

## Dr. Öğr. Üyesi AYLİN ECE KAYABEKİR

### Kişisel Bilgiler

E-posta: aekayabekir@gelisim.edu.tr

Web: <https://avesis.gelisim.edu.tr/aekayabekir>

### Uluslararası Araştırmacı ID'leri

ORCID: 0000-0003-3592-4564

Yoksis Araştırmacı ID: 356182

### Eğitim Bilgileri

Doktora, İstanbul Üniversitesi-Cerrahpaşa, Lisansüstü Eğitim Enstitüsü, İnşaat Mühendisliği (Dr), Türkiye 2018 - 2021

Yüksek Lisans, İstanbul Üniversitesi, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (YI) (Tezli), Türkiye 2016 - 2018

Lisans, İstanbul Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Türkiye 2011 - 2015

### Yaptığı Tezler

Doktora, METASEZGİSEL ALGORİTMALAR İLE OPTİMİZE AKTİF AYARLI KÜTLE SÖNÜMLEYİCİLERİ İLE YAPILARIN KONTROLÜ, İstanbul Üniversitesi-Cerrahpaşa, Lisansüstü Eğitim Enstitüsü, İnşaat Mühendisliği (Dr), 2021

Yüksek Lisans, Yapı mühendisliğinde metasezgisel algoritmalar ile optimizasyon uygulamaları, İstanbul Üniversitesi, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (YI) (Tezli), 2018

### Verdiği Dersler

YAPI STATİĞİ I, Lisans, 2022 - 2023

YAPI MEKANİĞİNDE NÜMERİK METODLAR, Doktora, 2022 - 2023

İNŞAAT MÜHENDİSLİĞİNDE BİLGİSAYAR UYGULAMALARI, Lisans, 2022 - 2023, 2021 - 2022

MUKAVEMET I, Lisans, 2022 - 2023

Yapı Statiği ve Mukavemet, Lisans, 2021 - 2022

Statik, Lisans, 2021 - 2022

Yapı Statiği II, Lisans, 2021 - 2022

Bitirme Tasarım Projesi, Lisans, 2021 - 2022

Bilgisayar Destekli Teknik Resim, Lisans, 2021 - 2022

Optimizasyon Teorisi, Doktora, 2021 - 2022

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

#### I. Design Optimization of a Hybrid Vibration Control System for Buildings

Salaas B., BEKDAŞ G., İbrahim Y. E., NİGDELİ S. M., Ezzat M., Nawar M., KAYABEKİR A. E.

Buildings, cilt.13, sa.4, 2023 (SCI-Expanded)

#### II. Cantilever Soldier Pile Design: The Multiobjective Optimization of Cost and CO2 Emission via Pareto Front Analysis

BEKDAŞ G., Arama Z. A., TÜRKAİN O. H., Kayabekir A. E., Geem Z. W.

Sustainability (Switzerland), cilt.14, sa.15, 2022 (SCI-Expanded)

