

## Asst. Prof. Özlem BAKŞI

### Personal Information

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**Address:** YTU Fen Edebiyat Fak. Matematik Böl. Esenler İstanbul

### Education Information

Doctorate, Yildiz Technical University, Faculty of Arts & Science, Department of Mathematics, Turkey 1994 - 1999

Post Graduate, Yildiz Technical University, Graduate School of Natural and Applied Sciences, Matematik, Turkey 1992 - 1994

Under Graduate, Ytu, Fen Edebiyat, Matematik, Turkey 1988 - 1992

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Sınırsız Operatör Katsayılı Sturm-Liouville Denkleminin İz Formülü, Yıldız Teknik Üniversitesi, Matematik, Analiz Ve Fonksiyonlar Teorisi, 1999

Post Graduate, 2-Dizayn ve 3-Dizayn ların İncelenmesi, Yıldız Teknik Üniversitesi, Matematik, Cebir Ve Sayılar Teorisi, 1994

### Research Areas

Mathematics, Differential Equations, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty of Arts & Science, Department of Mathematics, 2017 - Continues

Assistant Professor, The Ohio State University, Collage of Art and Science, Department of Mathematics, 2016 - 2017

Assistant Professor, Yildiz Technical University, Faculty of Arts & Science, Department of Mathematics, 2006 - 2016

Lecturer PhD, Yildiz Technical University, Faculty of Arts & Science, Department of Mathematics, 2000 - 2006

Research Assistant, Yıldız Teknik Üniversitesi, Fen Edebiyat Fakültesi, Matematik, 1993 - 2000

### Courses

Reel Analize Giriş, Under Graduate, 2017 - 2018, 2018 - 2019

## Jury Memberships

Academic Staff Examination, Yüksek Lisans İngilizce Matematik Sınavı, Matematik Bölümü Yüksek Lisans Sınavı, May, 2018

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

- I. **On Higher Regularized Traces of a Differential Operator with Bounded Operator Coefficient Given in a Finite Interval**  
Sezer Y., Bakşi Ö., Karayel S.  
Mediterranean Journal Of Mathematics, no.90, pp.1, 2021 (Journal Indexed in SCI Expanded)
- II. **BASIS PROPERTIES OF p-EXPONENTIAL FUNCTION OF LINDQVIST AND PEETRE TYPE**  
BAKŞI Ö., Gurka P., Lang J., Mendez O.  
MATHEMATICAL INEQUALITIES & APPLICATIONS, vol.21, no.4, pp.1003-1013, 2018 (Journal Indexed in SCI)
- III. **STRICT S-NUMBERS OF THE VOLTERRA OPERATOR**  
BAKŞI Ö., Khan T., Lang J., Musil V.  
PROCEEDINGS OF THE AMERICAN MATHEMATICAL SOCIETY, vol.146, no.2, pp.723-731, 2018 (Journal Indexed in SCI)
- IV. **Second regularized trace of a differential operator with second order unbounded operator coefficient given in a finite interval**  
Bakşi Ö., Karayel S., Sezer Y.  
Operators and Matrices, vol.11, pp.735-747, 2017 (Journal Indexed in SCI)
- V. **Basis properties of Lindqvist-Peetre functions in  $L-r(0,1)(n)$**   
Bakasi O., Gurka P., Lang J., Mendez O.  
REVISTA MATEMATICA COMPLUTENSE, vol.30, no.1, pp.1-12, 2017 (Journal Indexed in SCI)
- VI. **The third regularized trace formula for the Sturm-Liouville operator with the bounded operator coefficient**  
Baksi O., Adiguzelov E.  
MATHEMATICAL AND COMPUTER MODELLING, vol.52, pp.1846-1857, 2010 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **The regularization problem for higher order differential operator**  
Sezer Y., Karayel S., Bakşi Ö.  
Maltepe Journal of Mathematics, vol.2, no.1, pp.27-37, 2020 (International Refereed University Journal)
- II. **TRACE REGULARIZATION PROBLEM FOR HIGHER ORDER DIFFERENTIAL OPERATOR**  
Sezer Y., Bakşi Ö., Karayel S.  
Maltepe Journal of Mathematics, vol.2, no.1, pp.27-37, 2020 (International Refereed University Journal)
- III. **The Regularized Trace of Two Terms Differential Operator in the Space  $H_1 = L_2(0, \infty)$**   
BAKŞI Ö.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.9, pp.1594-1605, 2019 (Other Refereed National Journals)
- IV. **The sum of subtraction of the eigenvalues of two self-adjoint differential operators with unbounded operator coefficient**  
Karayel S., Bakşi Ö., Sezer Y.  
International Journal of Pure and Applied Mathematics, vol.3, no.63, pp.255-268, 2010 (Refereed Journals of Other Institutions)
- V. **Sonlu Aralıkta Verilmiş İkinci Mertebeden Bir Diferansiyel Operatörün Negatif Özdeğerlerinin Toplamı İçin Asimtotik Formül**  
BAKŞI Ö., Sedi İ.

