

## Res. Asst. PhD Hande USLU TUNA

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-6241-2020

ScopusID: 57219146036

Yoksis Researcher ID: 267192

### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Matematik, Turkey 2018 - Continues

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Matematik, Turkey 2015 - 2018

Undergraduate, Bogazici University, Faculty Of Arts And Sciences, Matematik, Turkey 2010 - 2015

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Other, TEDx Istanbul 2018 Yeni Başlangıçlar, TEDx, 2018

Education Management and Planning, DergiPark ULAKBİM Dergi Sistemleri Eğitim Semineri, TÜBİTAK, 2018

Education Management and Planning, Pedagojik Formasyon Eğitimi, Yıldız Teknik Üniversitesi Eğitim Fakültesi, 2016

### Dissertations

Postgraduate, Behavior of First Order Differential Equations Through a Monte Carlo Based Algorithm, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Matematik, 2018

### Research Areas

Computer Science, Differential Equations, Dynamic Systems and Ergodic Theory, Statistics, Probability Theory, Stochastic Processes

### Academic Titles / Tasks

## Articles Published in Other Journals

- I. **Prediction of anemia with a particle swarm optimization-based approach**  
AHMAD A., Alzaidi K. M. S., SARI M., USLU H.  
An International Journal of Optimization and Control: Theories & Applications (IJOCTA), vol.13, no.2, pp.214-223, 2023 (ESCI)
- II. **Medical Model Estimation with Particle Swarm Optimization**  
Sarı M., Ahmad A. A., Uslu H.  
Communications Faculty of Sciences University of Ankara Series A1 Mathematics and Statistics, vol.70, no.1, pp.468-482, 2021 (ESCI)
- III. **Advection-Diffusion Process through A Difference Scheme-Based Monte Carlo Simulation**  
Ahmad A. A., Sarı M., Uslu H.  
International Journal of Agricultural and Statistical Sciences, vol.16, pp.2027-2035, 2020 (ESCI)
- IV. **Qualitative behavior of stiff ODEs through a stochastic approach**  
Uslu H., Sarı M., Coşgun T.  
An International Journal of Optimization and Control: Theories Applications (IJOCTA), vol.10, no.2, pp.181-187, 2020 (Scopus)
- V. **Monte Carlo based stochastic approach for the first order nonlinear ODE systems**  
Uslu H., Sarı M.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.26, no.1, pp.133-139, 2020 (ESCI)
- VI. **A STOCHASTIC TREATMENT FOR OSCILLATORY BEHAVIOR WITH DAMPING**  
Uslu H., Sarı M.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.10, no.2, pp.179-186, 2019 (ESCI)

## Books & Book Chapters

- I. **A New Approach for the Solution of the Generalized Abel Integral Equation**  
Coşgun T., Sarı M., Uslu H.  
in: Numerical Solutions of Realistic Nonlinear Phenomena, Machado J., Özdemir N., Baleanu D., Editor, Springer, London/Berlin, Zug, pp.145-151, 2020

## Refereed Congress / Symposium Publications in Proceedings

- I. **Predicting Anemia in Medical Systems Using Artificial Neural Network Models**  
SARI M., AHMAD A. A., DEMİR İ., AHMAD A. A., USLU H.  
3rd International E-Conference on Mathematical Advances and Applications (ICOMAA-2020), 24 - 27 June 2020
- II. **A stochastic approach for the nonlinear Duffing oscillator with damping term**  
USLU H., SARI M.  
2nd International Mathematical Developments and Applications Conference (ICOMAA-2019), 3 - 05 May 2019, pp.45
- III. **Behavior of Some Population Models through the Monte Carlo Method**  
USLU H., SARI M.  
International Conference on Applied Mathematics, Modeling and Life Science Problems (ICAMLS'xx18), İstanbul, Turkey, 3 - 05 October 2018

