

# Prof. MÜNEVVER TEZER

## Personal Information

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**Post Address:** Department of Mathematics Middle East Technical University, 06800, Ankara, TURKEY

## Education Information

Doctorate, The University of Calgary, Department Of Mathematics And Statistics, Canada 1978 - 1983

Post Graduate, University of Saskatchewan, Department Of Mathematics, Canada 1976 - 1978

Post Graduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, Turkey 1974 - 1976

Under Graduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, Turkey 1970 - 1974

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Some Mixed Boundary Value Problems in Magnetohydrodynamics, The University of Calgary, Department Of Mathematics And Statistics, 1983

Post Graduate, The Numerical Solution of the Navier-Stokes Equations using FEM, University of Saskatchewan, Department Of Mathematics, 1978

Post Graduate, Finite Element Formulation and Programming Aspects of Navier-Stokes Equations, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1976

## Research Areas

Mathematics, Numerical Analysis, Natural Sciences

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Mathematics, 2018 - Continues

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1993 - 2018

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1987 - 1993

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1984 - 1987

Lecturer PhD, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1983 - 1984

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 1975 - 1976

## Advising Theses

- Tezer M., Finite difference method solution of magnetohydrodynamic flow in channels with electrically conducting and slipping walls, Post Graduate, S.ARSLAN(Student), 2018
- TEZER M., Radial basis function and dual reciprocity boundary element solutions of fluid dynamics problems, Doctorate, M.GÜRBÜZ(Student), 2017
- TEZER M., Numerical solutions of boundary value problems; applications in ferrohydrodynamics and magnetohydrodynamics, Doctorate, P.ŞENEL(Student), 2017
- TEZER M., DRBEM applications in fluid dynamics problems and DQM solutions of hyperbolic equations, Doctorate, B.PEKMEN(Student), 2014
- TEZER M., FEM solutions of magnetohydrodynamic and biomagnetic fluid flows in channels, Doctorate, Ö.TÜRK(Student), 2014
- TEZER M., The dual reciprocity boundary element solution of Helmholtz-type equations in fluid dynamics, Doctorate, N.ALSOY(Student), 2013
- TEZER M., Application of the boundary element method to parabolic type equations, Doctorate, N.BOZKAYA(Student), 2010
- TEZER M., The dual reciprocity boundary element method solution of fluid flow problems, Doctorate, S.GÜMGÜM(Student), 2010
- TEZER M., Numerical solution of nonlinear reaction-diffusion and wave equations, Doctorate, G.MERAL(Student), 2009
- TEZER M., The finite element method over a simple stabilizing grid applied to fluid flow problems, Doctorate, S.HAN(Student), 2008
- TEZER M., Boundary element method solution of initial and boundary value problems in fluid dynamics and magnetohydrodynamics, Doctorate, C.BOZKAYA(Student), 2008
- TEZER M., The finite element method solution of reaction-diffusion-advection equations in air pollution, Post Graduate, Ö.TÜRK(Student), 2008
- TEZER M., A boundary element formulation for axi-symmetric problems in poro-elasticity, Doctorate, M.HAMİT(Student), 2006
- TEZER M., Solution of helmholtz-type equations by differential quadrature method, Post Graduate, G.KURUŞ(Student), 2004
- TEZER M., Dual reciprocity boundary element method for time-dependent diffusion equation, Post Graduate, S.GÜMGÜM(Student), 2003
- TEZER M., Differential quadrature method for time-dependent diffusion equation, Post Graduate, M.AKMAN(Student), 2003
- TEZER M., Numerical methods for solving two-point boundary value problems, Post Graduate, M.KHADRA(Student), 2002
- TEZER M., Boundary element solution of magnetohydrodynamic flow, Post Graduate, C.ERDÖNMEZ(Student), 2001
- TEZER M., Evaluation of infinite integrals involving bessel functions of arbitrary order, Post Graduate, Y.ASU(Student), 2000
- TEZER M., A Two-step jacobi-type iterative method for solving linear systems, Post Graduate, F.ERDAL(Student), 2000
- TEZER M., Dual reciprocity boundary element method for Poisson's equations using osculatory radial basis functions, Post Graduate, S.HAN(Student), 2000
- TEZER M., New fast algorithms for polynomial interpolation and evaluation on the chebyshev node set, Post Graduate, A.DELİCEOĞLU(Student), 2000
- TEZER M., Correlation attack on stream ciphers, Post Graduate, F.BİRİNCİ(Student), 1998
- TEZER M., Finite elementsolution of navier-stokes equations in terms of velocity and pressure, Post Graduate, Y.ŞAHİNER(Student), 1994
- TEZER M., Finite element solution of Navier-stokes equations in terms of velocity and vorticity, Post Graduate, R.SEYEDİ(Student), 1993
- TEZER M., Numerical solutions for the navier-stokes equations in primitive variables using finite-difference method, Post Graduate, R.OMARİ(Student), 1990
- TEZER M., Finite element penalty solution of the stokes equations, Post Graduate, R.EİD(Student), 1988
- TEZER M., Finite element solution of magnetohydrodynamic flow equations, Post Graduate, S.KÖKSAL(Student), 1987
- TEZER M., A Penalty finite element method for the solution of navier stokes equations, Post Graduate, T.OMAR(Student), 1987

