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Research Areas

Differential Equations, Partial Differential Equations, Numerical Analysis, Approximations and Expansions

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Institute of Applied Mathematics, 2020 - Continues

Professional Experience

Assistant Director of the Institute, Middle East Technical University, Institute of Applied Mathematics, 2020 - Continues

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

- I. **A DRBEM approximation of the Steklov eigenvalue problem**
TÜRK Ö.
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.122, pp.232-241, 2021 (Journal Indexed in SCI)
- II. **An MHD Stokes eigenvalue problem and its approximation by a spectral collocation method**
Türk Ö.
Computers and Mathematics with Applications, vol.80, pp.2045-2056, 2020 (Journal Indexed in SCI)
- III. **Approximation of the Stokes eigenvalue problem on triangular domains using a stabilized finite element method**
Türk Ö.
MECCANICA, vol.55, pp.2021-2031, 2020 (Journal Indexed in SCI)
- IV. **Chebyshev spectral collocation method approximations of the Stokes eigenvalue problem based on penalty techniques**
Turk Ö., Codina R.
APPLIED NUMERICAL MATHEMATICS, vol.145, pp.188-200, 2019 (Journal Indexed in SCI)
- V. **A stabilized finite element method for the two-field and three-field Stokes eigenvalue problems**
Turk Ö., Boffi D., Codina R.
COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING, vol.310, pp.886-905, 2016 (Journal Indexed in SCI)
- VI. **A FEM approach to biomagnetic fluid flow in multiple stenosed channels**
Turk Ö., Bozkaya C., Tezer M.
COMPUTERS & FLUIDS, vol.97, pp.40-51, 2014 (Journal Indexed in SCI)
- VII. **Finite element study of biomagnetic fluid flow in a symmetrically stenosed channel**
Turk Ö., Tezer M., Bozkaya C.

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.259, pp.760-770, 2014 (Journal Indexed in SCI)

VIII. **BEM and FEM based numerical simulations for biomagnetic fluid flow**

Tezer M., Bozkaya C., Turk Ö.

ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.37, no.9, pp.1127-1135, 2013 (Journal Indexed in SCI)

IX. **Chebyshev Spectral Collocation Method for Unsteady Mhd Flow and Heat Transfer of a Dusty Fluid Between Parallel Plates**

Turk Ö., Tezer-Sezgin M.

NUMERICAL HEAT TRANSFER PART A-APPLICATIONS, vol.64, no.7, pp.597-610, 2013 (Journal Indexed in SCI)

X. **FEM solution of natural convection flow in square enclosures under magnetic field**

Turk Ö., Tezer-Sezgin M.

INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW, vol.23, no.5, pp.844-866, 2013 (Journal Indexed in SCI)

Articles Published in Other Journals

I. **Chebyshev Spectral Collocation Method Approximation to Thermally Coupled MHD Equations**

TÜRK Ö.

Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.22, pp.355-366, 2018 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

I. **Boundary Perturbations in Laplace and Steklov Eigenproblems**

Bahadır E., TÜRK Ö.

3rd International E-Conference on Mathematical Advances and Applications, İstanbul, Turkey, 24 - 27 June 2020, pp.76

II. **Modal analysis of elastic vibrations of incompressible materials based on a variational multiscale finite element method**

Codina R., TÜRK Ö.

European Numerical Mathematics and Advanced Applications Conference 2019, Egmond aan Zee, Netherlands, 30 September - 04 October 2019

III. **A CSCM approximation of steady MHD flow and heat transfer between parallel plates with hydrodynamic slip and convective boundary conditions**

TEZER M., TÜRK Ö.

European Numerical Mathematics and Advanced Applications Conference 2019, Egmond aan Zee, Netherlands, 30 September - 04 October 2019

IV. **Numerical approximation of the Stokes eigenvalue problem in cubic domain based on penalty technique**

Codina R., TÜRK Ö.

The International Congress of Mathematicians, Rio de Janeiro, Brazil, 1 - 09 August 2018, pp.91-92

V. **Chebyshev spectral collocation method approximations of the Stokes eigenvalue problem based on penalty techniques**

TÜRK Ö., Codina R.

European Conference on Numerical Mathematics and Advanced Applications (ENUMATH) 2017, Voss, Norway, 25 - 29 September 2017, pp.322

VI. **A stabilized finite element method for the two-field and three-field Stokes eigenvalue problems**

Boffi D., Codina R., TÜRK Ö.

Computational Methods in Applied Mathematics (CMAM-7), Jyväskylä, Finland, 31 July - 06 August 2016, pp.65

VII. **A finite element formulation for Maxwell eigenvalue problem using continuous Lagrangian**

interpolations

TÜRK Ö., Codina R., Boffi D.

THE MATHEMATICS OF FINITE ELEMENTS AND APPLICATIONS 2016, Londrina, Brazil, 14 - 17 July 2016, pp.266

VIII. A DRBEM Approach for the STOKES Eigenvalue Problem

TEZER M., TÜRK Ö.

Inter. Conf. on Computational and Mathematical Methods in Science and Engineering, CMMSE 2016, Rota-Cadiz, Spain, 4 - 08 July 2016, pp.1210-1219

IX. Chebyshev Spectral Collocation Method for Natural Convection Flow of a Micropolar Nanofluid in the Presence of a Magnetic Field

Türk Ö.

European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), Ankara, Turkey, 14 - 18 September 2015, vol.112, pp.453-461

X. Natural Convection Flow of a nanofluid in an Enclosure under a uniform magnetic field

TEZER M., BOZKAYA C., TÜRK Ö.

Advances in Boundary Element & and Meshless Techniques XVI, Valencia, Spain, 6 - 08 July 2015, vol.16, pp.138-143

XI. Biomagnetic fluid flow in a channel under the effect of a uniform localized magnetic field

TÜRK Ö., BOZKAYA C., TEZER M.

Advances in Boundary Element and Meshless Techniques XV, Italy, 15 - 17 July 2014, pp.81-86

XII. Biofluidflow in a channel with stenosis

TÜRK Ö., TEZER M., BOZKAYA C.

International Conference on Applied and Computational Mathematics, Ankara, Turkey, 3 - 06 October 2012, pp.87-88

XIII. FEM solution to unsteady biomagnetic fluid flow in a channel

TEZER M., TÜRK Ö., BOZKAYA C.

Mathematical Modeling and Computational Topics in Biosciences, Vietri sul Mare, Italy, 4 - 08 June 2012, pp.163-164

XIV. FEM Solution of Diffusion-Convection-Reaction Equations in Air Pollution

TÜRK Ö., TEZER M.

European Conference on Numerical Mathematics and Advanced Applications, ENUMATH 2009, Uppsala, Sweden, 29 June - 03 July 2009, pp.275

Supported Projects

TEZER M., TÜRK Ö., Project Supported by Higher Education Institutions, İçinde Parçacıklar Bulunduran Sıvıların Zamana Bağımlı Magnetohidrodinamik Akışı Ve Isı Transferi, 2011 - 2011

TEZER M., TÜRK Ö., Project Supported by Higher Education Institutions, Numerical Solution Of Liquid Metal Magnetohydrodynamics(mhd) Flow With Heat Transfer., 2010 - 2010

Tasks In Event Organizations

Bozkaya C., Küçüksakallı Ö., Türk Ö., Numerical Analysis and Computational Fluid Dynamics: Workshop in Honor of MÜNEVVER TEZER-SEZGİN's 67th Birthday, Workshop Organization, Ankara, Turkey, Nisan 2019

Citations

Total Citations (WOS):42

h-index (WOS):5