

# Prof. İZZET UFUK ÇAĞDAŞ

## Personal Information

**Office Phone:** [+90 242 310 6314](tel:+902423106314)

**Email:** izzetufuk@akdeniz.edu.tr

**Web:** <https://avesis.akdeniz.edu.tr/izzetufuk>

## International Researcher IDs

ScholarID: khnY3wIAAAAJ

ORCID: 0000-0002-2528-2978

ScopusID: 14068514800

Yoksis Researcher ID: 128449

## Education Information

Doctorate, University Of Kwazulu-Natal, School Of Mechanical Engineering, Makina Mühendisliği, South Africa 2004 - 2007

Postgraduate, Gazi University, Mühendislik-Mimarlık Fakültesi, İnşaat Mühendisliği, Turkey 1999 - 2001

Undergraduate, Gazi University, Mühendislik-Mimarlık Fakültesi, İnşaat Mühendisliği, Turkey 1994 - 1999

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Finite Element Solution of Optimization Problems, University Of Kwazulu-Natal, Faculty Of Engineering, School Of Mechanical Engineering, 2007

Postgraduate, Betonarme Döşemelerin Akma Çizgisi Yöntemi ile Analizinde Akma Çizgisi Deseninin Genetik Algoritma ile Bulunması, Gazi University, Mühendislik Mimarlık Fakültesi, İnşaat Mühendisliği Bölümü, 2001

## Research Areas

Civil Engineering, Mechanical, Building Stability, Structure, Structural Engineering, Building materials, Composite materials, Engineering and Technology

## Academic Titles / Tasks

Professor, Akdeniz University, Faculty of Engineering, Department of Civil Engineering, 2019 - Continues

Associate Professor, Akdeniz University, Faculty of Engineering, Department of Civil Engineering, 2013 - 2019

Assistant Professor, Akdeniz University, Faculty of Engineering, Department of Civil Engineering, 2007 - 2016

Research Assistant, UKZN, School of Mechanical Engineering, 2004 - 2007

Research Assistant, Gazi University, Mühendislik Fakültesi, İnşaat Mühendisliği, 1999 - 2004

## Advising Theses

- ÇAĞDAŞ İ. U., CAM ELYAF TAKVİYELİ POLİÜRETAN YÜZLÜ KOMPOZİT SANDVIÇ KİRİŞLERİN YAPISAL ANALİZ VE TESTLERİ, Postgraduate, Ö.YILDIRIM(Student), 2018
- ÇAĞDAŞ İ. U., İNCE METAL YÜZLÜ SANDVIÇ KİRİŞLERDE BATMA YÜKLERİNİN BELİRLENMESİ, Postgraduate, U.HEKİM(Student), 2018
- ÇAĞDAŞ İ. U., ÜÇ RAY KAYMA DENEYİ İLE RİJİT KÖPÜKLERİN KAYMA PARAMETRELERİNİN BELİRLENMESİ, Postgraduate, T.SARGIN(Student), 2018

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

- I. **Structural behavior of MDF beams reinforced by unidirectional glass fiber reinforced thermoset polyurethane outer layers**  
ÇAĞDAŞ İ. U., Saeedi S.  
Composite Structures, vol.295, 2022 (SCI-Expanded)
- II. **A modified three rail shear test procedure for rigid foamed materials**  
Gökova M., Sargin T., Aliyev R., Çağdaş İ. U.  
Journal Of Cellular Plastics, vol.0, no.0, pp.1-25, 2022 (SCI-Expanded)
- III. **A modified analytical expression to determine the quasi-static pre-indentation loads of metal-faced sandwich beams**  
ÇAĞDAŞ İ. U., TAŞKIN M.  
JOURNAL OF SANDWICH STRUCTURES & MATERIALS, vol.22, no.5, pp.1404-1425, 2020 (SCI-Expanded)
- IV. **Optimal design of variable stiffness laminated composite truncated cones under lateral external pressure**  
ÇAĞDAŞ İ. U.  
OCEAN ENGINEERING, vol.145, pp.268-276, 2017 (SCI-Expanded)
- V. **Optimal design of filament wound truncated cones under axial compression**  
ÇAĞDAŞ İ. U.  
COMPOSITE STRUCTURES, vol.170, pp.250-260, 2017 (SCI-Expanded)
- VI. **Effect of Fiber Orientation on Buckling and First-Ply Failures of Cylindrical Shear-Deformable Laminates**  
Cagdas I. U., ADALI S.  
JOURNAL OF ENGINEERING MECHANICS, vol.139, no.8, pp.967-978, 2013 (SCI-Expanded)
- VII. **Buckling of cross-ply laminates subject to linearly varying compressive loads and in-plane boundary restraints**  
ÇAĞDAŞ İ. U., ADALI S.  
JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS, vol.26, no.2, pp.193-215, 2013 (SCI-Expanded)
- VIII. **Optimal shapes of clamped-simply supported columns under distributed axial load and stress constraint**  
ÇAĞDAŞ İ. U., ADALI S.  
ENGINEERING OPTIMIZATION, vol.45, no.2, pp.123-139, 2013 (SCI-Expanded)
- IX. **Design of a laminated composite variable curvature panel under uniaxial compression**  
Cagdas I., ADALI S.  
ENGINEERING COMPUTATIONS, vol.29, no.1-2, pp.48-64, 2012 (SCI-Expanded)
- X. **Effect of in-plane boundary restraints on optimal design of skew laminates under buckling loads**  
ÇAĞDAŞ İ. U., ADALI S.  
COMPOSITE STRUCTURES, vol.93, no.8, pp.2060-2069, 2011 (SCI-Expanded)
- XI. **Stability analysis of cross-ply laminated shells of revolution using a curved axisymmetric shell finite element**  
Cagdas I. U.  
THIN-WALLED STRUCTURES, vol.49, no.6, pp.732-742, 2011 (SCI-Expanded)