## Jury Memberships

Doctorate, Doctorate, Muğla Sıtkı Koçman Üniversitesi, June, 2018

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

- **Exact and FDM solutions of 1D MHD flow between parallel electrically conducting and slipping plates**  
ARSLAN S., Tezer-Sezgin M.  
ADVANCES IN COMPUTATIONAL MATHEMATICS, vol.45, pp.1923-1938, 2019 (Journal Indexed in SCI)
- **Stabilizing subgrid FEM solution of the natural convection flow under high magnitude magnetic field on sinusoidal corrugated enclosure**  
AYDIN S. H. , Tezer-Sezgin M.  
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.97, pp.420-430, 2019 (Journal Indexed in SCI)
- **Semi-analytical solution of MHD flow through boundary integrals on the pipe wall**  
Tezer-Sezgin M., Bozkaya C.  
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.42, pp.2404-2416, 2019 (Journal Indexed in SCI)
- **MHD flow in a rectangular duct with a perturbed boundary**  
Fendoglu H., Bozkaya C., Tezer-Sezgin M.  
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.77, pp.374-388, 2019 (Journal Indexed in SCI)
- **NUMERICAL STABILITY OF RBF APPROXIMATION FOR UNSTEADY MHD FLOW EQUATIONS**  
Gurbuz M., Tezer-Sezgin M.  
APPLIED AND COMPUTATIONAL MATHEMATICS, vol.18, pp.123-134, 2019 (Journal Indexed in SCI)
- **Determining the optimal parameters for the MHD flow and heat transfer with variable viscosity and Hall effect**  
EVCİN C., UĞUR Ö., Tezer-Sezgin M.  
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.76, pp.1338-1355, 2018 (Journal Indexed in SCI)
- **DBEM and DRBEM solutions to 2D transient convection-diffusion-reaction type equations**  
Fendoglu H., BOZKAYA C., Tezer-Sezgin M.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.93, pp.124-134, 2018 (Journal Indexed in SCI)
- **DRBEM solution of the Cauchy MHD duct flow with a slipping perturbed boundary**  
Aydin C., Tezer-Sezgin M.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.93, pp.94-104, 2018 (Journal Indexed in SCI)
- **MHD Stokes flow and heat transfer in a lid-driven square cavity under horizontal magnetic field**  
Gurbuz M., Tezer-Sezgin M.  
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.41, pp.2350-2359, 2018 (Journal Indexed in SCI)
- **MHD convection flow in a constricted channel**  
TEZER M., Gurbuz M.  
ANALELE STIINTIFICE ALE UNIVERSITATII OVIDIUS CONSTANTA-SERIA MATEMATICA, vol.26, pp.267-283, 2018 (Journal Indexed in SCI)
- **Convective Flow of Blood in Square and Circular Cavities**  
Senel P., TEZER M.  
ANALELE STIINTIFICE ALE UNIVERSITATII OVIDIUS CONSTANTA-SERIA MATEMATICA, vol.26, pp.209-230, 2018 (Journal Indexed in SCI)
- **Pipe flow of a magnetizable fluid in rectangular cavities under magnetic sources**  
Senel P., TEZER M.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.83, pp.55-66, 2017 (Journal Indexed in SCI)
- **DRBEM solution of biomagnetic fluid flow and heat transfer in cavities-CMMSE2016**  
Senel P., TEZER M.  
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.55, pp.1407-1426, 2017 (Journal Indexed in SCI)
- **FEM solution to natural convection flow of a micropolar nanofluid in the presence of a magnetic field**  
TÜRK Ö., Tezer-Sezgin M.