- III. **A hybrid metaheuristic method for optimization of active tuned mass dampers**  
Kayabekir A. E., NİGDELİ S. M., BEKDAŞ G.  
Computer-Aided Civil and Infrastructure Engineering, cilt.37, sa.8, ss.1027-1043, 2022 (SCI-Expanded)
- IV. **Comparative analysis of factors influencing the optimal seismic design of retaining walls**  
AKBAY ARAMA Z., DALYAN İ., BEKDAŞ G., KAYABEKİR A. E.  
ARABIAN JOURNAL OF GEOSCIENCES, cilt.15, sa.6, 2022 (SCI-Expanded)
- V. **COST AND ENVIRONMENTAL FRIENDLY MULTI-OBJECTIVE OPTIMUM DESIGN OF REINFORCED CONCRETE COLUMNS**  
Kayabekir A. E., BEKDAŞ G., NİGDELİ S. M., Apak S.  
Journal of Environmental Protection and Ecology, cilt.23, sa.2, ss.890-899, 2022 (SCI-Expanded)
- VI. **An Artificial Intelligence-Based Prediction Model for Optimum Design Variables of Reinforced Concrete Retaining Walls**  
Yücel M., BEKDAŞ G., NİGDELİ S. M., Kayabekir A. E.  
International Journal of Geomechanics, cilt.21, sa.12, 2021 (SCI-Expanded)
- VII. **Effect of application factors on optimum design of reinforced concrete retaining systems**  
Kayabekir A. E., AKBAY ARAMA Z., BEKDAŞ G.  
Structural Engineering and Mechanics, cilt.80, sa.2, ss.113-127, 2021 (SCI-Expanded)
- VIII. **Effects of Constant Parameters on Optimum Design of Axially Symmetric Cylindrical Reinforced Concrete Walls**  
Kayabekir A. E.  
Structural Design of Tall and Special Buildings, cilt.30, sa.6, 2021 (SCI-Expanded)
- IX. **Total potential optimization using metaheuristic algorithms for solving nonlinear plane strain systems**  
Toklu Y. C., BEKDAŞ G., Yücel M., NİGDELİ S. M., Kayabekir A. E., Kim S., Geem Z. W.  
Applied Sciences (Switzerland), cilt.11, sa.7, 2021 (SCI-Expanded)
- X. **Adaptive-hybrid harmony search algorithm for multi-constrained optimum eco-design of reinforced concrete retaining walls**  
Yücel M., Kayabekir A. E., BEKDAŞ G., NİGDELİ S. M., Kim S., Geem Z. W.  
Sustainability (Switzerland), cilt.13, sa.4, ss.1-20, 2021 (SCI-Expanded)
- XI. **The usage of the harmony search algorithm for the optimal design problem of reinforced concrete retaining walls**  
AKBAY ARAMA Z., Kayabekir A. E., BEKDAŞ G., Kim S., Geem Z. W.  
Applied Sciences (Switzerland), cilt.11, sa.3, ss.1-28, 2021 (SCI-Expanded)
- XII. **Analysis of Plane-Stress Systems via Total Potential Optimization Method Considering Nonlinear Behavior**  
Toklu Y. C., Kayabekir A. E., BEKDAŞ G., NİGDELİ S. M., Yücel M.  
Journal of Structural Engineering (United States), cilt.146, sa.11, 2020 (SCI-Expanded)
- XIII. **CO2 and cost optimization of reinforced concrete cantilever soldier piles: A parametric study with harmony search algorithm**  
AKBAY ARAMA Z., Kayabekir A. E., BEKDAŞ G., Geem Z. W.  
Sustainability (Switzerland), cilt.12, sa.15, 2020 (SCI-Expanded)
- XIV. **Eco-friendly design of reinforced concrete retaining walls: Multi-objective optimization with harmony search applications**  
Kayabekir A. E., AKBAY ARAMA Z., BEKDAŞ G., NİGDELİ S. M., Geem Z. W.  
Sustainability (Switzerland), cilt.12, sa.15, 2020 (SCI-Expanded)
- XV. **Optimal design of cantilever soldier pile retaining walls embedded in frictional soils with harmony search algorithm**  
BEKDAŞ G., AKBAY ARAMA Z., Kayabekir A. E., Geem Z. W.  
Applied Sciences (Switzerland), cilt.10, sa.9, 2020 (SCI-Expanded)
- XVI. **Optimum design of PID controlled active tuned mass damper via modified harmony search**  
Kayabekir A. E., BEKDAŞ G., NİGDELİ S. M., Geem Z. W.

