

## Res. Asst. PhD Yurdakul AYGÖRMEZ

### Personal Information

**Email:** aygormez@yildiz.edu.tr

**Web:** <http://www.yarbis1.yildiz.edu.tr/aygormez/>

**Address:** Yıldız Teknik Üniversitesi İnşaat Fakültesi B Blok 2-030

### Education Information

Doctorate, Yıldız Technical University, Graduate School of Natural and Applied Sciences, Civil Engineering, Turkey 2014 - 2018

Postgraduate, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, Turkey 2011 - 2014

Undergraduate, Karadeniz Teknik Üniversitesi, İnşaat, İnşaat, Turkey 2006 - 2010

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Investigation of colemanite waste and silica fume on the mechanical and durability properties of metakaolin based geopolymer mortar, Yıldız Technical University, Faculty of Construction, Civil Engineering Department, 2018

Postgraduate, KALIN SAYILABİLECEK PLAKLARDA KAYMA KİLİTLENMESİ PROBLEMİ, İstanbul Teknik Üniversitesi, İnşaat, İnşaat, 2014

### Research Areas

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

### Academic Titles / Tasks

Research Assistant PhD, Yıldız Teknik Üniversitesi, Faculty of Construction, Civil Engineering Department, 2019 - Continues

Research Assistant, Yıldız Technical University, Faculty Of Construction, Civil Engineering Department, 2014 - 2018

Research Assistant, İstanbul Teknik Üniversitesi, İnşaat, İnşaat, 2011 - 2014

### Courses

Teknik Resim ve Tasarı Geometri, Undergraduate, 2020 - 2021

Introductory Computer Sciences, Undergraduate, 2018 - 2019, 2019 - 2020

İNŞAAT MÜHENDİSLİĞİNE GİRİŞ, Undergraduate, 2020 - 2021

Temel Bilgisayar Bilimleri, Undergraduate, 2018 - 2019

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

- I. **Evaluation of the red mud and quartz sand on reinforced metazeolite-based geopolymer composites**  
AYGÖRMEZ Y.  
Journal of Building Engineering, vol.43, 2021 (Journal Indexed in SCI Expanded)
- II. **Assessment of performance of metabentonite and metazeolite-based geopolymers with fly ash sand replacement**  
AYGÖRMEZ Y.  
Construction and Building Materials, vol.302, 2021 (Journal Indexed in SCI)
- III. **Effect of basalt fiber on metakaolin-based geopolymer mortars containing ritem, basalt and recycled waste concrete aggregates**  
Sahin F., UYSAL M., CANPOLAT O., AYGÖRMEZ Y., Cosgun T., Dehghanpour H.  
CONSTRUCTION AND BUILDING MATERIALS, vol.301, 2021 (Journal Indexed in SCI)
- IV. **Long-term sulfuric and hydrochloric acid resistance of silica fume and colemanite waste reinforced metakaolin-based geopolymers**  
Aygörmez Y., Canpolat O.  
Revista de la Construcción, vol.20, no.2, pp.291-307, 2021 (Journal Indexed in SCI Expanded)
- V. **Sulfuric acid effect and application of freezing-thawing curing on long fiber reinforced metabentonite and slag-based geopolymer composites**  
AYGÖRMEZ Y.  
ADVANCES IN CONCRETE CONSTRUCTION, vol.12, no.2, pp.145-156, 2021 (Journal Indexed in SCI)
- VI. **Performance of ambient and freezing-thawing cured metazeolite and slag based geopolymer composites against elevated temperatures**  
AYGÖRMEZ Y.  
REVISTA DE LA CONSTRUCCION, vol.20, no.1, pp.145-162, 2021 (Journal Indexed in SCI)
- VII. **A survey on one year strength performance of reinforced geopolymer composites**  
AYGÖRMEZ Y., CANPOLAT O., Al-mashhadani M. M.  
CONSTRUCTION AND BUILDING MATERIALS, vol.264, 2020 (Journal Indexed in SCI)
- VIII. **Assessment of geopolymer composites durability at one year age**  
AYGÖRMEZ Y., CANPOLAT O., Al-mashhadani M. M.  
JOURNAL OF BUILDING ENGINEERING, vol.32, 2020 (Journal Indexed in SCI)
- IX. **High-temperature effects on white cement-based slurry infiltrated fiber concrete with metakaolin and fly ash additive**  
AYGÖRMEZ Y., Al-mashhadani M. M. , CANPOLAT O.  
REVISTA DE LA CONSTRUCCION, vol.19, no.2, pp.324-333, 2020 (Journal Indexed in SCI)
- X. **Evaluation of the 12–24 mm basalt fibers and boron waste on reinforced metakaolin-based geopolymer**  
Ali N., Canpolat O., Aygörmez Y., Al-Mashhadani M. M.  
Construction and Building Materials, vol.251, 2020 (Journal Indexed in SCI)
- XI. **Elevated temperature, freezing-thawing and wetting-drying effects on polypropylene fiber reinforced metakaolin based geopolymer composites**  
Aygörmez Y., Canpolat O., Al-Mashhadani M. M. , Uysal M.  
CONSTRUCTION AND BUILDING MATERIALS, vol.235, 2020 (Journal Indexed in SCI)
- XII. **Influence of wetting-drying curing system on the performance of fiber reinforced metakaolin-based geopolymer composites**  
Arslan A. A. , Uysal M., Yilmaz A. O. , Al-Mashhadani M. M. , Canpolat O., Sahin F., Aygörmez Y.  
CONSTRUCTION AND BUILDING MATERIALS, vol.225, pp.909-926, 2019 (Journal Indexed in SCI)
- XIII. **High-temperature behavior and mechanical characteristics of boron waste additive metakaolin based geopolymer composites reinforced with synthetic fibers**  
Celik A., Yilmaz K., Canpolat O., Al-Mashhadani M. M. , Aygörmez Y., Uysal M.  
CONSTRUCTION AND BUILDING MATERIALS, vol.187, pp.1190-1203, 2018 (Journal Indexed in SCI)

