

## Prof. Dr. ZAHİR MURADOĞLU

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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### Eğitim Bilgileri

Doktora, Azerbaycan Bilimler Akademisi, Siberetik Enstitüsü, Azerbaycan 1985 - 1990

Lisans, Azerbaycan Devlet Üniversitesi, Mekanik-Matematik, Azerbaycan 1976 - 1981

### Yabancı Diller

Rusça, B2 Orta Üstü

### Yaptığı Tezler

Doktora, Belirsiz Sınırlı Elasto - plastik problemlerin Sayısal Çözümü, Azerbaycan Bilimler Akademisi, Siberetik Enstitüsü, 1990

### Araştırma Alanları

Matematik, Sayısal Analiz, Temel Bilimler

### Akademik Unvanlar / Görevler

Prof. Dr., Kocaeli Üniversitesi, Fen Edebiyat Fakültesi, Matematik, 2008 - Devam Ediyor

Doç. Dr., Kocaeli Üniversitesi, Fen Edebiyat Fakültesi, Matematik, 1994 - 2008

Doç. Dr., Azerbaycan Devlet İktisat Üniversitesi, -, Bilimsel Araştırma Laboratuvarı, 1993 - 1994

Uzman, Azerbaycan Devlet Üniversitesi, Mekanik-Matematik, Matematik, 1985 - 1990

### Akademik İdari Deneyim

Anabilim/Bilim Dalı Başkanı, Kocaeli Üniversitesi, Fen Edebiyat Fakültesi, Matematik, 2011 - 2020

### Verdiği Dersler

Sonlu Elemanlar Teorisi II, Doktora, 2022 - 2023  
Uygulamalı Matematik, Lisans, 2023 - 2024  
Lineer Cebir, Lisans, 2022 - 2023  
Matematik Modelleme, Lisans, 2022 - 2023  
Matematik Tarihi, Lisans, 2023 - 2024  
Nümerik Analiz II, Lisans, 2022 - 2023  
Nümerik Analiz I, Lisans, 2023 - 2024

## Jüri Üyelikleri

Doçentlik Sınavı, Doçentlik Sınavı, Kocaeli Üniversitesi, Aralık, 2023  
Akademik Kadroya Atama-Profesörlük, Akademik Kadroya Atama-Profesörlük, Kocaeli Üniversitesi, Kasım, 2023

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

- I. **Determining the Geometrical Sizes of Plates with Internal Hinges by Using Additional Conditions**  
Yazici V., MURADOĞLU Z.  
ADVANCES IN MATHEMATICAL PHYSICS, cilt.2020, 2020 (SCI-Expanded)
- II. **A Mathematical Model and Numerical Solution of a Boundary Value Problem for a Multi-Structure Plate**  
Yazici V., MURADOĞLU Z.  
MATHEMATICS, cilt.7, sa.3, 2019 (SCI-Expanded)
- III. **Simultaneous determination of the strain hardening exponent, the shear modulus and the elastic stress limit in an inverse problem**  
Tatar S., Tinaztepe R., MURADOĞLU Z.  
APPLIED MATHEMATICAL MODELLING, cilt.40, ss.6956-6968, 2016 (SCI-Expanded)
- IV. **Numerical solution of the nonlinear evolutionary inverse problem related to elastoplastic torsional problem**  
Tatar S., MURADOĞLU Z.  
APPLICABLE ANALYSIS, cilt.93, sa.6, ss.1187-1200, 2014 (SCI-Expanded)
- V. **A modification of the semi-analytic inversion method: determination of the yield stress and a comparison with the parametrization algorithm**  
Tatar S., MURADOĞLU Z.  
INVERSE PROBLEMS IN SCIENCE AND ENGINEERING, cilt.22, sa.4, ss.543-556, 2014 (SCI-Expanded)
- VI. **Fast inversion algorithm for identification of elastoplastic properties of power hardening materials from limited spherical indentation tests**  
Hasanov A., MURADOĞLU Z.  
INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS, cilt.47, sa.5, ss.526-536, 2012 (SCI-Expanded)

## Diğer Dergilerde Yayınlanan Makaleler

- I. **ON THE SOLUTION OF THE HOMOGENEOUS LINEAR CONJUGATION PROBLEM WITH SINGULARITIES OF NONINTEGER ORDER**  
Urbanovich T., MURADOĞLU Z.  
ADVANCES IN DIFFERENTIAL EQUATIONS AND CONTROL PROCESSES, cilt.19, sa.2, ss.127-138, 2018 (ESCI)
- II. **Determination of Young'xxs Modulus by UsingInitial Data for Different Boundary Conditions**  
İLHAN F., MURADOĞLU Z.  
Applied Mathematical Sciences, cilt.11, sa.19, ss.913-923, 2017 (Hakemli Dergi)

