CV of Prof. Dr. Ramazan DEMIRBOGA

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https://scholar.google.com/citations?user=uBSfY50AAAAJ&hl=en

EDUCATION

High School: Istanbul Kabatas Erkek Lisesi, 1987

B.S. Middle East Technical University (METU) Turkey, Civil Engineering 1992, TURKEY

M.S. Dumlupinar University, Structural Engineering, Construction Materials in Civil Engineering, August 1995, TURKEY

Ph.D. Ataturk University, Erzurum, Structural Engineering, Construction Materials in Civil Engineering, December 1999, TURKEY

APPOINTMENTS

18.09. 2016- Present, Alfaisal University, Riyadh, Saudi Arabia

8.2013- 9. 2016, King Abdulaziz University, Saudi Arabia

10.2010-8.2013 University Putra Malaysia, Engineering Faculty Civil Engineering Department, Malaysia.

08.01.2010- Promoted to Professor Position, Ataturk University Eng. Fac., Civil Eng. Dep., Turkey.

2008 - 2010 Deputy Dean & head of Construction Materials, Ataturk University, TURKEY.

10.12.2004 -07.01.2010 Associate Professor, at Ataturk University

2003- 2004 Ohio State University, Columbus, USA (Visiting Scholar with Prof.Hojjat Adeli))

28.12.2001- 08.02.2005 Assistant Professor, Ataturk University

22.04.1993-27.12.2001 Research Assistant, Ataturk University, TURKEY

Date of Birth: 18.02.1969

CONSULTANCY and ENDUSTRIAL EXPERIENCE

1) Assessed Erzurum Airport concrete quality assessment and rehabilitation of the Erzurum Airport by epoxy injection.
2) Agri Ready-mixed concrete Company's concrete mix design.
3) Erzurum Ready-mixed concrete company's concrete mix design.
4) Assessment and rehabilitation of Agri Airport Tower.
5) Concrete quality controls of many public buildings such as schools, logjams, and hospitals in the eastern part of Turkey have been done.

TEACHING

Teaching Experience (1993-Now):

Over 26 years of teaching experience (1993-2019) - taught graduate and undergraduate students, developed undergraduate/graduate programs.

Supervised under-graduate/graduate/PhD/Post-doctoral students, and examiner of Master's/PhD thesis.

External Examiner: University of Malaya, Malaysia.

Undergraduate Courses

- Materials of Construction
- Concrete Technology
- Mechanics of Materials, Solid Mechanics, Strength of Materials
- Reinforced Concrete Design
- Structural Analysis
- Structural Mechanics
- Introduction to Geotechnical Engineering
- Statics
- Materials Science
- Materials for Civil and Construction Engineers
- CE499 Senior Project

Postgraduate Courses

-Assessment and Rehabilitation of Concrete structures
- Advanced Concrete Technology
-Durability of Construction Materials

- Admixtures for Concrete

SUPERVISED THESIS

PhD: 11 (2 in progress & 9 completed), Masters: 9 (7 completed & 2 in progress);

ADMINISTRATIVE EXPERIENCE and Professional Activities:

Vice- Dean of Engineering Faculty, Ataturk University, Erzurum, TURKEY, 2008-2010

Chairman of the following related University Committees:

- MUDEK (Association for Assessment and Accreditation of Engineering Programs)

- **NCAAA Team member**, Review Panel for Building Engineering Program- (IAU) Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia, from 19/10/2018 to 25/10/2018.

-**NCAAA Team member,** Review Panel for Building Engineering Program- (KSU) King Saud University, Riyadh, Saudi Arabia, from 31/03/2019 to 03/04/2019.

- Summer practice Affairs Committee

- Staff Affairs Committee

- Personnel Committee

- Manpower Planning Subcommittee

-ABET Committee Member, King Abdulaziz University

-ABET Committee Member, University Putra Malysia

- Course Coordinator (Statics and Mechanics of Materials)

Professional Affiliation:

- Member of Union of chamber of Turkish Engineering architects – chamber of civil engineers

- Malaysian Society for Engineering & Technology

- ACI E- member

TECHNICAL ACTIVITIES:

Technical committee members and paper reviewer of many symposiums in Malaysia.