- Applied Sciences (Switzerland), cilt.10, sa.8, 2020 (SCI-Expanded)
- XVII. **A novel hybrid harmony search approach for the analysis of plane stress systems via total potential optimization**  
Kayabekir A. E., Toklu Y. C., BEKDAŞ G., NİGDELİ S. M., Yücel M., Geem Z. W.  
Applied Sciences (Switzerland), cilt.10, sa.7, 2020 (SCI-Expanded)
- XVIII. **Advanced energy-based analyses of trusses employing hybrid metaheuristics**  
BEKDAŞ G., Kayabekir A. E., NİGDELİ S. M., Toklu Y. C.  
Structural Design of Tall and Special Buildings, cilt.28, sa.9, 2019 (SCI-Expanded)
- XIX. **Transfer function amplitude minimization for structures with tuned mass dampers considering soil-structure interaction**  
BEKDAŞ G., Kayabekir A. E., NİGDELİ S. M., Toklu Y. C.  
Soil Dynamics and Earthquake Engineering, cilt.116, ss.552-562, 2019 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Investigation of optimum tuned mass damper parameter according to stroke capacity**  
KAYABEKİR A. E.  
Challenge Journal of Structural Mechanics, cilt.9, sa.4, 2023 (Hakemli Dergi)
- II. **The Effect of Structural Rigidity Uncertainties on ATMD Controlled Structures**  
Kayabekir A. E., BEKDAŞ G., NİGDELİ S. M.  
WSEAS TRANSACTIONS ON SYSTEMS, cilt.21, 2022 (Scopus)
- III. **Comparison of Passive and Active Tuned Mass Dampers for Structures Subjected to Earthquake Excitations**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
International Journal of Digital Innovation in the Built Environment, cilt.11, 2022 (Hakemli Dergi)
- IV. **Optimization of cylindrical wall domes via metaheuristic algorithms**  
KAYABEKİR A. E.  
Challenge Journal of Structural Mechanics, cilt.7, sa.4, ss.180-187, 2021 (Hakemli Dergi)
- V. **Optimum Design of Reinforced Concrete T-Beam Considering Environmental Factors via Flower Pollination Algorithm**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
International Journal of Engineering and Applied Sciences, cilt.13, sa.4, ss.166-178, 2021 (Hakemli Dergi)
- VI. **The effect of dome properties on design of the axial symmetric cylindrical wall**  
KAYABEKİR A. E.  
Challenge Journal of Structural Mechanics, cilt.7, 2021 (Hakemli Dergi)
- VII. **Active Tuned Mass Dampers for Control of Seismic Structures**  
KAYABEKİR A. E., NİGDELİ S. M., BEKDAŞ G.  
WSEAS TRANSACTIONS ON COMPUTERS, cilt.19, 2020 (Hakemli Dergi)
- VIII. **Effects of Soil Geotechnical Properties on the Prediction of Optimal Dimensions of Restricted Reinforced Concrete Retaining Walls**  
KAYABEKİR A. E., AKBAY ARAMA Z., BEKDAŞ G., DALYAN İ.  
Hittite Journal of Science and Engineering, cilt.7, sa.3, 2020 (Hakemli Dergi)
- IX. **Comparative study of optimum cost design of reinforced concrete retaining wall via metaheuristics**  
KAYABEKİR A. E., YÜCEL M., BEKDAŞ G., NİGDELİ S. M.  
Challenge Journal of Concrete Research Letters, cilt.11, 2020 (Hakemli Dergi)
- X. **Metaheuristic algorithms in optimum design of reinforced concrete beam by investigating strength of concrete**  
ULUSOY S., KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
Challenge Journal of Concrete Research Letters, cilt.11, sa.2, 2020 (Hakemli Dergi)
- XI. **L-shaped reinforced concrete retaining wall design: cost and sizing optimization**

KAYABEKİR A. E., AKBAY ARAMA Z., BEKDAŞ G., DALYAN İ.

