

## Assoc. Prof. ALPER ALDEMİR

### Personal Information

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### Education Information

Doctorate, Orta Doğu Teknik Üniversitesi, Fen Bilimleri, İnşaat Mühendisliği, Turkey 2010 - 2016

Postgraduate, Orta Doğu Teknik Üniversitesi, Risk Analizi A.B.D., İnşaat Mühendisliği, Turkey 2007 - 2010

Undergraduate, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2002 - 2007

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Seismic performance evaluation of roller compacted concrete gravity dams by pseudo dynamic testing, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2016

Postgraduate, A simple seismic performance assessment technique for unreinforced brick masonry structures, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2010

### Research Areas

Civil Engineering, Structure, Earthquake Engineering, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2017 - Continues

Research Assistant, Hacettepe Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2016 - 2017

Research Assistant, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2007 - 2016

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Experimental investigations on the structural behaviour of reinforced geopolymer beams produced from recycled construction materials**  
AKDUMAN Ş., Kocaer O., ALDEMİR A., ŞAHMARAN M., YILDIRIM G., Almahmood H., Ashour A.  
JOURNAL OF BUILDING ENGINEERING, vol.41, 2021 (Journal Indexed in SCI)
- II. **Prediction equation for the fundamental vibration period of concrete gravity dams with impounded water**  
ALDEMİR A.

EARTHQUAKE SPECTRA, vol.37, no.3, pp.1710-1725, 2021 (Journal Indexed in SCI)

- III. **Simplified Approach for Seismic Performance Assessment of Dry-Joint Masonry Arch Bridges**  
Demirel I. O. , ALDEMİR A.  
BUILDINGS, vol.11, no.7, 2021 (Journal Indexed in SCI)
- IV. **Mechanical and microstructural characterization of geopolymers from assorted construction and demolition waste-based masonry and glass**  
ULUGÖL H, KUL A., Yildirim G., ŞAHMARAN M., ALDEMİR A., Figueira D., Ashour A.  
JOURNAL OF CLEANER PRODUCTION, vol.280, 2021 (Journal Indexed in SCI)
- V. **Development of alkali-activated binders from recycled mixed masonry-originated waste**  
Yildirim G., KUL A., Ozcelikci E., ŞAHMARAN M., ALDEMİR A., Figueira D., Ashour A.  
JOURNAL OF BUILDING ENGINEERING, vol.33, 2021 (Journal Indexed in SCI)
- VI. **Rapid screening method for the determination of regional risk distribution of masonry structures**  
ALDEMİR A., Guvenir E., ŞAHMARAN M.  
STRUCTURAL SAFETY, vol.85, 2020 (Journal Indexed in SCI)
- VII. **Rapid screening method for the determination of seismic vulnerability assessment of RC building stocks**  
COŞKUN O., ALDEMİR A., ŞAHMARAN M.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.18, no.4, pp.1401-1416, 2020 (Journal Indexed in SCI)
- VIII. **Seismic behaviour of roller compacted concrete dams under different base treatments**  
Gharibdoust A., ALDEMİR A., BİNİCİ B.  
STRUCTURE AND INFRASTRUCTURE ENGINEERING, 2019 (Journal Indexed in SCI)
- IX. **Seismic behavior and improvement of autoclaved aerated concrete infill walls**  
BİNİCİ B., CANBAY E., ALDEMİR A., Demirel I. O. , Uzgan U., Eryurtlu Z., Bulbul K., YAKUT A.  
ENGINEERING STRUCTURES, vol.193, pp.68-81, 2019 (Journal Indexed in SCI)
- X. **Seismic behavior of autoclaved aerated concrete low rise buildings with reinforced wall panels**  
GÖKMEN F., BİNİCİ B., ALDEMİR A., Taghipour A., CANBAY E.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.17, no.7, pp.3933-3957, 2019 (Journal Indexed in SCI)
- XI. **Prediction Equations for the Fundamental Period and Mode Shape of Roller Compacted Concrete Gravity Dams considering Three Dimensional Geometry Effects**  
ALDEMİR A.  
JOURNAL OF EARTHQUAKE ENGINEERING, vol.22, pp.1-19, 2018 (Journal Indexed in SCI Expanded)
- XII. **In Situ Lateral Load Testing of a Two-Story Solid Clay Brick Masonry Building**  
ALDEMİR A., BİNİCİ B., CANBAY E., YAKUT A.  
JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES, vol.32, no.5, 2018 (Journal Indexed in SCI)
- XIII. **Effect of slot depth on the behavior of double-slotted reinforced concrete beam systems**  
ALDEMİR A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.2, pp.659-669, 2018 (Journal Indexed in SCI)
- XIV. **Lateral load testing of an existing two story masonry building up to near collapse**  
Aldemir A., BİNİCİ B., CANBAY E., YAKUT A.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.15, no.8, pp.3365-3383, 2017 (Journal Indexed in SCI)
- XV. **Seismic Performance Assessment of Masonry Buildings Using In Situ Material Properties**  
Cobanoglu B., ALDEMİR A., Demirel I. O. , BİNİCİ B., CANBAY E., YAKUT A.  
JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES, vol.31, no.4, 2017 (Journal Indexed in SCI)
- XVI. **Cyclic Testing of Reinforced Concrete Double Walls**  
ALDEMİR A., BİNİCİ B., CANBAY E.  
ACI STRUCTURAL JOURNAL, vol.114, no.2, pp.395-406, 2017 (Journal Indexed in SCI)
- XVII. **Pseudo-dynamic testing of a concrete gravity dam**  
Aldemir A., BİNİCİ B., ARICI Y., KURÇ Ö., CANBAY E.  
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.44, no.11, pp.1747-1763, 2015 (Journal Indexed in SCI)