Advenced Concrete Technology Workshop, Keynote speaker, 16-17 April, 2013, Putrajaya, Malaysia.

RESEARCH ACTIVITIES

Development of blended cement, concrete and other construction materials (high Performance / self-consolidating concrete, lightweight concrete, controlled low strength materials, green concrete) for sustainable development with novel materials ranging from natural and industrial wastes (silica fume, fly ash, and slag), viscosity modifying agent, antifreeze admixtures, natural lime as well as volcanic materials (ash, pumice and perlite). My studies includes: fresh and hardened properties, rheology, bond characteristics, durability (freeze-thaw resistance, porosity, diffusivity, drying shrinkage, autogenous shrinkage, and water/chloride permeability), and marina performance (chloride and sulphate environments), pozzolanic and alkali-silica reaction, thermal conductivity, fire resistance, macro and microstructural properties (XRD, MIP, SEM etc.), and their use in the development of structural elements. Application of nanomaterials (such as nano- silica, nano- titanium and halloysite nano clay) to the construction technology has been studied. Geopolymer cement from waste agro, blast furnace slag, pumice and natural pozzolanic materials is investigated. Application of neural network to the construction materials; non-destructive testing (NDT) methods are applied in many projects. Assessment and rehabilitation of structural elements exposed to elevated temperature have been studied. The strengthening methods such as a polymer injection, steel plate, and wrapping with different types of materials such as polymer, carbon fibre, aramid and steel fibres, and their mats were used in some projects.

Area of Interest:

Analytical design of construction materials

Sustainability of construction materails; Waste materials, Reuse

Corrosion of Steel in Concrete

Durability of Concrete Materials

Materials Characterization at nano, micro and macro levels.

Structural Rehabilitation with Composite Systems and epoxies.

Green Concrete

Geoploymer concrete

Nano materials

Lightweight concrete

Cold weather concreting

Mineral and chemical admixtures for concrete

Referee of below international journals

- Cement concrete Research Journal

-Cement Concrete Coposite

- Building and Environment Journal

- Journal of Hazardous Materials

- Building and Construction Materials

- Indian Journal of Engineering Materials

- Journal of Materials Processing Technology

PANELIST IN BELOW TERMS

- 2006 European Committee funded projects

- November 2006 term, Engineering Research Group, Civil Engineering Department projects, The Scientific and Technological Research Council of Turkey

- November 2007 term, Engineering Research Group, Civil Engineering Departments projects, The Scientific and Technological Research Council of Turkey

- Evaluation of the TEYDEB KOBI Grant Program Project 2006, The Scientific and Technological Research Council of Turkey.

- Projects of Turkish Ministry of Industry and Trade 2010

AWARDS

Alfaisal University College of engineering research award 2019

Faculty Awards for Research Excellence 2019 at the Alfaisal University level

Publication Incentive Award by Incentive Program for International Scientific Publications, 2018, the Scientific and Technological Research Council of Turkey

Alfaisal University College of engineering research award 2017

Deanship of Scientific Research of King Abdulaziz University, Publication award 2015

Erzurum Ataturk University distinguished scientist recognition Award 2014.

Deanship of Scientific Research of King Abdulaziz University, Publication award, 2014

Ataturk University Engineering Faculty Award, Erzurum, 2014.

University Putra Malaysia, Production incentive award, 2012.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2015, The Scientific and Technological Research Council of Turkey

Publication Incentive Award by Incentive Program for International Scientific Publications, 2014, The Scientific and Technological Research Council of Turkey

Publication Incentive Award by Incentive Program for International Scientific Publications, 2013, The Scientific and Technological Research Council of Turkey.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2012, The Scientific and Technological Research Council of Turkey.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2011, The Scientific and Technological Research Council of Turkey.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2010, The Scientific and Technological Research Council of Turkey.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2009, The Scientific and Technological Research Council of Turkey.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2008, The Scientific and Technological Research Council of Turkey.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2005, The Scientific and Technological Research Council of Turkey.

Publication Incentive Award by Incentive Program for International Scientific Publications, 2004, The Scientific and Technological Research Council of Turkey(4 times).