- Sigma Mühendislik ve Fen Bilimleri Dergisi, pp.87-98, 2005 (Other Refereed National Journals)
- VI. **On a regularized trace of a differential operator with bounded operator coefficient.**  
BAKŞI Ö., Adiguzelov E.  
International Mathematical Journal, vol.3, pp.273-286, 2004 (National Non-Refereed Journal)
- VII. **SONLU BİR ARALIKTA VERİLMİŞ DİFERANSİYEL OPERATÖR DENKLEMİNİN DÜZENLİ İZİ ÜZERİNE**  
Bakşi Ö., Adiguzelov E.  
Sigma Journal of Engineering and Natural Sciences, no.1, pp.47-55, 2004 (National Refreed University Journal)
- VIII. **On the Regularized Trace of the Differential Operator Equation Given in Finite Interval Operator**  
Ehliman A., BAKŞI Ö.  
Sigma Mühendislik ve Fen Bilimleri Dergisi, pp.47-55, 2004 (Other Refereed National Journals)
- IX. **The asymptotic behaviour of the negative part of the spectrum of Sturm-Liouville operator with the operator coefficient which has singularity**  
BAKŞI Ö., Bayramov A.  
International Journal of Differential Equations and Applications, no.4, pp.315-329, 2002 (Refereed Journals of Other Institutions)

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

- I. **The Second Regularized Trace of Even Order Differential Operators with Operator Coefficient**  
BAKŞI Ö., SEZER Y.  
Fourth International Conference of Mathematical Sciences (ICMS 2020), İstanbul, Turkey, 21 June 2020, vol.1, pp.39
- II. **On the Identities of Generalized Trigonometric Functions**  
BAKŞI Ö.  
4th International Conference on Pure and Applied Sciences: Renewable Energy, İstanbul, Turkey, 23 - 25 November 2017
- III. **On the basis properties of generalized trigonometric functions of Lindqvist-Peetre type in the Lebesgue space  $L_r(0,1)^n$**   
BAKŞI Ö.  
Banach Spaces and Operator Theory with Applications, Poznan, Poland, 3 - 07 July 2017
- IV. **Some inequalities about the eigenvalues of a two terms differential operator and the sum of the eigenvalues of that operator**  
BAKŞI Ö.  
The Eighth Congress of Romanian Mathematicians, 01 June 2015
- V. **On the Regularized Trace of an Operator which has Purely-discrete Spectrum**  
BAKŞI Ö.  
10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, 01 July 2014
- VI. **On the Trace of an Even Order Differential Operator**  
BAKŞI Ö.  
ICREA Conference on Approximation Theory and Fourier Analysis, 01 December 2011
- VII. **The Regularized Trace Formula For a Differential Operator of Fourth order with bounded operator Coefficient**  
SEZER Y., BAKŞI Ö., KARAYEL S.  
International Conference on Mathematical Sciences, Bolu, Turkey, 23 - 27 November 2010
- VIII. **Sınırlı Operator Katsayılı İki Terimli Bir Diferansiyel Operator İçin İz Formülü**  
BAKŞI Ö.  
5. Ankara Matematik Günleri, 01 June 2010
- IX. **The Asymptotic Formula for the Subtraction of eigenvalues of a second order Differential operator**  
Bakşi Ö., Karayel S., Sezer Y.  
International Symposium on Analysis and theory of Functions, İstanbul Kültür University, İstanbul, Turkey, 24 - 26

August 2009, pp.41-42

- X. **On the Asymptotic Behaviour of the Negative Part of Second Order Differential Operator**  
BAKŞI Ö.  
International Conference of Mathematical Science, 01 August 2009
- XI. **On the Asymptotic Behaviour of the Sum of the Negative Eigenvalues of a Differential Operator Given in Semi-Axis**  
BAKŞI Ö.  
Fifth International Conference of Applied Mathematics and Computing, 01 August 2008
- XII. **İkinci Mertebeden Operatör Katsayılı Bir Diferansiyel Operatörün Düzenli İzinin Hesaplanması**  
Adıgüzelov E., BAKŞI Ö.  
XI. Ulusal Matematik Sempozyumu, Isparta, Turkey, 7 - 11 September 1998

## Scientific Refereeing

Esitsizlikler ve uygulamalar dergisi, SCI Journal, November 2015

Fark Denklemlerinde İleri Düzey, SCI Journal, October 2015

## Tasks In Event Organizations

Bakşı Ö., International Conference on Mathematical Advances and Applications, Scientific Congress, İstanbul, Turkey, Mayıs 2018

## Mobility Activity

Post Doc, Post Doc, The Ohio State University, United States Of America, 2016 - 2017

## Edit Congress and Symposium Activities

4th International Conference on Pure and Applied Sciences: Renewable Energy, Working Group, İstanbul, Turkey, 2017

Banach Spaces and Operator Theory with Applications, Attendee, Poznan, Poland, 2017

The Eighth Congress of Romanian Mathematicians, Working Group, Iasi, Romania, 2015

10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Working Group, Madrid, Spain, 2014

ICREA Conference on Approximation Theory and Fourier Analysis, Working Group, Barcelona, Spain, 2012

International Conference on Mathematical Sciences, Bolu, Working Group, Bolu, Turkey, 2010

5. Ankara Matematik Günleri, Working Group, İstanbul, Turkey, 2010

International Symposium on Analysis and Theory of Functions, Working Group, İstanbul, Turkey, 2009

International Conference of Mathematical Science, Working Group, İstanbul, Turkey, 2009

Fifth International Conference of Applied Mathematics and Computing, Working Group, Plovdiv, Bulgaria, 2008

XI. Ulusal Matematik Sempozyumu, Working Group, Isparta, Turkey, 1998

## Citations

Total Citations (WOS):5

h-index (WOS):2

## **Awards**

Bakşı Ö., Teşvik Ödülü , Yıldız Teknik Üniversitesi, Ytü, February 2012