Challenge Journal of Structural Mechanics, cilt.6, sa.3, 2020 (Hakemli Dergi)

- XII. **Grey Wolf Optimizer Based Design of Reinforced Concrete Retaining Walls Considering Shear Key**  
TEMÜR R., KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
International Journal of Theoretical and Applied Mechanics, cilt.3, ss.93-98, 2018 (Hakemli Dergi)
- XIII. **Investigation of Cross-Sectional Dimension on Optimum Carbon Fiber Reinforced Polymer Design for Shear Capacity Increase of Reinforced Concrete Beams**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M., TEMÜR R.  
International Journal of Theoretical and Applied Mechanics, cilt.3, ss.87-92, 2018 (Hakemli Dergi)
- XIV. **STATİK VE DİNAMİK YÜKLER ALTINDA İSTİNAT DUVARLARININ OPTİMUM TASARIMI**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M., TEMÜR R.  
Engineering Sciences, cilt.12, 2017 (Hakemli Dergi)
- XV. **Restricted Optimum Design of Reinforced Concrete Retaining Walls**  
BEKDAŞ G., NİGDELİ S. M., TEMÜR R., KAYABEKİR A. E.  
International Journal of Theoretical and Applied Mechanics, cilt.1, ss.326-332, 2016 (Hakemli Dergi)

## Kitap & Kitap Bölümleri

- I. **Metasezgisel Yöntemlerle Betonarme Yapı Elemanlarının Optimizasyonu**  
Nigdeli S. M., Bekdaş G., Kayabekir A. E.  
IUC Universty Press, İstanbul, 2023
- II. **Aktif Ayarlı Kütle Sönümleyicilerin Optimizasyonu**  
Kayabekir A. E., Bekdaş G., Nigdeli S. M.  
Ayarlı Kütle Sönümleyicilerinin Optimum Ayarlanması, Gebrail Bekdaş Sinan Melih Nigdeli, Editör, IUC University Press, İstanbul, ss.45-50, 2023
- III. **Optimum Design and Tuning Applications in Structural Engineering via Swarm Intelligence**  
Bekdaş G., Nigdeli S. M., Kayabekir A. E.  
Advances in Swarm Intelligence Variations and Adaptations for Optimization Problems, Anupam Biswas, Can Berk Kalaycı, Seyedali Mirjalili, Editör, Springer, London/Berlin, Zürich, ss.109-134, 2023
- IV. **The Development of Hybrid Metaheuristics in Structural Engineering**  
Kayabekir A. E., Nigdeli S. M., Bekdaş G.  
Hybrid Metaheuristics in Structural Engineering Including Machine Learning Applications, Gebrail Bekdaş, Sinan Melih Nigdeli, Editör, Springer, London/Berlin, Zürich, ss.17-34, 2023
- V. **Review of Tuning Mass Dampers and Application of Improved Harmony Search**  
Bekdaş G., Nigdeli S. M., Kayabekir A. E., Ulusoy S., Geem Z. W.  
Optimization Methods for Structural Engineering, Ishaan R. Kale, Ali Sadollah, Editör, Springer, London/Berlin, Singapore, ss.3-19, 2023
- VI. **Introduction and Overview: Structural control and Tuned Mass Dampers**  
Bekdaş G., Nigdeli S. M., Kayabekir A. E.  
Optimization of Tuned Mass Dampers-Using Active and Passive Control, Gebrail Bekdaş, Sinan Melih Nigdeli, Editör, Springer Cham, Zürich, ss.1-13, 2022
- VII. **Optimum Tuning of Active Mass Dampers via Metaheuristics**  
Kayabekir A. E., Bekdaş G., Nigdeli S. M.  
Optimization of Tuned Mass Dampers, Gebrail Bekdaş, Sinan Melih Nigdeli, Editör, Springer, London/Berlin, Zürich, ss.155-174, 2022
- VIII. **Metaheuristic-Based Structural Control Methods and Comparison of Applications**  
ULUSOY S., KAYABEKİR A. E., NİGDELİ S. M., BEKDAŞ G.  
Nature-Inspired Metaheuristic Algorithms for Engineering Optimization Applications, Editör, Springer, ss.251-276, 2022
- IX. **Harmony Search Algorithm for Structural Engineering Problems**

KAYABEKİR A. E., BEKDAŞ G., YÜCEL M., NİGDELİ S. M., Geem Z. W.