Publication Incentive Award by Incentive Program for International Scientific Publications, 2003, The Scientific and Technological Research Council of Turkey (3 times).

Publication Incentive Award by Incentive Program for International Scientific Publications, 2002, The Scientific and Technological Research Council of Turkey(1 time).

H-INDEXES:

H-Index: 30 according to the Google scholar.

Overall cited times: 2800 +

PUPLICATION LIST

BOOKS

Demirboga R., Turkmen I., Sahin R., Construction Materials (In Turkish), Lecture notes.

EDITOR

Editor of "Building and Construction" book (in Turkish)

SCI-ISI- JOURNALS PAPERS

Under review

Adnan Kocamaz, Yaşar Ayaz, İbrahim Türkmen, **Ramazan Demirboğa**, Mehmet Burhan Karakoç, Use of Tree Model M5P Classifiers to Model Compressive Strength and UPV of Mineral Admixtured Concretes, *Journal of Computational Materials Science*.

M.Akif, Kaygusuz and **Ramazan Demirboğa**, Experimental study of the behaviour of elevated temperature damaged RC beams confined with FRP. Structural Concrete

PUBLISHED PAPERS

In 2019

1- Rıza Polata, **Ramazan Demirboğa**, F Karagöl Mechanical and physical behavior of cement paste and mortar incorporating nano-CaO, *Structural Concrete, 2019, 20 (1), 361-370.*

In 2018

2- Rıza Polata, **Ramazan Demirboğa**, Fatma Karagöl, The Influence of Expanded Perlite Aggregate on Compressive Strength, Linear Autogenous Shrinkage, Restrained Shrinkage, Heat of Hydration of Cement-Based Materials. Structural Concrete, 2018, 19(6), pp.1771-1781.

3- Fatma Karagöl, Yavuz Yegin, Rıza Polata, Ahmet Benli, **Ramazan Demirboğa**, The Influence of Lightweight Aggregate, Freezing-Thawing Procedure and Air Entraining Agent on Freezing-Thawing Damage, *Structural Concrete*, 2018, 19(5), pp. 1328-1340.

In 2017

4- R Polat, **R Demirboğa**, F Karagöl, The effect of nano-MgO on the setting time, autogenous shrinkage, microstructure and mechanical properties of high performance cement paste and mortar. Construction and Building Materials, 2017, 156, 208-218

5- MM Yadollahi, A Benli, **R Demirboga,** Application of adaptive neuro-fuzzy technique and regression models to predict the compressive strength of geopolymer composites, Neural Computing and Applications 28 (6), 1453-1461(2017)

6- M. H. Rafiei, Waleed H. Khushefati, **Demirboga R.**, Hojjat Adeli, Novel Approach For Concrete Mix Design Using Neural Dynamics Model And The Virtual Lab Concept, *ACI Materials Journal* 114 (1) (2017).

7- M. H. Rafiei, Waleed H. Khushefati, **Demirboga R.**, Hojjat Adeli, Supervised Deep Restricted Boltzmann Machine For Estimation of Concrete Strength, *ACI Materials Journal* 114 (1), 2017.

8- İ Türkmen, AF Bingöl, A Tortum, **R Demirboğa**, R Gül, Properties of pumice aggregate concretes at elevated temperatures and comparison with ANN models, Fire and Materials, 41 (2), 142-153 (2017)

In 2016

9- M. H. Rafiei, Waleed H. Khushefati, **Demirboga R**, Hojjat Adeli, Neural Network, Machine Learning, and Evolutionary Approaches For Concrete Material Characterization, *ACI Materials Journal*. Volume: 113, Issue: 6, 2016

10- TM Al-zharani, **Demirboga R**, WH Khushefati, O Taylan, Measurement and prediction of correction factors for very high core compressive strength by using the adaptive neuro-fuzzy techniques. Construction and Building Materials 122, 320-331. 2016.

11- TM Al-zharani, **R Demirboga**, WH Khushafati Relationship Between Core Compressive Strength and UPV Values for Different Core Slenderness of High Strength Concrete Beam, 3 rd International Balkans Conference on Challenges of Civil Engineering, 3-BCCCE, 19-21 May 2016, Epoka University, Tirana, Albania.