- III. **Numerical solution of non linear biharmonic equation for elasto plastic bending plate**  
İLHAN F., MURADOĞLU Z.  
Applied Mathematical Sciences, cilt.9, sa.146, ss.7269-7280, 2015 (Hakemli Dergi)
- IV. **Finite Difference Schemes Obtained by Finite Element Method for Lamé System of Equations**  
Seyidmamedov Z.  
Journal of Kocaeli University, sa.3, ss.41-50, 1996 (Hakemsiz Dergi)
- V. **FE Solution of an Axisymmetric Inverse Elasto Plastic Problem Using Penetration Diagram**  
SEYİDMAMEDOV Z.  
Journal of Kocaeli University, sa.1, ss.7-14, 1994 (Hakemsiz Dergi)
- VI. **Numerical solution of quasistatistical elastoplastic contact problem with unknown boundary**  
SEYİDMAMEDOV Z.  
Soviyet VINITI, sa.1, ss.1-18, 1989 (Hakemsiz Dergi)
- VII. **Axisymmetric elastoplastic signorini problem and the numerical method for determining a hardness of materials**  
SEYİDMAMEDOV Z.  
Soviyet VINITI, ss.1-20, 1989 (Hakemsiz Dergi)
- VIII. **On the method of iteration for solving of elastoplastic contact problems**  
HASANOĞLU A., Seyidmamedov Z.  
"Numerical Methods of Analysis", sa.1, ss.17-22, 1988 (Hakemsiz Dergi)
- IX. **On an algorithms of numerical solution of nonlinear contact problems by program package DRIV SOLV03**  
SEYİDMAMEDOV Z., HASANOĞLU A.  
"Approximate Methods for Operator Equations", ss.24-34, 1986 (Hakemsiz Dergi)

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **DETERMINATION INTERLAYER TRANSMISSION CONDITIONS FOR MULTILAYERED MATERIALS BY USING BIQUADRATIC FINITE ELEMENTS**  
MURADOĞLU Z., URBANOVICH T., YAZICI V.  
5th International Congress on Fundamental and Applied Sciences 2018 (ICFAS2018), 18 - 22 Haziran 2018
- II. **DETERMINING THE SIZES OF PLATES IN THE PLATE SYSTEM BY USING ADDITIONAL CONDITIONS**  
YAZICI V., MURADOĞLU Z.  
9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 Kasım 2017, ss.52
- III. **NUMERICAL ANALYSIS OF FRICTIONLESS CONTACT PROBLEM FOR A LAMINATED MEDIUM**  
MURADOĞLU Z.  
9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 Kasım 2017, ss.47
- IV. **NUMERICAL APPROXIMATION OF TRANSMISSION CONDITIONS FOR BIHARMONIC EQUATION WITH DISCONTINUOUS COEFFICIENT ON NON-UNIFORM MESH**  
YAZICI V., MURADOĞLU Z.  
9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 Kasım 2017, ss.53
- V. **Numerical Solution of the Non-Linear Biharmonic Equation for Different Boundary Conditions**  
MURADOĞLU Z.  
VIII Annual International Conference of the Georgian Mathematical Union, 4 - 08 Eylül 2017, ss.137
- VI. **A study for decision making problems by using interval soft sets**  
MURADOĞLU Z., GÜNDÜZ Ç.  
International scientific conference «Algebraic and geometric methods of analysis», 31 Mayıs - 05 Haziran 2017
- VII. **Transmission Conditions for Plates System Composed of Elastic Plates with Differing Properties**  
MURADOĞLU Z., YAZICI V.  
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, Türkiye, 10 - 12 Mayıs 2017
- VIII. **Elasto plastic deformation of an incompressible bending plate with clamped boundary**

İLHAN F., MURADOĞLU Z.

International Congress on Fundamental and Applied Sciences 2016 (ICFAS2016), 22 - 26 Ağustos 2016, ss.69