Nature-Inspired Metaheuristic Algorithms for Engineering Optimization Applications, , Editör, Springer, ss.13-47, 2022

- X. **Optimization and Artificial Neural Network Models for Reinforced Concrete Members**  
YÜCEL M., NİGDELİ S. M., KAYABEKİR A. E., BEKDAŞ G.  
Nature-Inspired Metaheuristic Algorithms for Engineering Optimization Applications, , Editör, Springer, ss.181-199, 2022
- XI. **Yapay Zeka Optimizasyon Algoritmaları ve Mühendislik Uygulamaları**  
BEKDAŞ G., NİGDELİ S. M., YÜCEL M., KAYABEKİR A. E.  
Seçkin Yayıncılık, 2021
- XII. **Developments on Metaheuristic-Based Optimization in Structural Engineering**  
Kayabekir A. E., Bekdaş G., Nigdeli S. M.  
Advances in Structural Engineering—Optimization Emerging Trends in Structural Optimization, Sinan Melih Nigdeli, Gebraül Bekdaş, Aylin Ece Kayabekir, Melda Yucel, Editör, Springer, Zürich, ss.1-22, 2021
- XIII. **Total Potential Optimization Using Hybrid Metaheuristics: A Tunnel Problem Solved via Plane Stress Members**  
Toklu Y. C., Bekdaş G., Kayabekir A. E., Nigdeli S. M., Yücel M.  
Advances in Structural Engineering—Optimization Emerging Trends in Structural Optimization, Sinan Melih Nigdeli, Gebraül Bekdaş, Aylin Ece Kayabekir, Melda Yucel, Editör, Springer Cham, Zürich, ss.221-236, 2021
- XIV. **Statistical Evaluation of Metaheuristic Algorithm: An Optimum Reinforced Concrete T-beam Problem**  
Kayabekir A. E., Nigdeli M.  
Advances in Structural Engineering—Optimization Emerging Trends in Structural Optimization, Sinan Melih Nigdeli, Gebraül Bekdaş, Aylin Ece Kayabekir, Melda Yucel, Editör, Springer Cham, Zürich, ss.299-310, 2021
- XV. **Current Trends in the Optimization Approaches for Optimal Structural Control**  
Farzam M. F., Jalali H. H., Gavgani S. A. M., Kayabekir A. E., Bekdaş G.  
Advances in Structural Engineering—Optimization Emerging Trends in Structural Optimization, Sinan Melih Nigdeli, Gebraül Bekdaş, Aylin Ece Kayabekir, Melda Yucel, Editör, Springer Cham, Zürich, ss.133-179, 2021
- XVI. **Sustainable Optimum Design of RC Retaining Walls: The Influence of Structural Material and Surrounding Soil Properties**  
Akbaý Arama Z., Kayabekir A. E., Bekdaş G.  
Advances in Structural Engineering—Optimization Emerging Trends in Structural Optimization, Sinan Melih Nigdeli, Gebraül Bekdaş, Aylin Ece Kayabekir, Melda Yucel, Editör, Springer Cham, Zürich, ss.249-297, 2021
- XVII. **Metaheuristic Approaches for Optimum Design of Reinforced Concrete Structures: Emerging Research and Opportunities**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
IGI Global, 2020
- XVIII. **Optimum Design of Carbon Fiber-Reinforced Polymer (CFRP) Beams for Shear Capacity via Machine Learning Methods: Optimum Prediction Methods on Advance Ensemble Algorithms - Bagging Combinations**  
YÜCEL M., KAYABEKİR A. E., NİGDELİ S. M., BEKDAŞ G.  
Artificial Intelligence and Machine Learning Applications in Civil, Mechanical, and Industrial Engineering, , Editör, IGI Global, ss.85-103, 2020
- XIX. **A Comprehensive Review of the Flower Pollination Algorithm for Solving Engineering Problems**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M., Yang X.  
Nature-Inspired Algorithms and Applied Optimization, , Editör, Springer, ss.171-188, 2018
- XX. **Optimization in Civil Engineering and Metaheuristic Algorithms: A Review of State-of-the-Art Developments**  
BEKDAŞ G., NİGDELİ S. M., KAYABEKİR A. E.  
Computational Intelligence, Optimization and Inverse Problems with Applications in Engineering, , Editör, Springer, ss.111-137, 2018