12- Karakoc M. B., Türkmen İ., F. Kantarci, **Demirboga R.**, M. M.Maraş Fire Resistance of Geopolymer Concrete Produced from Elazığ Ferrochrome Slag, Journal Fire Mater. 2016; 40:836–847.

13- Ahmet Benli, Yadollahi, M.M**., Demirboğa R,** Application of adaptive neuro-fuzzy technique and regression models to predict the compressive strength of geopolymer Composites", Neural Computing and Applications, January 2016, Pages 1-9. (**DOI:** 10.1007/s00521-015-2159-6**).**

14- Karakoc M. B., Türkmen İ., F. Kantarci, **Demirboga R.,** M. M.Maraş Sulfate Resistance of Ferrochrome Slag Based Geopolymer Concrete, *International Ceramics*, 42 (1), 1254-1260, 2016.

15- Mohammad Panjehpour, Nima Farzadnia, Ramazan Demirboga, Abang Abdullah Abang Ali, Behavior of high-strength concrete cylinders repaired with CFRP sheets', Journal of Civil Engineering and Management 22 (1), 56-64 2016.

In 2015

16- Ibrahim Türkmen, A. Ferhat Bingöl and **Ramazan Demirbog,** Properties of Perlite aggregate Concretes After Elevated Temperatures, *Academic Journal of Science*, 149–156 (2015)

17- Ahmet Benli, Yadollahi, M.M., Demirboğa R, The Effects of Silica Modulus and Aging on Compressive Strength of Pumice-Based Geopolymer Composites, Construction & Building Materials, 2015. 94: p. 767–774. (doi:10.1016/j.conbuildmat.2015.07.052)

18- Demirboga R., F. Karagol, W. H. Khushafeti, Behavior of Fresh and Hardened Concretes with Antifreeze Admixtures in Deep-Freeze Low Temperatures and Exterior Winter Conditions, Construction & Building Materials 76 (2015) 388–395.

19- Polat R. , Demirboga R., W. H. Khushafeti, Effects of nano and micro size of CaO and MgO, nano-clay and expanded perlite aggregate on the autogenous shrinkage of mortar Construction & Building Materials 81 (2015) 268–275.

20- Omer sharmark, Demirboga R., W. H. Khushafeti, Relationship between Compressive Strength and UPV of GGBFS Based Geopolymer Mortars Exposed to Elevated Temperatures. Construction and Building Materials, *Volume 94, 30 September 2015, Pages 189-195.*

21- Omer sharmark, Demirboga R., W. H. Khushafeti, GGBFS Based Geopolymer Mortars Immersed in Sodium and Magnesium Sulfate Solutions and Sea Water, International Journal of Engineering Research & Technology (IJERT) , Vol. 4 Issue 02, February-2015.

22- Moslih Amer Salih, Abang Abdullah Abang Ali, Nima Farzadnia, Ramazan Demirboga Development of high strength alkali activated binder using palm oil fuel ash and GGBS at ambient temperature. Construction and Building Materials 93 (2015) 289–300.

23- Moslih Amer Salih, Abang Abdullah Abang Ali, Nima Farzadnia, Ramazan Demirboga, Effect of different curing temperatures on alkali activated palm oil fuel ash paste**,** *Volume 94, 30 September 2015, Pages 116-125*.

24- Ahmet Benli, Yadollahi, M.M., Demirboğa R., Effects of elevated temperature on pumice based geopolymer composites. *Plastics, Rubber and Composites* (prcprcme3378.3d 10/6/2015), DOI: 10.1179/1743289815Y.0000000020 Journal Impact Factor: 0.675

25- Yadollahi, M.M., Ahmet Benli, Demirboğa R., Prediction of Compressive Strength of Geopolymer Composites Using Artificial Neural Network, *Materials Research Innovations* DOI: 10.1179/1433075X15Y.0000000020 Journal Impact Factor: 0.473

In 2014

26- Karakoc M. B., Türkmen İ., F. Kantarci, Demirboga R., M. M.Maraş, Mechanical Properties and Setting Time of Ferrochrome Slag Based Geopolymer Paste and Mortar, Construction & Building Materials 72 (2014) 283–292.

