



## **Personal Information**

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## **International Researcher IDs**

ScholarID: ToGixuYAAAAJ

ORCID: 0000-0002-4534-3686

Publons / Web Of Science ResearcherID: JQV-3865-2023

ScopusID: 58311142000

Yoksis Researcher ID: 379683

## **Education**

Doctorate, University of Sheffield, Department of Engineering, Department of Automatic Control and Systems Engineering, England 2018 - 2022

Postgraduate, Brunel University, Civil Engineering, England 2016 - 2017

Undergraduate, Sakarya University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 2010 - 2014

## **Biography**

Dr. Adnan Kiral is a distinguished academic specializing in structural and earthquake engineering. He completed his Ph.D. at the University of Sheffield, focusing on innovative seismic control technologies, after earning his Master's degree in Civil Engineering from Brunel University. His undergraduate studies were in civil engineering at Sakarya University. With a strong academic foundation, Dr. Kiral has contributed extensively to the study of building dynamics, retrofitting techniques, and structural performance under seismic conditions. His research includes innovative solutions for seismic response control, such as semi-active damping systems, and he has shared his findings through numerous high-impact journal articles, book chapters, and international conferences. Dr. Kiral's work plays a critical role in advancing the resilience and safety of modern infrastructure.

## **Certificates, Courses and Trainings**

Other, Teaching Assistant, The University of Sheffield , 2020

Vocational Training, Constructionarium Week held at the National Construction College England, Brunel University, PJ Careys PLC and Atkins , 2017

## **Dissertations**

Doctorate, Novel Displacement Dependent Viscous Damper for SemiactiveControl of the Seismic Response of Multi-

Storey Buildings, University of Sheffield, engineering , civil engineering, 2018

## Research Areas

Structural Mechanics, Building Dynamics, Structure, Structural Engineering, Performance of Constructed Facilities, Earthquake Engineering, Mechanical Vibrations

## Academic Positions

Lecturer PhD, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ,  
2022 - Continues

## Courses

### Postgraduate

Structure Dynamics, Postgraduate, 2023 - 2024

Matlab applications in Civil Engineering, Postgraduate, 2023 - 2024

Introduction to Earthquake Resistant Building Design, Postgraduate, 2023 - 2024

### Undergraduate

Computer programming, Undergraduate, 2024 - 2025

REINFORCED CONCRETE STRUCTURES, Undergraduate, 2024 - 2025

Introduction to Structure Dynamics, Undergraduate, 2023 - 2024

Engineering mechanics, Undergraduate, 2024 - 2025

Construction Management and Quantity Surveying, Undergraduate, 2023 - 2024

Introduction to Earthquake Engineering, Undergraduate, 2023 - 2024

## Journal articles indexed in SCI, SSCI, and AHCI

- I. **Optimizing seismic performance of base-isolated buildings with mass and stiffness variations under near and far fault ground motions**  
Kiral A., Tonyali Z.  
Structures , vol.5, no.1, pp.1-23, 2025 (SCI-Expanded)
- II. **A comprehensive analysis of the ground motions of the 2023 Kahramanmaraş, Türkiye earthquakes**  
Kiral A., Tonyali Z., Ergün M.  
EARTHQUAKE AND STRUCTURES, no.26, pp.203-219, 2025 (SCI-Expanded)
- III. **Basic evaluation and restoration process for the structural characteristics of historically significant timber bridges in Türkiye: case studies in Eastern Black Sea Region**  
Tonyali Z., Birinci Kayaalp F., Kiral A., Özesen A.  
WOOD MATERIAL SCIENCE AND ENGINEERING, vol.25, no.2, pp.1-28, 2025 (SCI-Expanded)
- IV. **A case study comparing seismic retrofitting techniques for a historically significant masonry building's minaret**  
Kiral A., Ergün M., Tonyali Z., Artar M., Şentürk I.  
ENGINEERING FAILURE ANALYSIS, vol.166, no.5, pp.1-40, 2024 (SCI-Expanded)
- V. **The Seismic Response Evaluation of an Existing Multi-span Reinforced Concrete Highway Bridge in the Presence of Linear and Nonlinear Viscous Dampers**  
Kiral A., Gurbuz A., Ustabas I.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.24, no.2, pp.1-19, 2024 (SCI-Expanded)
- VI. **Seismic performance assessment of steel buildings equipped with a new semi-active displacement-**

### **dependent viscous damper**

Kiral A., Garcia R., Petkovski M., Hajirasouliha I.

JOURNAL OF EARTHQUAKE AND TSUNAMI, vol.1, no.1, pp.1-18, 2024 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **The effect of LRB stiffness changes with and without supplemental viscous dampers on seismic responses of an experimentally verified MDOF building**  
Kiral A., Tonyali Z.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.43, no.1, pp.1-15, 2025 (ESCI)
- II. **Evaluation of Earthquake-Related Damages on the Reinforced Concrete Buildings due to the February 6, 2023, Kahramanmaras-Turkiye Earthquakes**  
Tonyali Z., Kiral A.  
Recep Tayyip Erdogan University Journal of Science and Engineering, vol.5, no.1, pp.1-26, 2024 (Peer-Reviewed Journal)
- III. **Using supplemental linear viscous dampers for experimentally verified base-isolated building: Case study**  
Kiral A., Gürbüz A.  
Journal of Structural Engineering & Applied Mechanics (Online), vol.7, no.1, 2024 (Peer-Reviewed Journal)