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Control of Reinforced Concrete Frame Structures via Active Tuned Mass Dampers**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
7th International Conference on Harmony search, Soft computing and Applications (ICHSA 2022), 23 - 24 Şubat 2022
- II. **CARBON EMISSION MINIMIZATION OF REINFORCED CONCRETE SHEAR WALLS HARMONY SEARCH BASED OPTIMIZATION**  
KAYABEKİR A. E.  
INTERNATIONAL EUROASIA Congress on Scientific Researches and Recent Trends 9, 18 - 20 Şubat 2022
- III. **PARETO OPTIMIZATION OF REINFORCED CONCRETE BEAM CONSIDERING COST AND CO2 EMISSION**  
KAYABEKİR A. E.  
INTERNATIONAL AEGEAN CONFERENCES on Innovation Technologies & Engineering-V, 25 - 26 Şubat 2022
- IV. **Adaptive Harmony Search for Cost Optimization of Reinforced Concrete Columns**  
Kayabekir A. E., NİGDELİ S. M., BEKDAŞ G.  
4th International Conference on Intelligent Computing and Optimization, ICO 2021, Virtual, Online, 30 - 31 Aralık 2021, cilt.371, ss.35-44
- V. **Analysis of Non-linear Structural Systems via Hybrid Algorithms**  
NİGDELİ S. M., BEKDAŞ G., Yücel M., Kayabekir A. E., Toklu Y. C.  
4th International Conference on Intelligent Computing and Optimization, ICO 2021, Virtual, Online, 30 - 31 Aralık 2021, cilt.371, ss.536-545
- VI. **An investigation of design variable ranges in optimum design of reinforced concrete members**  
BEKDAŞ G., NİGDELİ S. M., KAYABEKİR A. E.  
19th International Conference of Numerical Analysis and Applied Mathematics, 20 - 26 Eylül 2021
- VII. **Optimum Design Of Tuned Mass Dampers For Real-Size Structures Via Adaptive Harmony Search Algorithm**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M., YÜCEL M.  
14th International Conference on Evolutionary and Deterministic Methods for Design, Optimization and Control (EUROGEN-2021), 28 - 30 Haziran 2021
- VIII. **Optimum Design Of Reinforced Concrete Retaining Walls By Using Specific Parameterfree Metaheuristic Algorithms**  
YÜCEL M., BEKDAŞ G., NİGDELİ S. M., KAYABEKİR A. E.  
14th International Conference on Evolutionary and Deterministic Methods for Design, Optimization and Control (EUROGEN-2021), 28 - 30 Haziran 2021
- IX. **CO2 minimization of reinforced concrete columns via teaching-learning-based optimization**  
BEKDAŞ G., NİGDELİ S. M., KAYABEKİR A. E.  
The 34th Conference of the European Chapter on Combinatorial Optimization (ECCO2021), 10 - 11 Haziran 2021
- X. **The Performance Verification of Tuned Mass Dampers for Damping Uncertainty**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
25th International Conference Mechanics (MECHANIKA-2021), 21 Mayıs 2021
- XI. **Robustness of Structures with Active Tuned Mass Dampers Optimized via Modified Harmony Search for Time Delay**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
6th International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020), 16 - 17 Temmuz 2020
- XII. **Computation of Axial Symmetric Cylindrical Reinforced Concrete Walls with Domes**  
KAYABEKİR A. E.  
6th International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020), 16 - 17 Temmuz 2020
- XIII. **Total Potential Optimization Using Metaheuristics: Analysis of Cantilever Beam via Plane-Stress Members**

TOKLU Y. C., BEKDAŞ G., KAYABEKİR A. E., NİGDELİ S. M., YÜCEL M.