27- Demirboga R., F. Karagol, Polat R. and Kaygusuz M.A. The effects of Urea on cold weather strength gaining of fresh concrete. Construction & Building Materials, 64 (2014) 114–120.

28- Yadollahi, M.M., Demirboğa R., Polat R., Effect of heat treatment temperature on ground pumice activation in geopolymer composites Sci Eng Compos Mater 2014; 21(3): 377–382.

In 2013

29- Demirboğa R. and Kan A. Design of specific gravity factor of artificial lightweight aggregate. Indian Journal of Engineering and Materials Sciences. Vol. 20, April 2013, pp. 139-144.

30- Moslih Amer Salih, Abang Abdullah Abang Ali, Ramazan Demirboga, Mustafa Al Bakri. Properties of Fresh Palm Oil Fuel Ash Based Geopolymer Material. Advances in Environmental Biology, 7(12) October Special Issue 2013, Pages: 3572-3579.

31- Hassan Noorvand, Abang Abdullah Abang Ali, Ramazan Demirboga, Nima Farzadnia, Hossein Noorvand. Incorporation of nano TiO2 in black rice husk ash mortars. Construction and Building Materials, 47 (2013) 1350–1361.

32- Nima Farzadnia, Abang Abdullah Abang Ali, Ramazan Demirboga, Mohammed Parvez Anwar. Characterization of high strength mortars with nano Titania at elevated temperatures. Construction and Building Materials 43 (2013) 469–479.

33- Hossein Noorvand, Abang Abdullah Abang Ali, Ramazan Demirboga, Hassan Noorvand, Nima Farzadnia. Physical and chemical characteristics of unground palm oil fuel ash cement mortars with nanosilica. Construction and Building Materials 48 (2013) 1104–1113.

34- Nima Farzadnia, Abang Abdullah Abang Ali, Ramazan Demirboga, Mohammed Parvez Anwar. Effect of halloysite nanoclay on mechanical properties, thermal behavior and microstructure of cement mortars. Cement and Concrete Research 48 (2013) 97–104.

35- Fatma Karagöl, Ramazan Demirboğa, Mehmet Akif Kaygusuz, Mehrzad Mohabbi Yadollahi, Rıza Polat. The influence of calcium nitrate as antifreeze admixture on the compressive strength of concrete exposed to low temperatures. Cold Regions Science and Technology 89 (2013) 30–35.

36- Mehrzad Mohabbi Yadollahi, Fatma Karagol, Mehmet Akif Kaygusuz, Rıza Polat and Ramazan Demirboga. Safety factor determining for space trusses by non-linear analysis and artificial

neural network method. DOI 10.1515/secm-2012-0114 Sci Eng Compos Mater 2013; 20(3): 277–284.

37- Ramazan Demirboğa, Mehmet Akif Kaygusuz and Rıza Polat. Effect of glass fiber-reinforced polymer and epoxy injection on compressive strength of elevated temperature damaged concrete. Fire and Materials, 2013; 37:100–113.

38- Nima Farzadnia, Abang Abdullah Abang Ali, Ramazan Demirboga. Characterization of high strength mortars with nano alumina at elevated temperatures. Cement and Concrete Research 54 (2013) 43–54.

39- Mehrzad Mohabbi Yadollahi, Ramazan Demirboga, Rıza Polat, Majid Atashafrazeh. Behavior Investigation of NaOH activated Pumice-Based Geopolymer Composites Exposed to Elevated Temperature. Int. J. Struct. & Civil Engg. Res. Vol. 2, No. 2, May 2013.

In 2012

40- Moslih Amer Salih, M.M.A. Abdllah, Demirboga R., and Abang Abdullah Abang Ali Effect of Na2SiO3/NaOH Ratio and Binder/Activator Ratio on Compressive Strength of POFA Blended with GGBS to produce Geopolymer Cement, Archive des Sciences, Volume. 65, Issue. 8, 2012.

41- Demirboga, R., and Kan A., Thermal Conductivity and Shrinkage Properties of Modified Waste Polystyrene Aggregate Concretes Building and Construction Materials, 35 (2012) 730–734.