MECCANICA, vol.52, pp.889-901, 2017 (Journal Indexed in SCI)

- **DRBEM solutions of Stokes and Navier-Stokes equations in cavities under point source magnetic field**  
Senel P., TEZER M.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.64, pp.158-175, 2016 (Journal Indexed in SCI)
- **DRBEM solution of natural convective heat transfer with a non-Darcy model in a porous medium**  
Pekmen B., TEZER M.  
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.53, pp.911-924, 2015 (Journal Indexed in SCI)
- **DRBEM Solution of MHD Flow with Magnetic Induction and Heat Transfer**  
Pekmen B., Tezer-Sezgin M.  
CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES, vol.105, pp.183-207, 2015 (Journal Indexed in SCI)
- **Free-Space Fundamental Solution of a 2D Steady Slow Viscous MHD Flow**  
Sellier A., AYDIN S. H. , Tezer-Sezgin M.  
CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES, vol.102, pp.393-406, 2014 (Journal Indexed in SCI)
- **A FEM approach to biomagnetic fluid flow in multiple stenosed channels**  
Turk O., Bozkaya C., Tezer M.  
COMPUTERS & FLUIDS, vol.97, pp.40-51, 2014 (Journal Indexed in SCI)
- **Numerical solution of buoyancy MHD flow with magnetic potential**  
Pekmen B., TEZER M.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.71, pp.172-182, 2014 (Journal Indexed in SCI)
- **Finite element study of biomagnetic fluid flow in a symmetrically stenosed channel**  
Turk O., Tezer M., Bozkaya C.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.259, pp.760-770, 2014 (Journal Indexed in SCI)
- **A DRBEM solution for MHD pipe flow in a conducting medium**  
AYDIN S. H. , TEZER M.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.259, pp.720-729, 2014 (Journal Indexed in SCI)
- **DRBEM solution of mixed convection flow of nanofluids in enclosures with moving walls**  
Gumgum S., TEZER M.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.259, pp.730-740, 2014 (Journal Indexed in SCI)
- **MHD flow and heat transfer in a lid-driven porous enclosure**  
Pekmen B., TEZER M.  
COMPUTERS & FLUIDS, vol.89, pp.191-199, 2014 (Journal Indexed in SCI)
- **DRBEM Solution of Incompressible MHD Flow with Magnetic Potential**  
Pekmen B., Tezer-Sezgin M.  
CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES, vol.96, pp.275-292, 2013 (Journal Indexed in SCI)
- **BEM and FEM based numerical simulations for biomagnetic fluid flow**  
Tezer M., Bozkaya C., Turk O.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.37, pp.1127-1135, 2013 (Journal Indexed in SCI)
- **Chebyshev Spectral Collocation Method for Unsteady Mhd Flow and Heat Transfer of a Dusty Fluid Between Parallel Plates**  
Turk O., Tezer-Sezgin M.  
NUMERICAL HEAT TRANSFER PART A-APPLICATIONS, vol.64, pp.597-610, 2013 (Journal Indexed in SCI)
- **BEM solution of MHD flow in a pipe coupled with magnetic induction of exterior region**  
TEZER M., AYDIN S. H.  
COMPUTING, vol.95, 2013 (Journal Indexed in SCI)
- **DRBEM solution of the thermo-solutal buoyancy induced mixed convection flow problems**  
Alsoy-Akgun N., TEZER M.

- ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.37, pp.513-526, 2013 (Journal Indexed in SCI)
- **DRBEM solution of free convection in porous enclosures under the effect of a magnetic field**  
Pekmen B., TEZER M.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.56, pp.454-468, 2013 (Journal Indexed in SCI)
  - **FEM solution of natural convection flow in square enclosures under magnetic field**  
Turk O., Tezer-Sezgin M.  
INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW, vol.23, pp.844-866, 2013 (Journal Indexed in SCI)
  - **DRBEM and DQM solutions of natural convection flow in a cavity under a magnetic field**  
Alsoy-Akgun N., TEZER M.  
PROGRESS IN COMPUTATIONAL FLUID DYNAMICS, vol.13, pp.270-284, 2013 (Journal Indexed in SCI)
  - **BEM solution to magnetohydrodynamic flow in a semi-infinite duct**  
BOZKAYA C., Tezer-Sezgin M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.70, pp.300-312, 2012 (Journal Indexed in SCI)
  - **A direct BEM solution to MHD flow in electrodynamically coupled rectangular channels**  
BOZKAYA C., TEZER M.  
COMPUTERS & FLUIDS, vol.66, pp.177-182, 2012 (Journal Indexed in SCI)
  - **Differential quadrature solution of nonlinear Klein-Gordon and sine-Gordon equations**  
Pekmen B., TEZER M.  
COMPUTER PHYSICS COMMUNICATIONS, vol.183, pp.1702-1713, 2012 (Journal Indexed in SCI)
  - **A numerical solution of the steady MHD flow through infinite strips with BEM**  
BOZKAYA C., TEZER M.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.36, pp.591-599, 2012 (Journal Indexed in SCI)
  - **Differential Quadrature Solution of Hyperbolic Telegraph Equation**  
Pekmen B., Tezer-Sezgin M.  
JOURNAL OF APPLIED MATHEMATICS, 2012 (Journal Indexed in SCI)
  - **The DRBEM solution of incompressible MHD flow equations**  
Bozkaya N., TEZER M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.67, pp.1264-1282, 2011 (Journal Indexed in SCI)
  - **The comparison between the DRBEM and DQM solution of nonlinear reaction-diffusion equation**  
MERAL G., TEZER M.  
COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION, vol.16, pp.3990-4005, 2011 (Journal Indexed in SCI)
  - **The differential quadrature solution of nonlinear reaction-diffusion and wave equations using several time-integration schemes**  
Meral G., TEZER M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, vol.27, pp.485-497, 2011 (Journal Indexed in SCI)
  - **DRBEM solution of natural convection flow of nanofluids with a heat source**  
Gumgum S., Tezer-Sezgin M.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.34, pp.727-737, 2010 (Journal Indexed in SCI)
  - **DRBEM solution of exterior nonlinear wave problem using FDM and LSM time integrations**  
Meral G., Tezer-Sezgin M.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.34, pp.574-580, 2010 (Journal Indexed in SCI)
  - **Two-level finite element method with a stabilizing subgrid for the incompressible MHD equations**  
AYDIN BAYRAM S., Nesliturk A. I. , Tezer-Sezgin M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.62, pp.188-210, 2010 (Journal Indexed in SCI)
  - **DRBEM SOLUTION OF THE NATURAL CONVECTIVE FLOW OF MICROPOLAR FLUIDS**  
Gumgum S., TEZER M.

