

Res. Asst. PhD Demet Yavuz

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International Researcher IDs

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Education Information

Doctorate, Ege University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, Turkey 2018 - 2023

Postgraduate, Van Yüzüncü Yil University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, Turkey 2016 - 2017

Undergraduate, Ataturk University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2010 - 2014

Undergraduate, Ataturk University, Mühendislik Fakültesi, Kimya Mühendisliği, Turkey 2008 - 2013

Foreign Languages

English, B2 Upper Intermediate

Research Areas

Civil Engineering, Building materials, Materials in Civil Engineering, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Van Yüzüncü Yil University, Mühendislik-Mimarlık Fakültesi, İnşaat Mühendisliği Bölümü, 2016 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Porous concrete modification with silica fume and ground granulated blast furnace slag: Hydraulic and mechanical properties before and after freeze-thaw exposure**
Yavuz D., Akbulut Z. F., Güler S.
Construction and Building Materials, vol.447, 2024 (SCI-Expanded)
- II. **Examining the Workability, Mechanical, and Thermal Characteristics of Eco-Friendly, Structural Self-Compacting Lightweight Concrete Enhanced with Fly Ash and Silica Fume**
Akbulut Z. F., Yavuz D., Tawfik T., Smarzewski P., Guler S.
MATERIALS, vol.17, no.14, pp.1-20, 2024 (SCI-Expanded)
- III. **Enhancing Concrete Performance through Sustainable Utilization of Class-C and Class-F Fly Ash: A Comprehensive Review**
Akbulut Z., Yavuz D., Tawfik T., Smarzewski P., Guler S.

SUSTAINABILITY, vol.16, no.12, pp.1-20, 2024 (SCI-Expanded)

- IV. **Efficient Sizing and Layout Optimization of Truss Benchmark Structures Using ISRES Algorithm**
Avcı M. S., Yavuz D., Ercan E., Nuhoglu A.
Applied Sciences (Switzerland), vol.14, no.8, 2024 (SCI-Expanded)
- V. **An experimental investigation of hydraulic and early and later-age mechanical properties of eco-friendly porous concrete containing waste glass powder and fly ash**
Yavuz D., Akbulut Z. F., Güler S.
Construction and Building Materials, vol.418, 2024 (SCI-Expanded)
- VI. **Mechanical and porosity properties of recycled pervious concrete aggregate-bearing pervious concretes**
Yavuz D., Gultekin A.
Journal of Sustainable Cement-Based Materials, vol.13, no.9, pp.1289-1300, 2024 (SCI-Expanded)
- VII. **Experimental study of aggregate size and gradation on pervious concretes' mechanic, hydraulic, and surface properties**
Yavuz D., Yazıcı Ş.
Structural Concrete, vol.24, no.4, pp.5451-5464, 2023 (SCI-Expanded)
- VIII. **A novel approach to estimate the tortuosity of pervious concretes using computed tomography**
Yavuz D., Yazıcı Ş., Avcı M. S., Özmen D.
Materials and Structures/Materiaux et Constructions, vol.56, no.4, 2023 (SCI-Expanded)
- IX. **Hybrid fiber reinforced concrete-filled square stub columns under axial compression**
Güler S., Yavuz D., Aydın M.
ENGINEERING STRUCTURES, vol.198, 2019 (SCI-Expanded)
- X. **Post-cracking behavior of hybrid fiber-reinforced concrete-filled steel tube beams**
Guler S., YAVUZ D.
CONSTRUCTION AND BUILDING MATERIALS, vol.205, pp.285-305, 2019 (SCI-Expanded)
- XI. **Strength prediction models for steel, synthetic, and hybrid fiber reinforced concretes**
Güler S., Yavuz D., Korkut F., Ashour A.
STRUCTURAL CONCRETE, vol.20, pp.428-445, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Freeze-thaw and drop-weight impact resistance of fiber-reinforced pervious concretes produced using recycled pervious concrete aggregate**
YAVUZ D.
Challenge Journal of Structural Mechanics, vol.10, no.4, pp.138-148, 2024 (Peer-Reviewed Journal)
- II. **Çelik Lif Katkılı Alüminyum Flexural Behaviour of Steel Fiber Reinforced Concrete-Filled Aluminum Tube Beamsın Tüp İçine Beton Doldurulmuş Kirişlerin Eğilme Dayanımlarının İncelenmesi**
Yaltay N., Yavuz D., Güler S.
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.36, no.1, pp.79-87, 2021 (Peer-Reviewed Journal)
- III. **Using Waste Marbles in Self Compacting Lightweight Concrete**
Türkmenoğlu Z. F., Türkmenoğlu M., Yavuz D.
International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering, vol.10, pp.1577-1580, 2016 (Peer-Reviewed Journal)
- IV. **Çelik Lif Katkılı Betonların Mekanik Özelliklerinin İncelenmesi**
Yavuz D., Güler S., Korkut F., Türkmenoğlu Z. F.
NWSA Engineering Science, vol.4, no.4, pp.93-99, 2016 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **HIGH PERFORMANCE CONCRETE: AN OVERVIEW**
Yaltay N., Yavuz D., Güler S.
ICENS2018, Kiev, Ukraine, 2 - 06 May 2018, pp.518
- II. **RETROFITTING METHODS OF MASONRY BUILDINGS IN TURKEY**
Güler S., Yavuz D., Yaltay N.
ICENS2018, Kiev, Ukraine, 2 - 06 May 2018, pp.517
- III. **Axial behaviour of concrete filled steel tube stub columns: a review**
Guler S., Korkut F., Yaltay N., Yavuz D.
12th International Conference on Advances in Steel-Concrete Composite Structures (ASCCS), Valencia, Spain, 27 - 29 June 2018, pp.359-363
- IV. **Compressive strength of steel fiber reinforced concrete**
Güzel E., Yavuz D., Korkut F., Güler S.
ICENS, Budapeşte, Hungary, 3 - 07 May 2017, pp.121
- V. **Compressive Strength of Fiber Reinforced Concrete with Air- Entrainment Agents**
Yavuz D., Türkmenoğlu Z. F., Güler S., Taymuş R. B.
ICENS, Budapeşte, Hungary, 3 - 07 May 2017, pp.120
- VI. **The Effect of Synthetic Fibers on Self Compacting Concrete**
Türkmenoğlu Z. F., Yavuz D., Güler S., Korkut F.
ICENS, Budapeşte, Hungary, 3 - 07 May 2017, pp.458
- VII. **Compressive Strength of Steel, Synthetic and Hybrid ReinforcedConcretes**
Güler S., Yavuz D., Yaltay N., Korkut F.
ICENS, Budapest, Hungary, 3 - 07 May 2017, pp.122
- VIII. **Mechanical Properties of Steel Fiber Reinforced Self Compacting Concrete**
Yavuz D., Güler S., Türkmenoğlu Z. F., Taymuş R. B.
ICENS, Budapeşte, Hungary, 3 - 07 May 2017, pp.314
- IX. **The Use Of Some Rocks Used As Consrtruction Stones in Turkey**
Türkmenoğlu Z. F., Güler S., Yavuz D.
3. International Conference on Civil and Environmental Engineering, İzmir, Turkey, 24 April 2017 - 27 April 2018, pp.682
- X. **The Effect of Air Entraining Agents on Compressive Strength**
Yavuz D.
ICCEQS 2016, Hong Kong, China, 5 - 06 December 2016, pp.746-749
- XI. **An Investigation on Ultrasonic Pulse Velocity of Hybrid Fiber Reinforced Concretes**
Güler S., Yavuz D., taymuş r. b., Korkut F.
ICCEQS 2016: 18th International Conference on Construction Engineering and Quantity Surveying, Hong Kong, China, 5 - 06 December 2016, pp.56-60
- XII. **Using of Waste Marbles in Self-Compacting Lightweight Concrete**
Türkmenoğlu Z. F., Türkmenoğlu M., Yavuz D.
18th International Conference on Construction Engineering and Quantity Surveying, Hong Kong, China, 5 - 06 December 2016, pp.738-742
- XIII. **Compressive strength of synthetic fiber reinforced concretes**
Güler S., Yavuz D., Korkut F.
ICCEUP 2016,, Seattle, United States Of America, 8 - 09 August 2016, pp.1519-1521
- XIV. **Ultrasonic pulse velocity of steel and synthetic fiber reinforced concretes**
Yavuz D., Korkut F., Güler S.
ICASCE 2016, Londra, United Kingdom, 26 - 27 July 2016, pp.239-242