6th International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020), 16 - 17 Temmuz 2020

- XIV. **Evaluation of Metaheuristic Algorithm on Optimum Design of T-Beams**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
6th International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020), 16 - 17 Temmuz 2020
- XV. **The Effect of Initial Values on Metaheuristic-Based Optimum Design of Tuned Mass Dampers**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
6th International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020), İstanbul, Türkiye, 16 - 17 Temmuz 2020
- XVI. **An Artificial Neural Network Model for Prediction of Optimum amount of Carbon Fiber Reinforced Polymer for Shear Capacity Improvement of Beams**  
KAYABEKİR A. E., YÜCEL M., BEKDAŞ G., NİGDELİ S. M.  
12th International Congress on Mechanics (HSTAM2019), 22 - 25 Eylül 2019
- XVII. **Investigation of Optimum Tuned Mass Dampers for Structures Considering Soil-Structure interaction in Near Fault Regions**  
KAYABEKİR A. E., NİGDELİ S. M., BEKDAŞ G.  
12th International Congress on Mechanics (HSTAM2019), 22 - 25 Eylül 2019
- XVIII. **A computer code for reinforced concrete design of axially symmetrical walls**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
4th Eurasian Conference on Civil and Environmental Engineering (ECOCEE), 17 - 18 Haziran 2019
- XIX. **Optimum Design of T-Beams Using Jaya Algorithm**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
3rd International Conference on Engineering Technology and Innovation (ICETI), 17 - 21 Nisan 2019
- XX. **Grey Wolf Optimizer Based Design of Reinforced Concrete Retaining Walls Considering Shear Key**  
TEMÜR R., KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
7th International Conference on Applied and Computational Mathematics (ICACM '18), 23 - 25 Kasım 2018
- XXI. **Investigation of cross-sectional dimension on optimum carbon fiber reinforced polymer design for shear capacity increase of reinforced concrete beams.**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M., TEMÜR R.  
7th International Conference on Applied and Computational Mathematics (ICACM '18), 23 - 25 Kasım 2018
- XXII. **Metaheuristic methods in structural engineering benchmark problems: the weight optimization of cantilever beams**  
BEKDAŞ G., KAYABEKİR A. E., NİGDELİ S. M., TEMÜR R.  
9th GRACM 2018 International Congress on Computational Mechanics, 4 - 06 Haziran 2018
- XXIII. **The analyses of spatial cable structures employing new generation metaheuristic methods**  
KAYABEKİR A. E., NİGDELİ S. M., BEKDAŞ G., TOKLU Y. C.  
9th GRACM 2018 International Congress on Computational Mechanics, 4 - 06 Haziran 2018
- XXIV. **Analyses of cable nets by using energy minimization using several metaheuristic methods**  
BEKDAŞ G., KAYABEKİR A. E., NİGDELİ S. M., TOKLU Y. C.  
International Conference on Bioinspired Optimization Methods and their Applications (BIOMA 2018), 16 - 18 Mayıs 2018
- XXV. **The Population Factor on Metaheuristic Based Analyses of Truss Structures**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M., TOKLU Y. C.  
International Conference on Bioinspired Optimization Methods and their Applications (BIOMA 2018), 16 - 18 Mayıs 2018
- XXVI. **The factor of optimum angle of carbon fiber reinforced polymers**  
KAYABEKİR A. E., SAYIN B., BEKDAŞ G., NİGDELİ S. M.  
4th International Conference on Engineering and Natural Sciences (ICENS 2018), 2 - 06 Mayıs 2018
- XXVII. **Optimum Design of Reinforced Concrete Multi-Story Multi-Span Frame Structures under Static Loads**