- XVIII. **Analysis Methods for the Investigation of the Seismic Response of Concrete Dams**  
Aldemir A., Yilmazturk S. M. , Yucel A. R. , BİNİCİ B., ARICI Y., Akman A.  
TEKNIK DERGI, vol.26, no.1, pp.6943-6968, 2015 (Journal Indexed in SCI)
- XIX. **Comparison of the expected damage patterns from two- and three-dimensional nonlinear dynamic analyses of a roller compacted concrete dam**  
ARICI Y., BİNİCİ B., Aldemir A.  
STRUCTURE AND INFRASTRUCTURE ENGINEERING, vol.10, no.3, pp.305-315, 2014 (Journal Indexed in SCI)
- XX. **Seismic Performance Assessment of Unreinforced Masonry Buildings with a Hybrid Modeling Approach**  
Aldemir A., ERBERİK M. A. , Demirel I. O. , SUCUOĞLU H.  
EARTHQUAKE SPECTRA, vol.29, no.1, pp.33-57, 2013 (Journal Indexed in SCI)
- XXI. **8 March 2010 Elazığ-Kovancılar (Turkey) Earthquake: Observations on Ground Motions and Building Damage**  
Akkar S., Aldemir A., Askan A., Bakir S., CANBAY E., Demirel I. O. , ERBERİK M. A. , GÜLERCE Z., Gulkan P., KALKAN E., et al.  
SEISMOLOGICAL RESEARCH LETTERS, vol.82, no.1, pp.42-58, 2011 (Journal Indexed in SCI)

### Articles Published in Other Journals

- I. **In situ seismic testing of a reinforced autoclaved aerated concrete building**  
BİNİCİ B., GÖKMEN F., CANBAY E., ALDEMİR A., Ogdu M. K. , Uzgan U., Eryurtlu Z., Ozdemir G.  
MAUERWERK, vol.22, no.5, pp.305-313, 2018 (Journal Indexed in ESCI)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Period Prediction Equation for Concrete Gravity Dams**  
ALDEMİR A.  
13th Congress on Advances in Civil Engineering, İzmir, Turkey, 12 September 2018, pp.1-7

### Supported Projects

- Aldemir A., Şahmaran M., EU Supported Other Project, Düşük Maliyetli Konutlandırma için Yeşil Yapısal Elemanların Lego İnşaat Sistemi, 2018 - 2020
- Aldemir A., Güldür Erkal B., TÜBİTAK Project, Dolu Rezervuar Durumdaki Beton Ağırlık Barajlar için Baraj-Zemin-Rezervuar Etkilerini ve Vadi Geometrisini Üç Boyutlu olarak Dikkate Alan Periyot Tahmin Denklemi Geliştirilmesi (217M410), 2018 - 2019
- Aldemir A., Şahmaran M., Project Supported by Other Official Institutions, Sürdürülebilir Yapı ve Kent Tasarımı, 2018 - 2018
- ALDEMİR A., Project Supported by Higher Education Institutions, Beton Barajlar için Boş Rezervuar Durumunda Periyot Tahmin Denklemi Geliştirme, 2017 - 2018
- Aldemir A., Binici B., Project Supported by Other Official Institutions, 6016 sayılı Afet Riski Altındaki Alanların Dönüştürülmesi Hakkında Kanun Kapsamında Ortak Hizmet Uygulaması (2105-03-03-2-01-11), 2016 - 2018
- Aldemir A., Binici B., Project Supported by Other Official Institutions, 6016 sayılı Afet Riski Altındaki Alanların Dönüştürülmesi Hakkında Kanun Kapsamındaki Ortak Hizmet Uygulaması (2016-03-03-32-00-67), 2015 - 2018

## **Patent**

Binici B., Aldemir A., STRUCTURAL MODULE WHICH CAN STORE THERMAL ENERGY, Patent, CHAPTER E Constructed Constructions (Construction), The Invention Registration Number: EP 3309493 A1 , Initial Registration, 2019

## **Citations**

Total Citations (WOS):55

h-index (WOS):5