NUMERICAL HEAT TRANSFER PART A-APPLICATIONS, vol.57, pp.777-798, 2010 (Journal Indexed in SCI)

- **The boundary element solution of the magnetohydrodynamic flow in an infinite region**  
TEZER M., BOZKAYA C.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.225, pp.510-521, 2009 (Journal Indexed in SCI)
- **Solution to transient Navier-Stokes equations by the coupling of differential quadrature time integration scheme with dual reciprocity boundary element method**  
BOZKAYA C., TEZER M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.59, pp.215-234, 2009 (Journal Indexed in SCI)
- **Differential quadrature solution of nonlinear reaction-diffusion equation with relaxation-type time integration**  
Meral G., TEZER M.  
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.86, pp.451-463, 2009 (Journal Indexed in SCI)
- **Two-level finite element method with a stabilizing subgrid for the incompressible Navier-Stokes equations**  
NESLİTÜRK A. İ. , AYDIN BAYRAM S., Tezer-Sezgin M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.58, pp.551-572, 2008 (Journal Indexed in SCI)
- **Time-domain BEM solution of convection-diffusion-type MHD equations**  
Bozkaya N., Tezer-Sezgin M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.56, pp.1969-1991, 2008 (Journal Indexed in SCI)
- **Boundary element method solution of magnetohydrodynamic flow in a rectangular duct with conducting walls parallel to applied magnetic field**  
Tezer-Sezgin M., BOZKAYA C.  
COMPUTATIONAL MECHANICS, vol.41, pp.769-775, 2008 (Journal Indexed in SCI)
- **Fundamental solution for coupled magnetohydrodynamic flow equations**  
Bozkaya C., Tezer-Sezgin M.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.203, pp.125-144, 2007 (Journal Indexed in SCI)
- **Finite element method solution of electrically driven magnetohydrodynamic flow**  
Nesliturk A., Tezer-Sezgin M.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.192, pp.339-352, 2006 (Journal Indexed in SCI)
- **Boundary element solution of unsteady magnetohydrodynamic duct flow with differential quadrature time integration scheme**  
Bozkaya C., Tezer-Sezgin M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.51, pp.567-584, 2006 (Journal Indexed in SCI)
- **Solution of magnetohydrodynamic flow problems using the boundary element method**  
Tezer-Sugin M., Aydin S. H.  
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.30, pp.411-418, 2006 (Journal Indexed in SCI)
- **The finite element method for MHD flow at high Hartmann numbers**  
Nesliturk A., Tezer-Sezain M.  
COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING, vol.194, pp.1201-1224, 2005 (Journal Indexed in SCI)
- **Solution of magnetohydrodynamic flow in a rectangular duct by differential quadrature method**  
Tezer-Sezgin M.  
COMPUTERS & FLUIDS, vol.33, pp.533-547, 2004 (Journal Indexed in SCI)
- **Dual reciprocity boundary element method for magnetohydrodynamic flow using radial basis functions**  
Tezer-Sezgin M., Aydin S.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL FLUID DYNAMICS, vol.16, pp.49-63, 2002 (Journal Indexed

in SCI)

