

## Prof. Nihal Eratlı

### Personal Information

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### Education Information

Doctorate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Katı Cisimlerin Mekaniği (YI), Turkey 1988 - 1995

Post Graduate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Katı Cisimlerin Mekaniği (YI), Turkey 1985 - 1987

Under Graduate, Anadolu Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1979 - 1983

### Foreign Languages

English

### Research Areas

Mechanics of Solid Bodies, Civil Engineering, Mechanical, Engineering and Technology

### Academic Titles / Tasks

Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 2017 - Continues

Associate Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 2006 - 2017

Assistant Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 1997 - 2006

Lecturer PhD, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 1995 - 1997

Research Assistant, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 1986 - 1995

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

- I. **Forced vibration analysis of composite-geometrically exact elliptical cone helices via mixed FEM**  
Aribas U. N. , Ermis M., Kutlu A., Eratlı N., Omurtag M. H.  
MECHANICS OF ADVANCED MATERIALS AND STRUCTURES, 2020 (Journal Indexed in SCI)
- II. **The static and dynamic analyses of warping included composite exact conical helix by mixed FEM**  
Aribas Ü. N. , Ermiş M., Eratlı N., Omurtag M. H.  
COMPOSITES PART B-ENGINEERING, vol.160, pp.285-297, 2019 (Journal Indexed in SCI)
- III. **Parametric analysis of viscoelastic hyperboloidal helical rod**  
Ermiş M., Eratlı N., Argeso H., Kutlu A., Omurtag M. H.  
ADVANCES IN STRUCTURAL ENGINEERING, vol.19, no.9, pp.1420-1434, 2016 (Journal Indexed in SCI)
- IV. **Dynamic analysis of helicoidal bars with non-circular cross-sections via mixed FEM**  
Eratlı N., Yılmaz M., Darılmaz K., Omurtag M. H.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.57, no.2, pp.221-238, 2016 (Journal Indexed in SCI)
- V. **Dynamic analysis of linear viscoelastic cylindrical and conical helicoidal rods using the mixed FEM**  
Eratlı N., Argeso H., Calim F. F. , TEMEL B., Omurtag M. H.

- JOURNAL OF SOUND AND VIBRATION, vol.333, no.16, pp.3671-3690, 2014 (Journal Indexed in SCI)
- VI. **Variational derivative for buckling loads of beams and frames**  
Eratlı N., GURSOY A.  
INTERNATIONAL APPLIED MECHANICS, vol.41, no.7, pp.825-830, 2005 (Journal Indexed in SCI)
- VII. **Free vibration analysis of Reissner plates by mixed finite element**  
Eratlı N., AKOZ A.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.13, no.3, pp.277-298, 2002 (Journal Indexed in SCI)
- VIII. **Mixed finite element formulation for folded plates**  
Eratlı N., AKOZ A.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.13, no.2, pp.155-170, 2002 (Journal Indexed in SCI)
- IX. **A sectorial element based on Reissner plate theory**  
AKOZ A., Eratlı N.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.9, no.6, pp.519-540, 2000 (Journal Indexed in SCI)
- X. **The mixed finite element formulation for the thick plates on elastic foundations**  
Eratlı N., AKOZ A.  
COMPUTERS & STRUCTURES, vol.65, no.4, pp.515-529, 1997 (Journal Indexed in SCI)
- XI. **The New Functional for Reissner Plates and its Application**  
AKOZ A., Eratlı N.  
COMPUTERS, no.44, pp.1139-1144, 1992 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Elastically Damped Transient Response of Axially FG Straight Beams**  
ARIBAŞ Ü. N. , ERMİŞ M., KUTLU A., ERATLI N., OMURTAG M. H.  
International Journal of Theoretical and Applied Mechanics, vol.4, pp.19-25, 2019 (Refereed Journals of Other Institutions)
- II. **THE DYNAMIC ANALYSIS OF A LINEAR VISCOELASTIC PLANAR ELLIPTICAL BEAM**  
Ermış M., Kutlu A., Eratlı N., Omurtag M. H.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.9, no.2, pp.157-168, 2018 (Journal Indexed in ESCI)
- III. **Forced Vibration Analysis of Warping Considered Curved Composite Beams Resting on Viscoelastic Foundation**  
ARIBAŞ Ü. N. , ERMİŞ M., KUTLU A., ERATLI N., OMURTAG M. H.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.31, no.4, pp.1093-1105, 2018 (Journal Indexed in ESCI)
- IV. **Dynamic behavior of the viscoelastic noncylindrical helices with a mixed finite element method**  
Eratlı N., Kutlu A.  
Int. J. of Structural Analysis and Design-IJSAD, vol.2, no.1, pp.110-113, 2015 (Refereed Journals of Other Institutions)
- V. **FREE VIBRATION ANALYSIS OF HELICOIDAL BARS WITH THIN-WALLED CIRCULAR TUBE CROSS-SECTION VIA MIXED FINITE ELEMENT METHOD**  
Eratlı N., Ermış M., Omurtag M. H.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.33, no.2, pp.200-218, 2015 (Journal Indexed in ESCI)
- VI. **Free vibration analysis of circular, annular and annular sectorial plates**  
Eratlı N.  
ARI Bulletin of the Technical University of Istanbul, An Interdisciplinary Journal of Physical and Engineering Sciences, vol.53, no.1, pp.29-43, 2003 (National Refereed University Journal)
- VII. **Reissner plak teorisi için sonlu eleman formülasyonu**  
AKÖZ A. Y. , Eratlı N.  
TEKNIK DERGI, vol.12, no.3, pp.2465-2486, 2001 (Other Refereed National Journals)

## Supported Projects

Eratlı N., Arıbaş Ü. N. , Omurtag M. H. , Ermiş M., Project Supported by Higher Education Institutions, Ortotrop üç parametrelili Pasternak zemine oturan iki ve üç boyutlu tabakalı kompozit çubukların zorlanmış titreşim analizi, 2017 - 2019

Eratlı N., Project Supported by Higher Education Institutions, Silindirik Olmayan Viskoelastik Helislerin Sonlu Eleman Yöntemiyle Dinamik Analizi, 2014 - 2018

Eratlı N., Project Supported by Higher Education Institutions, Eksen Geometrisi Silindirik ve Silindirik Olmayan Viskoelastik Helislerin Sonlu Elemanlarla Dinamik Analizi, 2012 - 2014

Eratlı N., Omurtag M. H. , TUBITAK Project, Değişken Kesitli ve eksenel geometrisi Silindirik Olmayan Visko Elastik Helislerin Karışık Sonlu Eleman Metodu İle Analiz, 2011 - 2014

## Scientific Research / Working Group Memberships

Hesaplamalı Mekanik (Computational Mechanics), İSTANBUL TEKNİK ÜNİVERSİTESİ, Turkey,  
<https://calismagruplari.itu.edu.tr/>, 2015 - Continues

## Citations

Total Citations (WOS):93

h-index (WOS):5