

## Res. Asst. SİNEM ARSLAN ÖLÇER

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-7633-2020

ScopusID: 57207717586

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### Education Information

Doctorate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Turkey 2018 - Continues

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Turkey 2016 - 2018

Undergraduate, Dokuz Eylul University, Faculty Of Science, Department Of Mathematics (English), Turkey 2011 - 2016

### Dissertations

Postgraduate, FINITE DIFFERENCE METHOD SOLUTION OF MAGNETOHYDRODYNAMIC FLOW IN CHANNELS WITH ELECTRICALLY CONDUCTING AND SLIPPING WALLS, Middle East Technical University, Graduate School of Natural and Applied Sciences, Graduate School of Natural and Applied Sciences, 2018

### Research Areas

Numerical Analysis

### Academic Titles / Tasks

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Mathematics, 2017 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **DRBEM solution of singularly perturbed coupled MHD flow equations**  
ARSLAN ÖLÇER S., TEZER M.  
Engineering Analysis with Boundary Elements, vol.155, pp.696-706, 2023 (SCI-Expanded)
- II. **Convergence, stability, and numerical solution of unsteady free convection magnetohydrodynamical flow between two slipping plates**  
Arslan S., Tezer-Sezgin M.

MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.45, no.1, pp.21-35, 2022 (SCI-Expanded)

III. **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, no.4, pp.1923-1938, 2019 (SCI-Expanded)

## Books & Book Chapters

I. **Finite Difference Solutions of 2D Magnetohydrodynamic Channel Flow in a Rectangular Duct**

ARSLAN S., Tezer M.

in: Numerical Mathematics and Advanced Applications ENUMATH 2019, Fred J. Vermolen, Cornelis Vuik, Editor, Springer, Cham, pp.63-71, 2021

## Refereed Congress / Symposium Publications in Proceedings

I. **DRBEM solutions of regularly perturbed MHD flow in a rectangular duct with no-slip and insulated/conducting walls**

Ölçer S., TEZER M.

11th International Conference on Mathematical Modeling in Physical Sciences, IC-MSQUARE 2022, Virtual, Online, Serbia, 5 - 08 September 2022, vol.2872

II. **Finite Difference Solutions of 2D Magnetohydrodynamic Channel Flow in a Rectangular Duct**

ARSLAN ÖLÇER S., TEZER M.

European Conference on Numerical Mathematics and Advanced Applications, ENUMATH 2019, Egmond aan Zee, Netherlands, 30 September - 04 October 2019, vol.139, pp.63-71

III. **Fdm solution of mhd flow in a rectangular duct with slipping and partly insulated partly conducting side walls**

ARSLAN S., Tezer-Sezgin M.

8th International Conference on Mathematical Modeling in Physical Sciences (ICMSQUARE), Bratislava, Slovakia, 26 - 29 August 2019, vol.1391

IV. **Finite Difference Solutions of 1D Magnetohydrodynamic Channel Flow With Slipping Walls**

ARSLAN S., Tezer M.

European Seminar on Computing (ESCO), 3 - 08 June 2018

V. **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

## Metrics

Publication: 9

Citation (WoS): 2

Citation (Scopus): 3

H-Index (WoS): 1

H-Index (Scopus): 1

## Scholarships

2211-A General Domestic Doctorate Scholarship Program, TUBITAK, 2018 - Continues