## **Books**

- I. **Seismic Response Control of Buildings Using Viscous-Based Devices**  
Kiral A., Tonyali Z.  
in: Modern Approaches to Traffic Safety and Sound Insulation, Doç. Dr. Kurtuluş ARTIK, Editor, Bidge Publisher, Ankara, pp.70-111, 2024

## **Papers Presented at Peer-Reviewed Scientific Conferences**

- I. **Multi-Objective Optimization of an Experimentally Verified Base-Isolated Building**  
Kiral A., Tonyali Z.  
EU 6th International Conference on Health, Engineering and Applied Sciences , Belgrade, Serbia, 17 - 20 October 2024, pp.1-20, (Summary Text)
- II. **EVALUATING THE KAHRAMANMARAS EARTHQUAKE OF FEBRUARY 6 2023 IN TURKEY BASED ON NEW GENERATION ATTENUATION GROUND MOTION (NGA) MODELS**  
Kiral A., Tonyali Z.  
EUROPEAN CONFERENCES 2nd INTERNATIONAL CONFERENCE ON HEALTH, ENGINEERING AND APPLIED SCIENCES, Belgrade, Serbia, 4 - 06 August 2023, pp.1-6, (Full Text)
- III. **STRUCTURAL AND ECONOMIC EFFECTS OF SEA LEVEL RISING IN HATAY-ISKENDERUN AFTER 6 FEBRUARY 2023 TURKEY-SYRIA EARTHQUAKE**  
Süme V., Kiral A.  
4th INTERNATIONAL MEDITERRANEAN CONGRESS, Lefkoşa, Cyprus (Kktc), 15 - 16 June 2023, pp.241-248, (Full Text)
- IV. **Using the Concept of "Weakening and Viscous Damping" for retrofitting of a Structure**  
Kiral A., Gürbüz A., Ustabaş İ.  
EGE 8th INTERNATIONAL CONFERENCE ON APLIED SCIENCES, İzmir, Turkey, 2 - 04 June 2023, pp.1-10, (Full Text)
- V. **THE FEBRUARY 6, 2023, KAHRAMANMARAS-TURKIYE EARTHQUAKES: SEISMO-TECTONIC EVALUATIONS AND EFFECTS ON REINFORCED CONCRETE BUILDINGS**

Kiral A., Tonyalı Z.

EGE 8th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, İzmir, Turkey, 2 - 04 June 2023, pp.1-12, (Full Text)

**VI. Semiactive Fluid Viscous Damper for Seismic Control of Multi-Storey Buildings**

Kiral A., Petkovski M.

ACSE Seminar / Sheffield UK, Sheffield, England, 03 March 2020, pp.1, (Summary Text)

## Other Publications

**I. Novel Displacement Dependent Viscous Damper for Semiactive Control of the Seismic Response of Multistorey Buildings**

Kiral A., Petkovski M.

Other, pp.1-120, 2022

## Expert Reports

**I. TEKNOFEST 2024 Technology Competitions Referee**

Kiral A.

TEKNOFEST 2024 Technology Competitions, pp.50, Rize, 2024

**II. Bina Deprem Güvenlik Değerlendirme Raporu**

Gürbüz A., Kiral A., Kaya A., Yılmaz F.

Kahramanmaraş Cumhuriyet Savcılığı, pp.33, Kahramanmaraş, 2024

**III. DEPREMDE “Miroğlu Gıda San. ve Tic. A.Ş.” ye AİT UN FABRİKASI BİNASINDA MEYDANA GELEN HASARLARIN GÜÇLENDİRME YAPILARAK YAPI GÜVENLİĞİNİN SAĞLANMASINA AİT TEKNİK RAPOR**

Süme V., Kiral A.

ŞEMA Mühendislik Mimarlık Bürosu, pp.11, Hatay, 2023

## Funded Projects

Kiral A., Other International Funding Programs, Semi-active control of the Sosokan building under the 2011 Tohoku earthquake in Japan / Japonya'daki 2011 Tohoku depremi altında Sosokan binasının yarı aktif kontrolü, 2018 - 2019

## Peer Reviews in Scientific Publications

EARTHQUAKE ENGINEERING AND ENGINEERING VIBRATION, SCI Journal, April 2025

INSTITUTION OF CIVIL ENGINEERS. PROCEEDINGS. STRUCTURES AND BUILDINGS, SCI Journal, March 2025

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in ESCI, August 2024

Recep Tayyip Erdoğan University Journal of Science and Engineering Sciences, National Scientific Refreed Journal, June 2024

CIVIL ENGINEERING JOURNAL-STAVEBNI OBZOR, Journal Indexed in SCI-E, May 2024

Kahramanmaraş Sütçü İmam Üniversitesi Fen ve Mühendislik Dergisi, National Scientific Refreed Journal, February 2024

NATURAL HAZARDS, Journal Indexed in SCI-E, March 2023

2nd International Conference on Applied on Economic and Social Science (ICAESS 2020), Conference Paper (Full Text), June 2020

## Scientific Project Refereeing

Project Supported by Other Official Institutions, January 2024

## **Metrics**

Publication: 20

Citation (WoS): 2

Citation (Scopus): 3

H-Index (WoS): 1

H-Index (Scopus): 1

## **Scholarships**

Pursuant to Law no 1416, England, Ministry of Education, 2014 - 2022