- **BOUNDARY-ELEMENT METHOD SOLUTION OF MHD FLOW IN A RECTANGULAR DUCT**  
TEZERSEZGIN M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.18, pp.937-952, 1994 (Journal Indexed in SCI)
- **ON THE NUMERICAL EVALUATION OF AN OSCILLATING INFINITE SERIES-III**  
SEZGIN M.  
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.35, pp.175-183, 1990 (Journal Indexed in SCI)
- **ON THE NUMERICAL EVALUATION OF AN OSCILLATING INFINITE SERIES .2.**  
SEZGIN M.  
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.33, pp.263-270, 1990 (Journal Indexed in SCI)
- **FINITE-ELEMENT METHOD FOR SOLVING MHD FLOW IN A RECTANGULAR DUCT**  
TEZERSEZGIN M., KOKSAL S.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING, vol.28, pp.445-459, 1989 (Journal Indexed in SCI)
- **SOME INFINITE INTEGRALS INVOLVING PRODUCTS OF EXPONENTIAL AND BESSEL-FUNCTIONS**  
TEZER M.  
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.28, pp.207-217, 1989 (Journal Indexed in SCI)
- **MAGNETOHYDRODYNAMIC FLOW ON A HALF-PLANE**  
SEZGIN M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.8, pp.743-758, 1988 (Journal Indexed in SCI)
- **MAGNETOHYDRODYNAMIC FLOW IN ELECTRODYNAMICALLY COUPLED RECTANGULAR DUCTS**  
SEZGIN M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.8, pp.705-722, 1988 (Journal Indexed in SCI)
- **SIMULATION OF MHD POWER GENERATOR FLOW USING A SUPERCOMPUTER**  
ARIEL P., AGGARWALA B., SEZGIN M.  
ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK, vol.68, pp.503-511, 1988 (Journal Indexed in SCI)
- **ELECTRICALLY DRIVEN FLOWS IN MHD WITH MIXED ELECTROMAGNETIC BOUNDARY-CONDITIONS**  
SEZGIN M., AGGARWALA B., ARIEL P.  
ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK, vol.68, pp.267-280, 1988 (Journal Indexed in SCI)
- **MAGNETOHYDRODYNAMIC FLOW IN A RECTANGULAR DUCT**  
SEZGIN M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.7, pp.697-718, 1987 (Journal Indexed in SCI)
- **MAGNETOHYDRODYNAMIC FLOW IN AN INFINITE CHANNEL**  
SEZGIN M.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.6, pp.593-609, 1986 (Journal Indexed in SCI)

## Articles Published in Other Journals

- **Numerical Solution and Stability Analysis of Transient MHD Duct Flow**  
Tezer M., Gürbüz M.  
Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.20, no.3, pp.53-61, 2018 (National Refreed University Journal)
- **International conference on boundary element and meshless techniques XVII**  
TEZER M., KARASÖZEN B.  
EUROPEAN JOURNAL OF COMPUTATIONAL MECHANICS, vol.26, pp.351-352, 2017 (Journal Indexed in ESCI)
- **Magnetohydrodynamic pipe flow in annular-like domains**

BOZKAYA C., Tezer-Sezgin M.

EUROPEAN JOURNAL OF COMPUTATIONAL MECHANICS, vol.26, pp.394-410, 2017 (Journal Indexed in ESCI)

- **Natural convection flow of a nanofluid in an enclosure under an inclined uniform magnetic field**

TEZER M., BOZKAYA C., TÜRK Ö.

EUROPEAN JOURNAL OF COMPUTATIONAL MECHANICS, vol.25, pp.2-23, 2016 (Journal Indexed in ESCI)

- **MHD Stokes flow in lid-driven cavity and backward-facing step channel**

Gurbuz M., TEZER M.

EUROPEAN JOURNAL OF COMPUTATIONAL MECHANICS, vol.24, pp.279-301, 2015 (Journal Indexed in ESCI)

## Book & Book Chapters

- **Numerical Analysis**

Tezer M., Bozkaya C.

ODTÜ Basım İşliđi, Ankara, 2018

## Refereed Congress / Symposium Publications in Proceedings

- **Parameter Identification in MHD Duct Flow Cauchy Problem using the DRBEM**

Tezer-Sezgin M., Aydin C.

7th International Conference on Mathematical Modeling in Physical Sciences, IC-MSQUARE 2018, Moscow, Russia, 27 - 31 August 2018, vol.1141

- **MHD flow in a circular pipe with arbitrarily conducting slipping walls**

Senel P., Tezer-Sezgin M.

7th International Conference on Mathematical Modeling in Physical Sciences, IC-MSQUARE 2018, Moscow, Russia, 27 - 31 August 2018, vol.1141

- **The Application of BEM to MHD Flow and Heat Transfer in a Rectangular Duct with Temperature Dependent Viscosity**

Ebren Kaya E., Tezer M.