- IV. **Monte Carlo Based Stochastic Approach for Some Nonlinear ODE Systems**  
SARI M., USLU H.  
Ninth International Conference on Numerical Methods and Applications NMA'xx18, Borovets, Bulgaria, 20 - 24 August 2018, pp.51
- V. **A Discussion of the Generalized Abel Integral Equation**  
COŞGUN T., SARI M., USLU H.  
The International Conference on Applied Mathematics in Engineering (ICAME'xx18), Balıkesir, Turkey, 27 - 29 June 2018, pp.89
- VI. **The Qualitative Behavior of Some Stiff ODEs Through Stochastic Methods**  
SARI M., USLU H., COŞGUN T.  
The International Conference on Applied Mathematics in Engineering (ICAME'xx18), Balıkesir, Turkey, 27 - 29 June 2018, pp.102
- VII. **Solutions of Differential Equations through Monte Carlo Algorithms**  
USLU H., SARI M.  
The Second International Conference on Computational Mathematics and Engineering Sciences (CMES2017), 20 - 22 May 2017
- VIII. **Monte Carlo Solutions of Differential Equations**  
USLU H., SARI M.  
The Second International Conference on Modeling and Scientific Computing in Mathematical Engineering (MOCASIM2017), 17 - 20 April 2017

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

Türk Matematik Derneği, Member, 2018 - Continues

## **Tasks In Event Organizations**

Uslu H., 3rd International E-Conference on Mathematical Advances and Applications (ICOMAA-2020), Scientific Congress, Turkey, Haziran 2020

Uslu H., 2nd International Mathematical Developments and Applications Conference (ICOMAA-2019), Scientific Congress, İstanbul, Turkey, Mayıs 2019

Uslu H., International Conference on Mathematical Advances and Applications (ICOMAA2018), Scientific Congress, İstanbul, Turkey, Mayıs 2018

## **Metrics**

Publication: 15

Citation (WoS): 1

H-Index (WoS): 1

## **Congress and Symposium Activities**

TMD Ankara Şubesi 2. Matematik Çalıştayı, Attendee, Ankara, Turkey, 2019

2nd International Mathematical Developments and Applications Conference (ICOMAA-2019), Working Group, İstanbul, Turkey, 2019

İstanbul Üniversitesi Fen Fakültesi Fizik Kulübü 9. Fizik Çalıştayı, Attendee, İstanbul, Turkey, 2019

TMD Ankara Şubesi 1. Matematik Çalıştayı, Attendee, Ankara, Turkey, 2019

International Conference on Applied Mathematics, Modeling and Life Science Problems (ICAMLS'18), Attendee, İstanbul,

Turkey, 2018

Ninth International Conference on Numerical Methods and Applications ( NMA'18), Attendee, Borovets, Bulgaria, 2018

The International Conference on Applied Mathematics in Engineering (ICAME'18), Attendee, Balıkesir, Turkey, 2018

International Conference on Mathematical Advances and Applications (ICOMAA2018), Attendee, İstanbul, Turkey, 2018

İstanbul Üniversitesi Fen Fakültesi Öğrenci Matematik Çalıştayı IV, Attendee, İstanbul, Turkey, 2018

Yapay Öğrenme Modelleri Geliştirirken Karşılaşılan Sorunlar ve Çözümleri Semineri, Attendee, İstanbul, Turkey, 2018

DergiPark ULAKBİM Dergi Sistemleri Eğitim Semineri, Attendee, İstanbul, Turkey, 2018

The Second International Conference on Computational Mathematics and Engineering Sciences (CMES2017), Attendee, İstanbul, Turkey, 2017

The Second International Conference on Modeling and Scientific Computing in Mathematical Engineering (MOCASIM2017), Attendee, Marrâkush, Morocco, 2017

Boğaziçi Üniversitesi Matematik Topluluğu II. Matematik ve Toplum Çalıştayı, Attendee, İstanbul, Turkey, 2017

First International Computational Science Research Workshop (CompSciResearch-2016/1), Attendee, İstanbul, Turkey, 2016

## Scholarships

TÜBİTAK 2211 Yurt İçi Doktora Burs Programı, TÜBİTAK, 2018 - Continues

TÜBİTAK 2210 Yurt İçi Yüksek Lisans Burs Programı, TÜBİTAK, 2015 - 2017

TÜBİTAK 2205 Yurt İçi Lisans Burs Programı, TÜBİTAK, 2014 - 2015