

## Assoc. Prof. ESMA ULUTAŞ

### Personal Information

**Email:** esmaates@ktu.edu.tr

**Web:** <https://avesis.ktu.edu.tr//esmaates>

### International Researcher IDs

ORCID: 0000-0001-7302-3674

ScopusID: 56562790300

Yoksis Researcher ID: 19268

### Education Information

Doctorate, Firat University, Fen Fakültesi/Fen Bilimleri Enstitüsü, Matematik/Uygulamalı Matematik, Turkey 2011 - 2015

Postgraduate, Firat University, Fen Fakültesi/Fen Bilimleri Enstitüsü, Matematik/Uygulamalı Matematik, Turkey 2009 - 2011

Undergraduate, Firat University, Faculty Of Science, Matematik, Turkey 2004 - 2008

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, Araştırma Projesi Hazırlama Sertifikası, KTÜ, 2014

### Dissertations

Doctorate, Saçılma terimine sahip bazı lineer olmayan kısmi diferensiyel denklemlerin soliton çözümleri Soliton solutions of some partial differential equations with dispersion term, Firat University, Fen Bilimleri Enstitüsü, Uygulamalı Matematik, 2015

Postgraduate, Lineer olmayan bazı kısmi diferensiyel denklemlerin genişletilmiş  $(G'/G)$ -açılım metodu ile çözümü Solutions of some nonlinear partial differensial equations by extended  $(G'/G)$ -expansion method, Firat University, Fen Bilimleri Enstitüsü, Uygulamalı Matematik, 2011

### Research Areas

Mathematics, Differential Equations, Partial Differential Equations, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Karadeniz Technical University, Of Teknoloji Fakültesi, Elektronik ve Haberleşme Mühendisliği, 2022  
- Continues

Assistant Professor, Karadeniz Technical University, Of Teknoloji Fakültesi, Elektronik Ve Haberleşme Mühendisliği, 2018 - 2023  
Assistant Professor, Karadeniz Technical University, Of Teknoloji Fakültesi, Elektronik ve Haberleşme Mühendisliği, 2015 - 2018  
Lecturer, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, 2013 - 2015  
Lecturer, Bitlis Eren University, Fen Edebiyat Fakültesi, İstatistik Bölümü, 2011 - 2013

## Academic and Administrative Experience

Deputy Head of Department, Karadeniz Technical University, 2023 - Continues  
Head of Department, Karadeniz Technical University, Of Teknoloji Fakültesi, Elektronik ve Haberleşme Mühendisliği, 2017 - Continues

## Courses

Diferansiyel denklemler, Undergraduate, 2015 - 2016, 2014 - 2015  
Mühendislik Matematği, Undergraduate, 2014 - 2015, 2013 - 2014  
Sayısal Çözümleme, Undergraduate, 2015 - 2016  
Matematik II, Undergraduate, 2013 - 2014

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

- I. **Travelling wave and optical soliton solutions of the Wick-type stochastic NLSE with conformable derivatives**  
ULUTAŞ E.  
CHAOS SOLITONS & FRACTALS, vol.148, 2021 (SCI-Expanded)
- II. **EXACT SOLUTIONS OF STOCHASTIC KdV EQUATION WITH CONFORMABLE DERIVATIVES IN WHITE NOISE ENVIRONMENT**  
ULUTAŞ E., Inc M., Baleanu D.  
THERMAL SCIENCE, vol.25, 2021 (SCI-Expanded)
- III. **BRIGHT, DARK, AND SINGULAR OPTICAL SOLITON SOLUTIONS FOR PERTURBED GERDJIKOV-IVANOV EQUATION**  
ULUTAŞ E., Inc M., Baleanu D., Kumar S.  
THERMAL SCIENCE, vol.25, 2021 (SCI-Expanded)
- IV. **Bright, dark and singular optical solitons in a power law media with fourth order dispersion**  
Inc M., ATEŞ E.  
OPTICAL AND QUANTUM ELECTRONICS, vol.49, no.9, 2017 (SCI-Expanded)
- V. **Travelling wave solutions of generalized Klein-Gordon equations using Jacobi elliptic functions**  
ATEŞ E., Inc M.  
NONLINEAR DYNAMICS, vol.88, no.3, pp.2281-2290, 2017 (SCI-Expanded)
- VI. **Optical solitons in multiple-core couplers with the nearest neighbors linear coupling**  
AL QURASHI M. M., ATEŞ E., Inc M.  
OPTIK, vol.142, pp.343-353, 2017 (SCI-Expanded)
- VII. **Optical solitons of the coupled nonlinear Schrodinger's equation with spatiotemporal dispersion**  
İNÇ M., ATEŞ E., Tchier F.  
NONLINEAR DYNAMICS, vol.85, no.2, pp.1319-1329, 2016 (SCI-Expanded)
- VIII. **Optical soliton solutions for generalized NLSE using Jacobi elliptic functions**  
İNÇ M., ATEŞ E.

OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.9, pp.1081-1087, 2015 (SCI-Expanded)

**IX. Travelling Wave Solutions of the  $K(n, n)$  Equation**

İNÇ M., ATEŞ E.

CHINESE JOURNAL OF PHYSICS, vol.53, no.1, 2015 (SCI-Expanded)

**X. SINGULAR 1-SOLITON SOLUTION OF THE  $K(m, n)$  EQUATION WITH GENERALIZED EVOLUTIONS AND ITS SUBSIDIARIES**

Inc M., Ulutas E., Cavlak E., Biswas A.

ACTA PHYSICA POLONICA B, vol.44, no.9, pp.1825-1836, 2013 (SCI-Expanded)

**XI. Singular solitons and other solutions to a couple of nonlinear wave equations**

inç m., ULUTAŞ E., biswas a.

CHINESE PHYSICS B, vol.22, no.6, pp.1-7, 2012 (SCI-Expanded)

### Articles Published in Other Journals

**I. The complex Ginzburg Landau equation in Kerr and parabolic law media**

Ulutaş E.

An International Journal of Optimization and Control: Theories & Applications, vol.10, no.1, pp.113-117, 2020 (Scopus)

**II. Travelling wave solutions of a  $BBm(m,n)$  equation with generalized evolution**

Inc M., ATEŞ E.

Nonlinear Studies, vol.24, no.2, pp.303-308, 2017 (Scopus)

### Books & Book Chapters

**I. RESONANT OPTICAL SOLITON PERTURBATION WITH FULL NONLINEARTIY IN THREE NONLINEAR MEDIUM**

ULUTAŞ E.

in: INTERNATIONAL THEORY, RESEARCH AND REVIEWS IN SCIENCE AND MATHEMATICS, AKGÜL, Hasan, Editor, Serüven Yayınevi, Ankara, pp.195-209, 2023

### Refereed Congress / Symposium Publications in Proceedings

**I. ON SOLUTIONS STOCHASTIC NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS WITH CONFORMABLE DERIVATIVES**

ULUTAŞ E.

THE SIXTH INTERNATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS AND ENGINEERING SCIENCES (CMES-2022), 20 May 2022

**II. Some optical soliton solutions for the generalized Fokas-Lenells equation**

ULUTAŞ E.

9th International Conference on Applied Analysis and Mathematical Modeling, 11 June 2021, vol.9, pp.151-156

**III. Exact Solutions of Perturbed Gerdjikov-Ivanov Equation**

ULUTAŞ E.

4th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", 27 October 2020

**IV. Exact Soliton solutions for the Klein-Gordon-Schrödinger equation with powerlaw nonlinearity**

ATEŞ E., İNÇ M.

International Workshop on Mathematical Methods in Engineering, 27 - 29 April 2017

**V. Optical solitons in multiplecore couplers with the nearest neighbors linear coupling**

ATEŞ E., İNÇ M.

ICNAAM 2016, Rodos, Greece, 19 - 25 September 2016

**VI. Optical solitons in a type of nonlinear directional couplers**

İNÇ M., ATEŞ E.

International Conference on Mathematics and Mathematics Education (ICMME-2016), 12 - 14 May 2016

## **Scientific Refereeing**

NONLINEAR DYNAMICS, SCI Journal, January 2024

OPTICAL AND QUANTUM ELECTRONICS, SCI Journal, January 2023

Celal Bayar University Journal of Science, Other Indexed Journal, January 2020

Suleyman Demirel University Journal of Natural and Applied Sciences, Other Indexed Journal, January 2020

## **Metrics**

Publication: 20

Citation (WoS): 206

Citation (Scopus): 206

H-Index (WoS): 8

H-Index (Scopus): 8