International Conference on Boundary Element and Meshless Techniques, Malaga, Spain, 9 - 11 July 2018, pp.83-89

- **The DRBEM slution of the Cauchy MHD Flow in a duct with one of the walls is slipping and variably conducting**

Aydin C., Tezer M.

International Conference on Applied Mathematics in Engineering ICAME-2018, Balıkesir, Turkey, 27 - 29 June 2018, pp.38

- **Numerical Modelling of MHD Convection Flow in Cavities**

Gürbüz M., Tezer M.

International Conference on Applied Mathematics in Engineering ICAME-2018, Balıkesir, Turkey, 27 - 29 June 2018, pp.34

- **Stability of Unsteady MHD Flow in a Rectangular Duct**

Tezer M., Gürbüz M.

International Conference on Applied Mathematics in Engineering ICAME-2018, Balıkesir, Turkey, 27 - 29 June 2018, pp.35

- **MHD flow in a rectangular duct with a perturbed boundary**

Fendođlu H., Bozkaya C., Tezer M.

Symposium of the International Association for Boundary Element Methods- IABEM 2018, Paris, France, 26 - 28 June 2018, pp.44

- **Solution of MHD Flow with BEM using Direct Radial Basis Function Interpolation**

Gürbüz M., Tezer M.

20th European Conference on Mathematics for Industry (ECMI-2018), Budapest, Hungary, 18 - 22 June 2018, pp.370

- **Solution of MHD Flow in an Array of Electromagnetically Coupled Rectangular Ducts**



Tezer M., Senel P.

20th European Conference on Mathematics for Industry (ECMI-2018), Budapest, Hungary, 18 - 22 June 2018, pp.369

- **DRBEM Solution to MHD Flow in Ducts with Thin Slipping side Walls and Seperated by Conducting Thick walls**

Senel P., Tezer M.

6th European Seminar on Computing-ESCO 2018, Plzen, Czech Republic, 3 - 08 June 2018, pp.153

- **Optimal Control for the MHD Fow and Heat Transfer with Variable Viscosity in a Square Duct**

Evcin C., Uğur Ö., Tezer M.

6th European Seminar on Computing-ESCO 2018, Plzen, Czech Republic, 3 - 08 June 2018, pp.9

- **Finite Difference Solution of 1D Magnetohydrodynamic Channel Flow with Slipping Walls**

Arslan S., Tezer M.

6th European Seminar on Computing-ESCO 2018, Plzen, Czech Republic, 3 - 08 June 2018, pp.9

- **The stabilized FEM solution of the MHD flow in a rectangular duct with perturbed boundary**

Tezer M., Aydın S. H.

3rd international conference on computational mathematics and engineering sciences (CMES 2018), Girne, Cyprus (Kktc), 4 - 06 May 2018, pp.269

- **DRBEM Solution of the Double Diffusive Convective Flow**

BOZKAYA C., TEZER M.

European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), Ankara, Turkey, 14 - 18 September 2015, vol.112, pp.13-21

- **DRBEM Solution of MHD Flow and Electric Potential in a Rectangular Pipe with a Moving Lid**

TEZER M., BOZKAYA C.

European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), Ankara, Turkey, 14 - 18 September 2015, vol.112, pp.3-11

- **DRBEM Solution for Unsteady Natural Convection Flow in Primitive Variables with Fractional Step Time Advancement**

Sariaydin A., Tezer-Sezgin M.

9th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences, Vienna, Austria, 10 - 14 July 2012, vol.1493, pp.871-877

- **Solution of Navier-Stokes Equations Using FEM with Stabilizing Subgrid**

TEZER M., AYDIN BAYRAM S., NESLİTÜRK A. İ.

8th European Conference on Numerical Mathematics and Advanced Applications (ENUMATH 2009), Uppsala, Sweden, 29 June - 03 July 2009, pp.875-882

- **Numerical solution of magnetohydrodynamic flow problems using the boundary element method**

Tezer-Sezgin M., Aydın S.