Supported Projects

Yaltay N., Yavuz D., Korkut F., Güler S., Aydın M., Project Supported by Higher Education Institutions, Alüminyum tüp içine

beton doldurulmuş kirişlerin eğilme dayanımlarının incelenmesi, 2018 - 2019

Güler S., Korkut F., Yavuz D., Türkmenoğlu Z. F., Yaltay N., Aydın M., Project Supported by Higher Education Institutions, Normal ve paslanmaz çelik tüp içine beton doldurulmuş kirişlerin eğilme dayanımlarının incelenmesi, 2018 - 2018

Güler S., Güzel E., Korkut F., Yaltay N., Yavuz D., Türkmenoğlu Z. F., Taymuş R. B., Gülen M., Project Supported by Higher Education Institutions, Lif katkıli kendiliğinden yerleşen betonların basınç dayanımlarının yüksek sıcaklık etkisi altında incelenmesi, 2017 - 2017

Korkut F., Yavuz D., Türkmenoğlu Z. F., Yaltay N., Project Supported by Higher Education Institutions, Çelik ve Sentetik Lif Katkıli Kendiliğinden Yerleşen Betonların Taze ve Sertleşmiş Beton Özelliklerinin İncelenmesi, 2016 - 2017

Güler S., Yaltay N., Yavuz D., Korkut F., Türkmenoğlu Z. F., Project Supported by Higher Education Institutions, Sentetik Lif Katkıli Betonların Basınç Dayanımlarının İncelenmesi, 2016 - 2017

Güler S., Türkmenoğlu Z. F., Güzel E., Korkut F., Gülen M., Yavuz D., Project Supported by Higher Education Institutions, Çelik Lif Katkıli Betonların Mekanik Özelliklerinin İncelenmesi, 2016 - 2016

Metrics

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