

## Asst. Prof. ARZU BİLGİN

### Personal Information

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**Address:** Recep Tayyip Erdogan Universitesi Fen Edebiyat Fakultesi Matematik Bolumu Matematik Bolumu #524

### International Researcher IDs

ScholarID: ISloxcIAAAAJ

ORCID: 0000-0001-5835-9030

Publons / Web Of Science ResearcherID: JSL-8072-2023

ScopusID: 57183855800

Yoksis Researcher ID: 277555

### Education Information

Post Doctorate, University of Rhode Island, College of Art and Sciences, Mathematics, United States Of America 2019 - 2019

Doctorate, University of Rhode Island, College Of Art And Sciences, Applied Mathematics, United States Of America 2011 - 2016

Postgraduate, University of New Hampshire, College Of Art And Sciences, Applied Mathematics, United States Of America 2009 - 2010

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Vocational Training, Academic Research in the Applications of Mathematical Biology, Sarajevo Üniversitesi, 2023

Vocational Training, Firat'ta Uygulamalı Matematik ve Mühendislik Yaz Okulu, Firat Üniversitesi, 2021

### Dissertations

Doctorate, Global Dynamics of Some Discrete Dynamical Systems with Applications, University of Rhode Island, Mathematics , Applied Mathematics, 2016

Postgraduate, Comparative Analysis of Four Different One-Dimensional Flexible Structure, University of New Hampshire, Mathematics And Statistics, Applied Mathematics, 2010

### Research Areas

Population Biology, Differential Equations, Dynamic Systems and Ergodic Theory, Economics, Social Sciences and Behavioral Sciences, Global Analysis, Analysis on Manifolds, Partial Differential Equations

## Academic Titles / Tasks

Assistant Professor, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2023 - Continues  
Research Assistant PhD, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2018 - Continues  
Lecturer PhD, University of Rhode Island, College Of Art And Sciences, Applied Mathematics, 2016 - 2017  
Lecturer, Johnson & Wales University, College of Sciences and Liberal Arts, Matematics, 2016 - 2017

## Academic and Administrative Experience

Erasmus Program Department Coordinator, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2023 - Continues  
Farabi Coordinator, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Matematik Bölümü, 2018 - Continues

## Courses

Differential Equation I, Undergraduate, 2023 - 2024  
The Methods of Applied Mathematics, Postgraduate, 2023 - 2024  
Fundamentals of Mathematics, Undergraduate, 2022 - 2023  
Professional English IV, Undergraduate, 2022 - 2023  
Engineering Mathematics, Undergraduate, 2022 - 2023  
Professional English IV, Undergraduate, 2022 - 2023  
Mathematics, Undergraduate, 2023 - 2024  
Fundamentals of Mathematics, Undergraduate, 2022 - 2023  
Statistics, Undergraduate, 2016 - 2017  
Calculus II, Undergraduate, 2016 - 2017  
Global Character of Difference Equations I, Postgraduate, 2016 - 2017  
Introduction to Difference Equations, Postgraduate, 2016 - 2017  
Calculus, Undergraduate, 2016 - 2017  
Applied Calculus, Undergraduate, 2014 - 2015

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

- I. **Dynamics of a Plant-Herbivore Model Subject to Allee Effects with Logistic Growth of Plant Biomass**  
Bešo E., Kalabušić S., Pilav E., BİLGİN A.  
International Journal of Bifurcation and Chaos, vol.33, no.10, 2023 (SCI-Expanded)
- II. **Global Dynamics of a Cooperative Discrete System in the Plane**  
Bilgin A., Brett A., Kulenovic M. R. S., Pilav E.  
INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS, vol.28, no.7, 2018 (SCI-Expanded)
- III. **Global Asymptotic Stability for Discrete Single Species Population Models**  
BİLGİN A., Kulenovic M. R. S.  
DISCRETE DYNAMICS IN NATURE AND SOCIETY, 2017 (SCI-Expanded)
- IV. **Basins of attraction of period-two solutions of monotone difference equations**  
BİLGİN A., Kulenovic M. R. S., Pilav E.  
ADVANCES IN DIFFERENCE EQUATIONS, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Global Attractivity for Nonautonomous Difference Equation via Linearization**