- XIV. **Effect of using colemanite waste and silica fume as partial replacement on the performance of metakaolin-based geopolymer mortars**  
Uysal M., Al-Mashhadani M. M. , Aygörmez Y., Canpolat O.  
CONSTRUCTION AND BUILDING MATERIALS, vol.176, pp.271-282, 2018 (Journal Indexed in SCI)
- XV. **Mechanical and microstructural characterization of fiber reinforced fly ash based geopolymer composites**  
Al-Mashhadani M. M. , Canpolat O., Aygörmez Y., Uysal M., Erdem S.  
CONSTRUCTION AND BUILDING MATERIALS, vol.167, pp.505-513, 2018 (Journal Indexed in SCI)

### Articles Published in Other Journals

- I. **Evaluation of the performance of fiber-reinforced rice husk ash substituted white cement samples**  
Aygörmez Y.  
Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, no.2, pp.543-559, 2021 (National Refreed University Journal)
- II. **Effect of Fly Ash and Ground Granulated Blast Furnace Slag on The Strength of Concrete Pavement**  
ACIKÖK F., CANPOLAT O., Uysal M., AYGÖRMEZ Y., ŞAHİN F.  
Journal of Sustainable Construction Materials and Technologies, vol.3, pp.278-285, 2018 (Refereed Journals of Other Institutions)
- III. **Abrasion Resistance and Strength Properties of Non-Fibrous and Steel Fiber Reinforced Mortars With Different Aggregates**  
Almashhadani M. M. , Canpolat O., Karagöz M., Aygörmez Y., Uysal M.  
Journal of Sustainable Construction Materials and Technologies, vol.3, no.2, pp.221-229, 2018 (Refereed Journals of Other Institutions)
- IV. **Investigation of Waste Products of Boron and Metakaolin Utilizes**  
Mushurov M., Canpolat O., Uysal M., Almashhadani M. M. , Aygörmez Y.  
Journal of Sustainable Construction Materials and Technologies, vol.3, no.2, pp.212-220, 2018 (Refereed Journals of Other Institutions)
- V. **Effect of Using Colemanite and Basalt Fiber on the Mechanical Properties of Metakaolin-Based Geopolymer Mortars**  
Nawar A., Canpolat O., Almashhadani M. M. , Aygörmez Y., Uysal M.  
Journal of Sustainable Construction Materials and Technologies, vol.3, no.2, pp.235-241, 2018 (Refereed Journals of Other Institutions)

### Refereed Congress / Symposium Publications in Proceedings

- I. **WETTING-DRYING RESISTANCE OF SLAG AND KAOLIN-BASED GEOPOLYMER CONCRETES WITH THE TALL AND SHORT BASALT FIBERS**  
Aygörmez Y.  
12th. INTERNATIONAL CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL AND MEDICAL SCIENCES, Paris, France, 9 - 11 July 2021, pp.402-411
- II. **INVESTIGATION OF PERFORMANCE OF ZEOLITE AND KAOLIN SUBSTITUTED WHITE CEMENT BASED CONCRETE SAMPLES**  
Aygörmez Y.  
2nd INTERNATIONAL BAKU CONFERENCE ON SCIENTIFIC RESEARCH, Baku, Azerbaijan, 28 - 30 April 2021, pp.527-538
- III. **INVESTIGATION OF MECHANICAL PROPERTIES OF BENTONITE AND QUARTZ SAND SUBSTITUTED PORTLAND CEMENT BASED SAMPLES**  
Aygörmez Y.