42- Karakoc M. B., Demirboga R., Türkmen İ. and Can İ, Effect of Expanded Perlite Aggregate on cyclic thermal loading of HSC and Artificial Neural Network Modeling, International Journal of science and technology Scientia Iranica, Transactions A: Civil Engineering 19 (2012) 41–45.

43- Nima Farzadnia, Abang Abdullah Abang Ali and Demirboga R., Development of Nanotechnology in High Performance Concrete, Advanced Materials Research Volume 364,2012, pp.115-118.

44- Mohabbi Yadollahi, M., Kaygusuz, M.A., Polat, R., Demirboga ,R., Gül,R., Majid Atashafrazeh, M., Goharkhaneh Asli, F., 2012. Steel Fibers Effect in Strength Enhancement of Geopolymer Composite. J. Basic. Appl. Sci. Res., 2(8) 8416-8420.

45- Moslih Amer Salih, M.M.A. Abdllah, Demirboga R., and Abang Abdullah Abang Ali, Utilization Palm Oil Fuel Ash with Slag in Geopolymer Technology: A Review, International Review of Civil Engineering (I.RE.C.E.), May 2012 (Vol. 3 N. 3).

46- Yadollahi, M, Demirboga R., Polat R. and Kaygusuz M.A. Estimating of FRP-confined compressive strength of elevated temperature damaged concrete using ANN, Archive Des Sciences, Volume. 65, Issue. 8, 2012.

In 2011

47- Mohammad Panjehpour , Abang Abdullah Abang Ali and Demirboga R ., A Review for Characterization of Silica Fume and Its Effects on Concrete Properties, International Journal of Sustainable Construction Engineering & Technology (ISSN: 2180-3242) Vol 2, Issue 2, December 2011

48- Demirboga R., Transparent concrete and security of houses, Housing news, Vol.10 January-June 2011, page 7.

49- Nima Farzadnia, Abang Abdullah Abang Ali and Demirboga R., Incorporation of Mineral Admixtures in Sustainable High Performance Concrete, International Journal of Sustainable Construction Engineering& Technology, vol. 2, Issue 1, 2011, 44-49.

50- Karakoc M. B., Demirboga R., Türkmen İ. and Can İ., Modeling with ANN and effect of pumice aggregate and air entrainment on the freeze–thaw durability of HSC, Building and Construction Materials, volume 25(11) (2011), 4241-4249.

In 2010

51- Karakoç M.B. Demirboga R., HSC with expanded perlite aggregate at wet and dry curing conditions, ASCE Journal of Materials in Civil Engineering, Volume 22, Issue 12, pp. 1252-1259 (2010).

52- Polat R., Demirboga R., Karakoc M. B. and Türkmen İ., The influence of lightweight aggregate on the physico-mechanical properties of concrete exposed to freeze-thaw cycles, Cold Regions Science and Technology, 60 (2010) 51–56.

In 2009

53- Kan A., Demirboga R., A new technique of processing for waste-expanded polystyrene foams as aggregates. Journal of Materials Processing Technology, 209 (2009) 2994–3000.

54- Kan A., Demirboga R., A novel material for lightweight concrete production, Cement & Concrete Composites, 31 (2009) 489–495.

In 2008

55- İ. Turkmen, Y.Özdemir, M Kurudirek, F. Demir, Ö.Şimşek, Demirboga R., Calculation of radiation attenuation coefficients in Portland cements mixed with silica fume, blast furnace slag and zeolite, Annals of Nuclear Energy Volume: 35 (10)(2008) 1937-1943.

In 2007

56- H.Canakci, Demirboga R., M. B. Karakoc and O. Sirin, Thermal conductivity of limestone from Gaziantep (Turkey). Building and Environment vol.42 (4)(2007) 1777 – 1782.

57- Kan A. , Demirboga R. , Effect of cement and EPS beads ratios on compressive strength and density of lightweight concrete, Indian Journal of Engineering & Materials Sciences Vol. 14, April 2007, pp. 158-162.

58- Demirboga R., Türkmen İ., and Karakoç M.B., Thermo-mechanical Properties of Concrete Containing High Volume Mineral Admixtures. Building and Environment vol.42(1)(2007) 349 – 354.