## Refereed Congress / Symposium Publications in Proceedings

- I. **Two Dimensional Continuous Lotka-Volterra Systems in Difference Equations**  
Bilgin A.  
ICDEA (International Conference on Difference Equations and Applications), Sarajevo, Bosnia And Herzegovina, 26 - 30 July 2021, pp.18-19
- II. **The Global Attractivity of Linearizable Scalar Difference Equations**  
Bilgin A.  
5th International Conference on Computational Mathematics and Engineering Sciences, Van, Turkey, 8 - 10 June 2021, pp.25
- III. **The Dynamical Scenarios of a Combination of Holling Type Functions**  
Bilgin A.  
E-Conference on Mathematical Advances and Applications, İstanbul, Turkey, 26 - 29 May 2021, pp.11-12
- IV. **Coexistence of Period-Two Solutions of a Cooperative System**  
Bilgin A.  
AMS Eastern Sectional Meeting, Rhode Island, United States Of America, 20 March 2021 - 21 March 2022, pp.32-33
- V. **Global Dynamics for Discrete Models in Population Dynamics of Single Species**  
Bilgin A.  
2019 JMM (Joint Mathematics Meeting), Maryland, United States Of America, 16 - 19 January 2019, pp.18-19
- VI. **Basins of Attraction of Period- Two Solutions of Monotone Difference Equations**  
Bilgin A.  
2018 JMM (Joint Mathematics Meeting), California, United States Of America, 10 - 13 January 2018, pp.11-12
- VII. **Basins of Attraction of Period- Two Solutions of Monotone Difference Equations**  
Bilgin A., Pilav E., Kulenovic M.  
2016 AMS Fall Eastern Sectional Meeting, Maine, United States Of America, 24 - 25 September 2016, pp.18-19
- VIII. **Global Dynamics of Cooperative Discrete System In The Plane,**  
Bilgin A., Brett A., Pilav E., Kulenovic M.  
AMS Fall Eastern Sectional Meeting, New Jersey, United States Of America, 14 - 15 November 2015, pp.27-28
- IX. **Global Attractivity for NonAutonomous Difference Equation via Linearization**  
Bilgin A., Kulenovic M.  
ICDEA (International Conference on Difference Equations), Bialystok, Poland, 19 - 25 July 2015, pp.22-23
- X. **Global Asymptotic Stability for Discrete Single Species Biological Models**  
Bilgin A., Kulenovic M.  
Progress on Difference Equations, İzmir, Turkey, 21 - 24 May 2014, pp.27

## Memberships / Tasks in Scientific Organizations

international society of difference equations (ISDE), Member, 2019 - Continues, United States Of America  
American Mathematical Society, Member, 2018 - Continues, United States Of America

## Scientific Refereeing

ADVANCES IN DIFFERENCE EQUATIONS, Journal Indexed in SCI-E, May 2021  
DISCRETE DYNAMICS IN NATURE AND SOCIETY, Journal Indexed in SCI-E, May 2021

## Metrics

Publication: 15

Citation (WoS): 7

Citation (Scopus): 13

H-Index (WoS): 2

H-Index (Scopus): 2

## Congress and Symposium Activities

ICDEA (International Conference on Difference Equations and Applications), Invited Speaker, Sarajevo, Bosnia And Herzegovina, 2021

5th International Conference on Computational Mathematics and Engineering Sciences , Invited Speaker, Van, Turkey, 2021

E-Conference on Mathematical Advances and Applications, Invited Speaker, İstanbul, Turkey, 2021

AMS Eastern Sectional Meeting, Invited Speaker, Rhode Island, United States Of America, 2021

JMM (Joint Mathematics Meeting), Session Moderator, Maryland, United States Of America, 2019

Joint Mathematical Meetings, Session Moderator, Maryland, United States Of America, 2019

JMM (Joint Mathematics Meeting), Session Moderator, California, United States Of America, 2018

AMS Fall Eastern Sectional Meeting, Invited Speaker, Maine, United States Of America, 2016

AMS Fall Eastern Sectional Meeting, Invited Speaker, New Jersey, United States Of America, 2015

ICDEA (International Conference on Difference Equations), Invited Speaker, Bialystok, Poland, 2015

PODE (Progress on Difference Equations), Invited Speaker, İzmir, Turkey, 2014

## Scholarships

MEB YURT DIŐI LİSANSÜSTÜ ÖĞRENİM BURSLULUK PROGRAMI (YLSY) , Ministry of Education, 2007 - 2017

## Awards

Bilgin A., Visiting researcher, 2 months, University Of Rhode Island, July 2018

Bilgin A., Kahramanmaras Sutcu Imam Universitesi Fen Edebiyat Fakultesi Matematik Bolum Birinciligi, Kahramanmaras Sutcu Imam Universitesi, July 2006