- ULUSOY S., KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
5th International Conference on Civil and Urban Engineering (ICCUE 2018), 11 - 13 Mart 2018
- XXVIII. **Minimization of Vertical Deflection of an Optimum I- Beam by Jaya Algorithm**  
BEKDAŞ G., NİGDELİ S. M., KAYABEKİR A. E., TOKLU Y. C.  
15th International Conference of Numerical Analysis and Applied Mathematics, 25 - 30 Eylül 2017
- XXIX. **Jaya algorithm based optimum carbon fiber reinforced polymer design for reinforced concrete beams**  
KAYABEKİR A. E., SAYIN B., NİGDELİ S. M., BEKDAŞ G.  
15th International Conference of Numerical Analysis and Applied Mathematics, 25 - 30 Eylül 2017
- XXX. **Optimum Design of Reinforced Concrete Shear Walls employing Teaching Learning Based Optimization**  
BEKDAŞ G., NİGDELİ S. M., KAYABEKİR A. E.  
2nd International Conference on Civil and Environmental Engineering (ICOCEE 2017), 8 - 10 Mayıs 2017
- XXXI. **The Effect of the Consideration Soil Structure Interaction on Seismic Analyses of Structures**  
KAYABEKİR A. E., ULUSOY S., NİGDELİ S. M., BEKDAŞ G.  
2nd International Conference on Civil and Environmental Engineering (ICOCEE 2017), 8 - 10 Mayıs 2017
- XXXII. **Optimization of Spans of Frame Structures employing Teaching Learning Based Optimization**  
KAYABEKİR A. E., NİGDELİ S. M., BEKDAŞ G.  
2nd International Conference on Civil and Environmental Engineering (ICOCEE 2017), 8 - 10 Mayıs 2017
- XXXIII. **The Effect of the Flexibility of the Structures Considering Soil-Structure Interaction**  
ULUSOY S., KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M.  
2nd International Conference on Civil and Environmental Engineering (ICOCEE 2017), 8 - 10 Mayıs 2017
- XXXIV. **Optimization of spans of multi-story frames using teaching learning based optimization**  
BEKDAŞ G., NİGDELİ S. M., KAYABEKİR A. E.  
3rd International Conference on Engineering and Natural Sciences (ICENS 2017), 3 - 07 Mayıs 2017
- XXXV. **Optimum carbon fiber reinforced polymer design for increasing shear capacity of RC beams**  
KAYABEKİR A. E., SAYIN B., BEKDAŞ G., NİGDELİ S. M.  
3rd International Conference on Engineering and Natural Sciences (ICENS 2017), 3 - 07 Mayıs 2017
- XXXVI. **Restricted Optimum Design of Reinforced Concrete Retaining Walls**  
BEKDAŞ G., NİGDELİ S. M., TEMÜR R., KAYABEKİR A. E.  
7th European Conference of Civil Engineering (ECCIE '16), 17 Aralık 2016
- XXXVII. **Optimum design of retaining walls under static and dynamic loads**  
KAYABEKİR A. E., BEKDAŞ G., NİGDELİ S. M., TEMÜR R.  
International Science Symposium (ISS2016), 1 - 04 Eylül 2016

## **Desteklenen Projeler**

Kayabekir A. E., Diğer Ülkelerden Üniversiteler Tarafından Desteklenmiş Proje, Design Optimization of a Hybrid Vibration Control System for Buildings Structures, 2022 - 2023

Kayabekir A. E., Yükseköğretim Kurumları Destekli Proje, Üç Boyutlu Uzay Kafes Sistemler için Yeni Optimizasyon Yaklaşımları, 2019 - 2023

KAYABEKİR A. E., Metasezgisel Algoritmalar ile Aktif Kontrol Sistemlerinin Parametrelerinin Belirlenmesi, 2019 - 2020

KAYABEKİR A. E., Personel taşıyıcı araçları patlama etkilerinden koruyan bir zırh tasarımı: Modelleme ve Analiz, 2018 - 2019

KAYABEKİR A. E., Restricted optimum design of reinforced concrete retaining walls, 2016 - 2017