59- Demirboga R., Thermal Conductivity and Compressive Strength of Concrete Incorporation with Mineral Admixtures. Building and Environment vol.42 (7)(2007) 2467 – 2471.

In 2006

60- Demirboga R. and Gül R., Production of high strength concrete by use of industrial by-products, Indian Journal of Engineering & Materials Sciences, vol. 41, Aug 2006, pp. 1124-1127.

61- Türkmen İ., Demirboga R and Gül R., The Effects of Different Cement Dosages, Slumps and Pumice Aggregate Ratios on the Freezing and Thawing of Concrete. Computers & Concrete vol.3, 2006 pp.163-175.

62- Gül R, Demirboga R., Guvercin, T., Compressive strength and ultrasound pulse velocity of mineral admixtured. Indian Journal of Engineering & Materials Sciences, vol. 13, February 2006, pp. 18-24.

In 2004

63- Demirboga R., Gül R., Durability of Mineral Admixtured Lightweight Aggregate Concrete, Indian Journal of Engineering & Materials Sciences, vol. 11, June 2004, pp. 201-206.

64- H. Uysal, Demirboga R., R. Şahin, R. Gül, The Effects of Different Cement Dosages, Slumps and Pumice Aggregate Ratios on the Thermal conductivity and Densities of Concrete. Cement Concrete Research, 34(2004) 845-848.

65- Demirboga R., R. Gül, Reply to the discussion by A. Demirbaş of the paper, The effects of expanded perlite aggregate, silica fume and fly ash on the thermal conductivity of lightweight concrete. Cement Concrete Research, 34(4) (2004) 727.

66- Demirboga R., Türkmen İ., and Karakoç M.B., Relationship between ultrasonic velocity and compressive strength for high volume mineral admixtured concrete, Cement Concrete Research, 34(2004), pp. 2329-2336.

In 2003

67- Şahin R., Demirboga R., Uysal H., Gül R., The Effects of Different Cement Dosages, Slumps and Pumice Aggregate Ratios on the Compressive Strength and Densities of Concrete. Cement Concrete Research, 33(8) (2003) 1245-1249.

68- Türkmen İ., Gül R., Çelik C., and Demirboga R. Determination by the Taguchi Method of Optimum Conditions for Mechanical Properties of High Strength Concrete with Admixtures of Silica Fume and Blast Furnace Slag, Civil Engineering and Environmental Systems, 20(2) (2003)105-118.

69- Demirboga R., Thermo-mechanical properties of sand and high volume mineral admixtures. Energy and Buildings 35(2003) 435-439.

70- Demirboga, R. and Gül, R., The effects of expanded perlite aggregate, silica fume and fly ash on the thermal conductivity of lightweight concrete, Cement and Concrete Research, 33 (5) (2003) 723-727.

71- Demirboga R., Influence of Mineral Admixtures on Thermal Conductivity and Compressive Strength of Mortar, Energy & Buildings, 35(2) (2003) 189-192.

72- Demirboğa R., R. Gül, H. Uysal, R. Şahin, Durability of mineral admixtured lightweight aggregate concrete, Energy Education Science and Technology, 2003, vol (issue) 12(1): 27-36 (journal now in ISI).

73- Demirboga R. And Gül R., Thermal conductivity and compressive strength of expanded perlite aggregate concrete with mineral admixtures, Energy and Buildings, Volume 35, Issue 11, December 2003, Pages 1155-1159.

In 2002

74- Tosunoğlu V., Demirboga R., Boncukçuoğlu R., Anaplı Ö. and Öztepe, Ç., "Pozzolanic Properties of Natural Pasa", Energy Education Science and Technology, 2002, vol (issue) 8(2): 77-84 (journal now in ISI).

75- Demirboga R., Gül R., "Research on Several Physico-Mechanical Properties of Blast Furnace Slag Aggregate Concrete", Energy Education Science and Technology, 2002, vol (issue) 9(2): 87-94(journal now in ISI).

In 2001

76- Demirboga R., Örüng, İ. and Gül, R., Effects of Expanded Perlite Aggregate and Mineral Admixtures on the Compressive Strength of Low Density Concretes, Cement and Concrete Research, 31(11), 2001.

