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Fatma Sidre Oglakkaya

Personal Information

Surname, Name: Oglakkaya, Fatma Sidre
Nationality: Turkish (TC)
Date and Place of Birth: 19 August, Konya
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Education

2012-2018, Middle East Technical University
PhD. Department of Mathematics
2007-2010, Selcuk University
MSc. Mathematical Education
2003-2007, Selcuk University
BSc. Mathematical Education
1999-2002, Meram Anatolian High School

Professional Experience

2018-current, Department of Mathematics, Osmaniye Korkut Ata University
Research Assistant, PhD
2012-2018, Department of Mathematics, Middle East Technical University
Teaching Assistant and Researcher
2010-2012, Department of Mathematics, Osmaniye Korkut Ata University
Research Assistant
2007-2010 Ministry of Education
Elementary and High School Mathematics Teacher

Skills

Language

- English (Advanced)
- German (Beginner)

Computer software

- Office Programs
- Matlab
- LaTeX
- Maplesoft

PUBLICATIONS

International Journal Publications

- F.S. Oğlakkaya and C. Bozkaya (2016). MHD natural convection in a semi-annulus enclosure filled with water-based nanofluid using DRBEM. *Engineering Analysis with Boundary Elements*, 71, 151-163.
- F.S. Oğlakkaya and C. Bozkaya (2018). Unsteady MHD mixed convection flow in a lid-driven cavity with a heated wavy wall. *International Journal of Mechanical Sciences*, 148, 231-245.

International Conference Proceedings

- F.S. Oğlakkaya and C. Bozkaya (2015). Mixed convection flow in a lid-driven cavity with hydromagnetic effect using DRBEM. Proceedings of Advances in Boundary Element and Meshless Techniques XVI-BETEQ 2015, Valencia, Spain (July 6-8), 44-49.
- F.S. Oğlakkaya and C. Bozkaya (2016). DRBEM solution to ferrofluid flow and heat transfer in semi-annulus enclosure in the presence of magnetic field. Proceedings of Advances in Boundary Element and Meshless Techniques XVII-BETEQ 2016, Ankara, Turkey (July 11-13), 107-112.
- F.S. Oğlakkaya and C. Bozkaya (2016). A numerical simulation of non-uniform magnetic field effect on ferrofluid flow in a half-annulus enclosure with sinusoidal hot wall. Proceedings of International Conference of Numerical Analysis and Applied Mathematics XIV-ICNAAM 2016, Rhodes, Greece, (September 19-25), 560067-(1-4).
- F.S. Oğlakkaya and C. Bozkaya (2017). MHD combined convection flow in a lid-driven cavity with sinusoidal wavy wall. Proceedings of The Eleventh UK Conference on Boundary Integral Methods XI-UKBIM-2017, Nottingham, UK (July 10-11), 152-159.
- F.S. Oğlakkaya and C. Bozkaya (2017). Heat transfer in an annulus enclosure under the influence of multiple magnetic sources. Proceedings of Ukrainian Conference on Applied Mathematics UCAM-2017, Lviv, Ukraine (September 28-30), 87-88.
- F.S. Oğlakkaya and C. Bozkaya (2018). MHD natural convection ferrofluid flow in semi-annulus enclosures. IOP Conf. Series: Journal of Physics: Conf. Series 1141, International Conference on Mathematical Modelling in Physical Sciences-ICMSQUARE-2018, Moscow, Russia (August 27-31), 012036.
- F.S. Oğlakkaya and C. Bozkaya (2019). DRBEM solution of the MHD forced convection in a channel with sinusoidal walls. Proceedings of Advances in Boundary Element and Meshless Techniques XX-BETEQ 2019, Palermo, Italy (July 22-24), 186-191.

International Conference Abstracts

- F.S. Oğlakkaya, and C. Bozkaya (2015). Natural convection of nanofluid flows in a semicircular annulus using DRBEM. Abstract book of European Conference on Numerical Mathematics and Advanced Applications-ENUMATH-2015, Ankara, Turkey (September 13-18), 200.

Posters presented in National Workshops

- F.S. Oğlakkaya, and C. Bozkaya, Ferrofluid flow in a sinusoidal enclosure under the effect of nodal magnetic source, 3rd Women Mathematicians Association Workshop, İzmir, 27-29 May 2016.

RESEARCH INTEREST

- Numerical Solutions to PDEs
- Computational Fluid Dynamics
- Magnetohydrodynamics
- Ferrohydrodynamics

NUMERICAL METHODS

- Boundary Element Method (BEM)
- Finite Difference Method (FDM)
- Finite Element Method (FEM)

TEACHING EXPERIENCE

- Calculus with Analytic Geometry (Math 119), Department of Mathematics, METU.
- Calculus of Functions of Several Variables (Math 120), Department of Mathematics, METU.
- Basic Mathematics I (Math 125), Department of Mathematics, METU.
- Basic Mathematics II (Math 126), Department of Mathematics, METU.

FUNDING AND ACADEMIC PROJECTS

- C. Bozkaya (Coordinator), F.S. Oğlakkaya (Researcher) (January 2015-December 2016). Magnetohydrodynamic nanofluid and convective heat transfer. BAP-1, Department of Mathematics, Middle East Technical University, Project No: BAP-01-01-2015-002, Project Budget: 7000TL.

INTEREST

- Aikido
- Tennis