- XII. **Buckling of cross-ply cylinders under hydrostatic pressure considering pressure stiffness**  
ÇAĞDAŞ İ. U., ADALI S.  
OCEAN ENGINEERING, vol.38, no.4, pp.559-569, 2011 (SCI-Expanded)
- XIII. **Assessment of the accuracy of homogenization in finite element analysis of grid plates under transverse loads**  
Cagdas I. U.  
ENGINEERING COMPUTATIONS, vol.27, no.5-6, pp.676-693, 2010 (SCI-Expanded)
- XIV. **Optimal design of simply supported columns subject to distributed axial load and stress constraint**  
ADALI S., ÇAĞDAŞ İ. U.  
OPTIMAL CONTROL APPLICATIONS & METHODS, vol.30, no.5, pp.505-520, 2009 (SCI-Expanded)
- XV. **Iterative algorithms for optimal design of columns subject to a stress constraint**  
ADALI S., Cagdas I. U.  
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.344, no.5, pp.711-724, 2007 (SCI-Expanded)
- XVI. **Optimal sizing of piezo-actuators for minimum-deflection design of frames under uncertain loads**  
Adali S., Sadek I. S., Bruch J. C., Sloss J. M., Cagdas I. U.  
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.344, no.5, pp.698-710, 2007 (SCI-Expanded)
- XVII. **Optimization of clamped columns under distributed axial load and subject to stress constraints**  
Cagdas I. U., ADALI S.  
ENGINEERING OPTIMIZATION, vol.39, no.4, pp.453-469, 2007 (SCI-Expanded)
- XVIII. **Deflection control of elastically restrained laminated frames under deterministic and uncertain loads using induced strain actuators**  
ADALI S., Sadek I. S., Bruch J. C., Sloss J. M., Cagdas I. U.  
COMPOSITE STRUCTURES, vol.76, no.1-2, pp.2-13, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The influence of tangential edge restraints on the nonlinear response of laminated composite cylindrical panels subject to a pinching force**  
Çağdaş İ. U.  
Konya Mühendislik Bilimleri Dergisi, vol.10, no.3, pp.623-633, 2022 (Peer-Reviewed Journal)
- II. **The Influence of Axial Compression on the Free Vibration Frequencies of Cross-ply Laminated and Moderately Thick Cylinders**  
ÇAĞDAŞ İ. U.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.23, no.1, pp.45-52, 2020 (ESCI)
- III. **Metal yüzü sandviç konsol kirişlerde numune boyunun ölçülen temel titreşim frekansına etkisi**  
ÇAĞDAŞ İ. U., Aliyev R.  
GAZİ ÜNİVERSİTESİ FEN BİLİMLERİ DERGİSİ PART: C TASARIM VE TEKNOLOJİ, vol.1, pp.1-10, 2020 (Peer-Reviewed Journal)
- IV. **Basınç rijitliğinin hidrostatik basınç etkisi altındaki katmanlı kompozit silindirlerin burulmalı burkulmalarına etkisi**  
ÇAĞDAŞ İ. U.  
Konya Mühendislik Bilimleri Dergisi, vol.1, pp.1-10, 2020 (Peer-Reviewed Journal)
- V. **Cam Elyaf Takviyeli Poliüretan Dış Yüzlü Sandviç Kirişlerin Eğilme Rijitliklerinin Konsol Kiriş Titreşim Deneyi İle Belirlenmesi**  
ÇAĞDAŞ İ. U., Yıldırım Ö.  
Gazi Üniversitesi Mühendislik Bilimleri Dergisi, vol.5, no.3, pp.273-279, 2019 (Peer-Reviewed Journal)
- VI. **Unimodal Optimization of Axially Compressed Shear Deformable Columns**  
ÇAĞDAŞ İ. U.