77- Kurt, M., Demirboğa R., Gül, R., Bilgisayar yardımı ile beton karışım hesabı, DSİ Teknik Bülteni, Sayı 95, 2001.

B. SYMPOSIUM (PROCEEDINGS):

78- İbrahim Turkmen, A Ferhat Bingöl**, Ramazan Demirboğa,** Properties of perlite aggregate concretes after elevated temperatures, International Journal of Arts & Sciences (IJAS) Conference, 19-22 Oct, 2015, Roma, Italy.

79- M. Burhan KARAKOÇ, İbrahim TÜRKMEN, M. Murat MARAŞ, Fatih KANTARCI, **Ramazan Demirboğa**, Investigation of Ferrochrome Slag Based Geopolymer Concrete under the Sulfate Attack,, International Journal of Arts & Sciences (IJAS) Conference, 19-22 Oct, 2015, Roma, Italy

80- İ Türkmen, M. B. Karakoç, F. Kantarci, M. M.Maraş, Demirboga R., Fire Resistance of Geo-polymer Concrete Produced From Ferrochrome Slag by Alkali Activation Method. 2nd International Conference on Renewable Energy Research and Applications Madrid, Spain, 20-23 October 2013.

81- İ Türkmen, M. B. Karakoç, F. Kantarci, M. M.Maraş, **Demirboga R**., Mechanical Properties and Setting Time of Geo-polymer Paste and Mortar Produced From Ferrochrome Slag. 2nd International Conference on Renewable Energy Research and Applications Madrid, Spain, 20-23 October 2013.

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C- RESEARCH PROJECTS

In Saudi Arabia

1) The Effect of Lime addition on properties of Blast furnace slag Based Geopolymer Binder, 2019, ongoing.
2) Durability of geopolymer cement from activation of Pozzolana and modelling by soft computing Techniques, Grant Programs for Universities and Research Centers, KACST, 2018, under review.
3) Effect of nano-MgO on mechanical properties and microstructure of high performance cement pastes and mortars (under review), 2016, completed.
4) Predicting concrete properties using advanced neural network models (accepted), Highly cited Research Project (with Prof.Hojjat Adeli, Ohio State University), 2015, completed.
5) Effect of core sizes and casting direction on high strength concrete (ongoing), 2014, completed.

In Malaysia

7- Effects of different saturation levels on concrete strength, RUG,(RM 25,900), Project no:05.02.12-2303 RU. Principal Investigator.

8- Industrialized Building Systems Naim Holdings Berhad, 2012-2013. Co-investigator (RM 1,000,000), completed.

9- Investigation of geopolymer cement from ground POFA by alkali activation method, MOSTI, Malaysia, Co-investigator, 2011-2013 (RM 246,320).

10- Sustainable Housing Design and Construction" under KESDEC (Vote: 63696), Malaysia, 2010-2012. Co-investigator. (RM 122,394), Completed.

11- Lightweight concrete with pelletized POFA aggregates, submitted to the FRGS/ERGS, Malaysia, (submitted). Principal Investigator.

In Turkey

12- The effect of nano materials on the autogenic shrinkage of high strength concrete, 2012-2014, Erzurum Ataturk University, TURKEY. Principal Investigator.

13- Investigation of geopolymer cement from Elazig Ferro- chrome Slag by Alkali-activation method, MAG-111M147, 2011-2014, comleted, Funded by The Scientific and Technological Research Council of Turkey, Supervisor.

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21- Investigation physico-mechanical properties of self-compacting LWA concrete, 2005-2008, Completed in 2008, Co- investigator, Turkey.

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23- The effect of the expanded perlite on the fire and freeze-thaw resistances of high strength concrete. Funded by Atatürk University, project, No: 03/39. Principle Investigator, Turkey.

24- Several physico-Mechanical Properties of lightweight and semi-lightweight concretes under different curing conditions. Funded by Atatürk University, project, No: 03/56, 2004-2006, completed in 2006, principal investigator, Turkey.

25- Investigation properties of concrete blocks made up of expanded perlite and pumice aggregates. Funded by Atatürk University, project, No: 98/26, 1998-2000. Principle Investigator, Turkey.

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