INTERNATIONAL EUROASIA Congress on Scientific Researches and Recent Trends 7. , Baku, Azerbaijan, 6 - 09 December 2020, pp.486-496

- IV. **Effect of Composition on Melt Flow and Density of Polypropylene Copolymer/Kaolin Geo-Filler Composites**  
Zulkifli Z., Daud Y. M. , Zainal F. F. , Hashim M. F. A. , Aygörmez Y.  
INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS ENGINEERING & TECHNOLOGY (ICAMET 2020), Melaka, Malaysia, 26 - 27 November 2020, pp.280
- V. **Bentonitin Geopolimer Üretiminde Kullanılabilirliğinin Araştırılması**  
Kabirova A., Uysal M., Canpolat O., Şahin F., Aygörmez Y., Al-Mashhadani M. O. M.  
5. Uluslararası Öğrenci Sempozyumu, İstanbul, Turkey, 6 - 08 December 2019, pp.54-65
- VI. **YOL KAPLAMA UYGULAMALARINDA ALTİGEN BİÇİMLİ MİKRO ÇELİK FİBER DONATILARIN KULLANIMI**  
Şahin O., Aygörmez Y.  
5. ULUSLARARASI MUHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, İstanbul, Turkey, 21 - 22 December 2019, pp.1540
- VII. **NANO MALZEMELERİN DONMA-ÇÖZÜLME ETKİSİNE KARŞI YOL KAPLAMA UYGULAMALARINDA KULLANILMASI**  
Aygörmez Y., Şahin O.  
5. ULUSLARARASI MUHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, İstanbul, Turkey, 21 - 22 December 2019, pp.1582
- VIII. **Uçucu Kül ve Öğütülmüş Yüksek Fırın Cürufunun Beton Yol Karışımlarının Basınç Dayanımı ve Durabilitesine Olan Etkilerinin Araştırılması**  
Acikok F., Canpolat O., Uysal M., Aygörmez Y.  
1. Beton Yollar Kongresi ve Sergisi, Ankara, Turkey, 13 - 14 November 2019, pp.275-285
- IX. **Fly Ash Based Geopolymer Composites Partially Replaced With Silica Fume: An Experimental Investigation**  
Al-Mashhadani M. O. M. , Canpolat O., Aygörmez Y., Uysal M., Şahin F.  
Fifth International Conference on Sustainable Construction Materials and Technologies, London, United Kingdom, 14 - 17 July 2019, pp.74-82
- X. **Sulfate Resistance Of Sustainable Geopolymer Mortars**  
Aygörmez Y., Canpolat O., Al-Mashhadani M. O. M. , Uysal M., Şahin F.  
Fifth International Conference on Sustainable Construction Materials and Technologies, London, United Kingdom, 14 - 17 July 2019, pp.56-65
- XI. **The investigation of mechanical and durability properties of red mud-metakaolin based geopolymers mortars with different filling materials**  
Chakkor O., Tammam Y., Altan M. F. , Uysal M., Canpolat O., Aygörmez Y., Al-Mashhadani M.  
4th Eurasian Conference on Civil and Environmental Engineering (ECOCEE), İstanbul, Turkey, 17 - 18 June 2019, pp.875
- XII. **Mechanical and Durability Properties of Fly Ash Based Geopolymers Mortars with Different Filling Materials**  
Tammam Y., Chakkor O., Uysal M., Canpolat O., Aygörmez Y., Al-Mashhadani M., Sahin F.  
4th Eurasian Conference on Civil and Environmental Engineering (ECOCEE), İstanbul, Turkey, 17 - 18 June 2019, pp.866-874
- XIII. **Using different types of aggregates including waste concrete in the production of geopolymer mortars**  
Canpolat O., Şahin F., Uysal M., Al-Mashhadani M. O. M. , Aygörmez Y.  
5th International Conference on Sustainable Construction Materials and Technologies, SCMT 2019, Kingston upon Hull, England, 14 - 17 July 2019, vol.2
- XIV. **Experimental notes on the factors affecting the strength behavior of fly ash based geopolymer composites**  
CANPOLAT O., AYGÖRMEZ Y., Al-mashhadani M. M. , Uysal M.

4th International Conference on Green Design and Manufacture 2018, IConGDM 2018, Ho Chi Minh, Vietnam, 29 - 30 April 2018, vol.2030

**XV. Compressive and flexural strength behaviors of metakaolin based geopolymer mortars manufactured by different procedures**

AYGÖRMEZ Y., CANPOLAT O., Al-Mashhadani M., UYSAL M.

4th International Conference on Green Design and Manufacture 2018, IConGDM 2018, Ho Chi Minh, Vietnam, 29 - 30 April 2018, vol.2030

**XVI. Kalın Sayılabilecek Plaklarda Kayma Kilitlenmesi Problemi**

AYGÖRMEZ Y., AKSU ÖZKUL T.