International Journal of Computational and Experimental Science and Engineering, vol.5, pp.100-104, 2019 (Peer-Reviewed Journal)

VII. **Failure analysis of curved composite panels based on first-ply and buckling failures**

ADALI S., ÇAĞDAŞ İ. U.

Procedia Engineering, vol.10, pp.1591-1596, 2011 (Peer-Reviewed Journal)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **Optimal design of axially compressed sandwich composite cylinders having orthogrid core**  
Çağdaş İ. U.  
ISARC 3rd International Scientific Research and Innovation Congress, İstanbul, Turkey, 26 - 27 August 2022, pp.374-379
- II. **Linearized stability analysis of space frames using a degenerated beam finite element**  
Çağdaş İ. U.  
ISARC 3rd International Scientific Research and Innovation Congress, 26 - 27 August 2022, pp.380-386
- III. **Failure analysis of curved composite panels based on first-ply and buckling failures**  
ADALI S., ÇAĞDAŞ İ. U.  
11th International Conference on the Mechanical Behavior of Materials (ICM11), Como Lake, Italy, 5 - 09 June 2011, pp.3-5
- IV. **Semi-analytical finite element vibration analysis of cross-ply cylinders**  
ÇAĞDAŞ İ. U., ADALI S.  
ISTEC-2010 International Science & Technology Conference, Magusa, Cyprus (Kkct), 27 - 29 October 2010, pp.3
- V. **Optimal design of a cylindrical composite panel under external pressure**  
ÇAĞDAŞ İ. U.  
9th International Congress on Advances in Civil Engineering, Trabzon, Turkey, 27 - 30 August 2010, pp.3-5
- VI. **Finite element solution for curved composite panels under a compressive load**  
ADALI S., ÇAĞDAŞ İ. U.  
AfriCOMP 2009, 1st African Conference on Computational Mechanics – An International Conference, Sun City, South Africa, 7 - 11 January 2009, pp.3-5
- VII. **Optimization of cylindrically curved composite panels under compressive loads**  
ÇAĞDAŞ İ. U., ADALI S.  
ICCM17, Edinburg, United Kingdom, 1 - 03 January 2009, pp.3-5
- VIII. **Effect of boundary conditions on optimal composite rectangular plates under non-uniform buckling loads**  
ADALI S., ÇAĞDAŞ İ. U.  
ICCST6, Durban, South Africa, 1 - 03 January 2007, pp.3-5
- IX. **Non-local elastic modelling of statics and dynamics of nano-sized beams in an elastic medium under distributed loads**  
Duvaut G., Lene F., ADALI S., ÇAĞDAŞ İ. U.  
ICCST6, Durban, South Africa, 1 - 03 January 2007, pp.3-5
- X. **Optimization of columns under non-uniform axial loads**  
ADALI S., ÇAĞDAŞ İ. U.  
Fifth South African Conference on Computational and Applied Mechanics, SACAM06, Cape Town, South Africa, 16 - 18 January 2006, pp.3-5
- XI. **'Optimal design of elastically clamped columns subject to distributed axial load**  
ADALI S., ÇAĞDAŞ İ. U.  
6th World Congress on Structural and Multidisciplinary Optimization, Rio De Janeiro, Brazil, 30 May - 03 June 2005, pp.3-5
- XII. **Iterative algorithms for optimal design of columns subject to a stress constraint**  
ADALI S., ÇAĞDAŞ İ. U.

ICMSAO, Sharjah, United Arab Emirates, 7 - 10 February 2005, pp.3-5

**XIII. Shape control of laminated frames under uncertain thermal and mechanical loads using piezoelectric actuators**

ADALI S., Sadek I., Sloss J., Bruch J., ÇAĞDAŞ İ. U.

ICCM15, Durban, South Africa, 1 - 03 January 2005, pp.3-5

## **Supported Projects**

ÇAĞDAŞ İ. U., YILDIRIM Ö., Project Supported by Higher Education Institutions, Çekirdek Yoğunluğu Değişken Lifli Kompozit-Sandviç Kirişlerin Eğilme Davranışlarının Deneysel ve Teorik Olarak İncelenmesi, 2016 - 2023

ÇAĞDAŞ İ. U., Other International Funding Programs, Optimal design of cross-ply laminated cylinders under hydrostatic pressure, 2009 - 2010

## **Metrics**

Publication: 39

Citation (WoS): 85

Citation (Scopus): 94

H-Index (WoS): 5

H-Index (Scopus): 5

## **Scholarships**

Doktora bursu, Official Institutions of Foreign Countries, 2004 - Continues