- IX. **Obtaining Transmission Conditions For Fourth order Ordinary Differential Equations With Discontinuous Coefficients**  
YAZICI V., MURADOĞLU Z.  
8th International Conference on Image Processing, Wavelet and Applications, 22 - 24 Eylül 2016, ss.72
- X. **Determination of an unknown elastic modulus in an elastoplastic bending plate based on maximal deflection**  
İLHAN F., MURADOĞLU Z.  
8th International Conference "Inverse Problems: Modeling and Simulation", 23 - 28 Mayıs 2016
- XI. **On Elasto plastic Deformation of a Bending Plate with Simply Supported Boundary**  
İLHAN F., MURADOĞLU Z.  
International Conference on Applied Analysis and Mathematical Modelling, İstanbul, Türkiye, 8 - 12 Haziran 2015, ss.118
- XII. **Numerical Solution Of Inverse Coefficient Problem For Nonlinear Biharmonic Equation**  
MURADOĞLU Z., İLHAN F.  
The 7th International Conference "Inverse Problems: Modeling and Simulation" (IPMS-2014), Fethiye, 26 - 30 Mayıs 2014, ss.47
- XIII. **The Numerical Solution of the Problem Related to Bending of Beams System Which is Consisted of Thin Beams with Different Properties**  
YAZICI V., MURADOĞLU Z.  
International Conference on Mathematical Analysis, Differential Equations and Their Applications, Mersin, Türkiye, 4 - 09 Eylül 2012, ss.109
- XIV. **Numerical Solution to the Bending Problem for Nonhomogeneous Plate with Different Boundary Conditions**  
MURADOĞLU Z., İLHAN F.  
International Conference on Mathematical Analysis, Differential Equations and Their Applications, Mersin, Türkiye, 4 - 09 Eylül 2012, ss.78-79
- XV. **The numerical solution of an optimal control problem related to the transmission bending problem for an elastic plate**  
MURADOĞLU Z., Yazıcı V.  
5th International Conference "Inverse Problems: Modeling and Simulation", Antalya, Türkiye, 24 - 29 Mayıs 2010
- XVI. **Nonlokal Identification Problem in Nonlinear Ion Transport**  
HASANOĞLU A., MURADOĞLU Z.  
The Fourth International Conference "Inverse Problems : Modeling and Simulation", Fethiye, Türkiye, 26 - 30 Mayıs 2008, ss.64-65
- XVII. **The Mathematical Model and Numerical Solution of the Transmission Problem in a Layered Medium for the Case of Isolation**  
MURADOĞLU Z., ÖZBİLGE KAHVECİ E.  
International Conference Pioneers Of Bulgarian Mathematics, Sofija, Bulgaristan, 8 - 10 Temmuz 2006
- XVIII. **An Inversion Method for Identification of Elastoplastic Properties for Engineering Materials from Limited Spherical Indentation Measurements**  
MURADOĞLU Z., HASANOĞLU A.  
International Conference Tikhonov and Contemporary Mathematics, Moskva, Rusya, 19 - 25 Temmuz 2006
- XIX. **The Mathematical Model of Interface Problems Without Isolation and Behaviour of Numerical Solution**  
ÖZBİLGE KAHVECİ E., MURADOĞLU Z.  
International Conference on Modelling and Simulation (MS\06 Turkey), Konya, Türkiye, 28 - 30 Ağustos 2006
- XX. **State discretization step as a regularization parameter in inverse elastoplastic problems**  
Seyidmamedov Z.  
The International Conference "Inverse Problems : Modeling and Simulation, Fethiye, 7 - 12 Haziran 2004, ss.72-73

**XXI. Modeling of Come off Effects for Deformable Layers Under Indentation**

Seyidmamedov Z.

The First International Conference on Nonlinear Analysis and Nonlinear Modeling, Fethiye, 17 - 22 Temmuz 2001, ss.261-269

**XXII. Reconstruction of The Coefficient of Sturm Liouville Equation by Boundary Measurements**

Seyismamedov Z.

Int. Workshop on Nonlinear and Improperly Posed Problems, Kocaeli, Türkiye, 17 - 22 Ağustos 1998, ss.67-71

**XXIII. Malzemenin Elasto plastik Özelliklerinin Bulunması İle Bağlı Ters Problemin Sayısal Çözümü**

Seyidmamedov Z.

7. Denizli Malzeme Sempozyumu, Denizli, Türkiye, 2 - 04 Nisan 1997, ss.459-464

**XXIV. Numerical Solution of an Inverse Problem Related To Diagnostics of Materials**

Seyidmamedov Z.

Türk Matematik Derneği, VIII. Ulusal Matematik Sempozyumu, Adana, Türkiye, 21 - 23 Eylül 1995, ss.68-71

## **Desteklenen Projeler**

MURADOĞLU Z., Yükseköğretim Kurumları Destekli Proje, Elastik Levhalar Sisteminin Eğilmesi İle İlgili Lineer Olmayan Biharmonik Denklem İçin Optimal Kontrol Probleminin Sayısal Çözümü, 2011 - 2014

## **Bilimsel Hakemlikler**

JOURNAL OF INVERSE AND ILL-POSED PROBLEMS, SCI Kapsamındaki Dergi, Nisan 2023

CUMHURİYET SCIENCE JOURNAL, Hakemli Bilimsel Dergi, Nisan 2023

## **Metrikler**

Yayın: 39

Atıf (WoS): 16

Atıf (Scopus): 20

H-İndeks (WoS): 3

H-İndeks (Scopus): 3

## **Akademi Dışı Deneyim**

Kocaeli Üniversitesi

Kocaeli Üniversitesi

Kocaeli Üniversitesi

Azerbaycan Eğitim Bakanlığı

Azerbaycan Eğitim Bakanlığı

Azerbaycan Bilimler Akademisi

Azerbaycan İstatistik Bakanlığı