19. ULUSAL MEKANİK KONGRESİ, Trabzon, Turkey, 24 August 2015, no.11, pp.158-168

## Supported Projects

Aygörmez Y., Project Supported by Higher Education Institutions, APPLICATION OF LIGHT-WEIGHT AGGREGATES AND DIFFERENT ADDITIVES IN MORTAR PRODUCTION AND INVESTIGATION OF MECHANICAL AND DURABILITY PROPERTIES, 2021 - 2023

Uysal M., Canpolat O., Coşgun T., Aygörmez Y., TUBITAK Project, Endüstriyel Atık Malzemelerin Atık Beton Agregası İle Yer Değiştirmesiyle Üretilen Kırmızı Çamur-Metakaolin Tabanlı Sürdürülebilir Geopolimer Kompozitlerin Mekanik Ve Durabilite Özelliklerinin İncelenmesi, 2021 - 2022

CANPOLAT O., Tammam Y., Chakkor O., DEHGHANPOUR H., ALTAN M. F. , UYSAL M., AYGÖRMEZ Y., Şahin F., KABİROVA A., AL-MASHHADANI M. M. , et al, Project Supported by Higher Education Institutions, ATIK BETON AGREGA KATKILI SÜRDÜRÜLEBİLİR GEOPOLİMER KOMPOZİTLERİN MEKANİK VE DURABİLİTE ÖZELLİKLERİNİN BELİRLENMESİ, 2019 - 2021

CANPOLAT O., Mashhadani M., ARSLAN A. A. , UYSAL M., AYGÖRMEZ Y., KABİROVA A., Project Supported by Higher Education Institutions, BOR ATIK ÜRÜNLERİNİN GEOPOLİMER BETON ÜRETİMİNDE KULLANILABİLİRLİĞİNİN ARAŞTIRILMASI, 2017 - 2019

CANPOLAT O., AYGÖRMEZ Y., Project Supported by Higher Education Institutions, KOLEMANİT ATIĞI VE SİLİS DUMANI KATKILI METAKAOLİN TABANLI GEOPOLİMER HARCIN MEKANİK VE DURABİLİTE ÖZELLİKLERİNİN İNCELENMESİ, 2016 - 2019

## Scientific Refereeing

JOURNAL OF RENEWABLE MATERIALS, Journal Indexed in SCI-E, September 2021

CONSTRUCTION AND BUILDING MATERIALS, Journal Indexed in SCI-E, September 2021

Arabian Journal For Science And Engineering, Journal Indexed in SCI-E, August 2021

Construction And Building Materials, Journal Indexed in SCI-E, July 2021

Powder Technology, Journal Indexed in SCI-E, July 2021

Journal Of The Brazilian Society Of Mechanical Sciences And Engineering, SCI Journal, June 2021

Sigma Journal of Engineering and Natural Sciences, Journal Indexed in ESCI, June 2021

Geomechanics and Engineering, Journal Indexed in SCI-E, May 2021

Hittite Journal of Science and Engineering, National Scientific Refreed Journal, March 2021

JOURNAL OF PETROLEUM EXPLORATION AND PRODUCTION TECHNOLOGY, Journal Indexed in SCI-E, February 2021

Research on Engineering Structures and Materials, Other Indexed Journal, February 2021

ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, Journal Indexed in SCI-E, January 2021

Firat Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, October 2020

REVISTA DE LA CONSTRUCCION, Journal Indexed in SCI-E, October 2020

CONSTRUCTION AND BUILDING MATERIALS, Journal Indexed in SCI-E, March 2020

Powder Technology, Journal Indexed in SCI-E, January 2020

## **Edit Congress and Symposium Activities**

Experimental Notes on the Factors Affecting the Strength Behavior of Fly Ash Based Geopolymer Composites, Attendee, Turkey, 2018

Compressive and Flexural Strength Behaviors of Metakaolin Based Geopolymer Mortars Manufactured by Different Procedures, Attendee, Thanh-Pho-Ho-Chi-Minh, Vietnam, 2018

19. ULUSAL MEKANİK KONGRESİ, Attendee, Trabzon, Turkey, 2015

## **Citations**

Total Citations (WOS):209

h-index (WOS):7

## **Awards**

Aygörmez Y., Yıldız Teknik Üniversitesi Rektörlüğü Akademik Teşvik Ödülü, Yıldız Teknik Üniversitesi Rektörlüğü , March 2021

Canpolat O., Aygörmez Y., Uysal M., ULUSLARARASI BİLİMSEL YAYIN TEŞVİK PROGRAMI, Tübitak Ulakbim Cabim, February 2020