27th World Conference on Boundary Elements and Other Mesh Reduction Methods, Florida, United States Of America, 15 - 18 March 2005, vol.39, pp.453-461

## Supported Projects

BOZKAYA C., TEZER M., FENDOĞLU H., Project Supported by Higher Education Institutions, Zamana bağlı magnetohidrodinamik akış probleminin pertürbe edilmiş sınıra sahip dikdörtgen kanal kesitinde sınır elemanları metodu ile çözümü, 2018 - 2019

TEZER M., BOZKAYA C., Project Supported by Higher Education Institutions, Silindirik kanal içerisinde magnetohidrodinamik akış probleminin teorik çözümü ve nümerik simülasyonu, 2016 - 2016

TEZER M., ŞENEL P., Project Supported by Higher Education Institutions, Magnetohidrodinamik (MHD)-Stokes Akışın Karşılıklı Sınır Elemanları Metodu (DRBEM) ile Nümerik Çözümü, 2015 - 2015

TEZER M., GÜRBÜZ M., Project Supported by Higher Education Institutions, Radyal Baz Fonksiyonları Yaklaşımı ile Manyetik Akış ve Elektrik Potansiyel Denklemlerinin Çözümü, 2015 - 2015

TEZER M., Pekmen B., Project Supported by Higher Education Institutions, Manyetik Potansiyel İçeren Manyeto-Konveksiyon Akışın Karşılıklı Sınır Elemanları Metodu ile Çözümü, 2013 - 2013

TEZER M., Project Supported by Higher Education Institutions, İçinde Parçacıklar Bulunduran Sımların Zamana Bağımlı

Magnetohidrodinamik Akışı Ve Isı Transferi., 2011 - 2011

TEZER M., Project Supported by Higher Education Institutions, Magnetohydrodynamic Flow In An Electrodynamically Conducting Semi-Infinite Strip, 2011 - 2011

TEZER M., Project Supported by Higher Education Institutions, Numerical Solution Of Liquid Metal

Magnetohydrodynamics(mhd) Flow With Heat Transfer., 2010 - 2010

## **Memberships / Tasks in Scientific Organizations**

Association for Turkish Women in Maths, Member of Science Committee, 2012 - Continues

## **Invited Congress and Symposium Activities**

7th International Conference on Mathematical Modeling in Physical Sciences, IC-MSQUARE, Working Group, Moscow, Russia, 2018

20th European Conference on Mathematics for Industry (ECMI-2018), Working Group, Budapest, Hungary, 2018

International Conference on Applied Mathematics in Engineering ICAME-2018, Working Group, Balıkesir, Turkey, 2018

3rd International conference on computational mathematics and engineering sciences (CMES 2018), Working Group, Girne, Cyprus (Kktc), 2018

## **Citations**

Total Citations (WOS):718

h-index (WOS):16

## **Invited Talks**

Recent Developments and Applications of Numerical Analysis, Seminar, Muğla Sıtkı Koçman Üniversitesi, Turkey, May 2018

Recent Developments and Applications of Numerical Analysis, Seminar, İzmir Ekonomi Üniversitesi, Turkey, April 2018

## **Awards**

Gürbüz M., Tezer M., TÜBİTAK ULAKBİM YAYIN TEŞVİK Makale Ödülü, Tübitak , December 2018

Aydin C., Tezer M., TÜBİTAK ULAKBİM YAYIN TEŞVİK Makale Ödülü, Tübitak, December 2018

Evcin C., Uğur Ö., Tezer M., ODTÜ Geliştirme Vakfı Makale Ödülü, Odtü Geliştirme Vakfı, September 2018

Bozkaya C., Tezer M., Fendoğlu H., ODTU Gelistirme Vakfi Makale Odulu, Odtu Gelistirme Vakfi, June 2018

Aydin C., Tezer M., ODTÜ Geliştirme Vakfı Makale Ödülü, Odtü Gelistirme Vakfı, May 2018