Publications

Other journals, April 2025
Other journals, April 2025
Other journals, April 2025
Other journals, April 2025
Other journals, April 2025
Other journals, April 2025
APPLIED MATHEMATICS LETTERS, Other journals, April 2025
DIFFERENTIAL EQUATIONS AND DYNAMICAL SYSTEMS, Other journals, April 2025
Other journals, April 2025
INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT AND FLUID FLOW, Other journals, April 2025
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, Other journals, April 2025
Conference Paper (Full Text), April 2025
Mechanical Sciences, Other journals, April 2025
Other journals, April 2025
Other journals, April 2025
EXPERIMENTAL THERMAL AND FLUID SCIENCE, Other journals, April 2025
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, Other journals, April 2025
Conference Paper (Full Text), April 2025
Other journals, April 2025
JOURNAL OF APPLIED MATHEMATICS, Other journals, April 2025
COMPUTERS AND MATHEMATICS WITH APPLICATIONS, Other journals, April 2025
ACTA MECHANICA, Other journals, January 2017
Other journals, January 2017
APPLIED MATHEMATICS LETTERS, Other journals, January 2017
Mechanical Sciences, Other journals, January 2017
Other journals, January 2017
Conference Paper (Full Text), January 2017
Other journals, January 2017

Mechanical Sciences, Other journals, January 2016
Other journals, January 2016
Other journals, January 2016
INTERNATIONAL JOURNAL OF BIOMATHEMATICS, Other journals, January 2016

## Metrics

Publication: 43
Citation (WoS): 505
Citation (Scopus): 528
H-Index (WoS): 9
H-Index (Scopus): 9

## Research Areas

**Avesis Research Areas:** Mathematics, Differential Equations, Dynamic Systems and Ergodic Theory, Functional Equations, General Mathematics, Integral Equations, Integral Transformations, Computational Calculation, Partial Differential Equations, Numerical Analysis
**WoS Research Areas:** Mathematics
**Scopus Research Areas:** General Mathematics