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PERSONAL

Date of Birth	17.01.1977
Place of Birth	Ankara / Turkey

EDUCATION

2002-2006	North Carolina State University, Structures, Ph.D.
1999-2002	Middle East Technical University, Structures, M.S.
1995-1999	Middle East Technical University, Structures, B.S.

ACADEMIC POSITIONS

September 2024 – Date	Associate Professor, Department of Civil Engineering Atılım University, Ankara, Turkey
March 2009 – September 2024	Assistant Professor, Department of Civil Engineering Atılım University, Ankara, Turkey
September 2008 – March 2009	Instructor, Department of Civil Engineering Atılım University, Ankara, Turkey

ADMINISTRATIVE DUTIES

October 2011 – January 2017	Associate Head of Department, Civil Engineering Department, Atılım University
August 2022 - Date	MÜDEK Faculty Coordinator, Faculty of Engineering, Atılım University

HONORS&AWARDS

1	None
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RESEARCH INTERESTS

1	Design and analysis of reinforced concrete, prestressed concrete, steel, wood, and masonry structures
2	Repair and strengthening using advanced composite materials (FRP, etc.)
3	Design and analysis of high-strength and self-consolidated concrete
4	Experimental and analytical studies
5	Image Processing in Structural Modelling
6	Active learning in Structural Engineering
7	Occupational safety and health
8	Public outreach

PROFESSIONAL SERVICE

1	MÜDEK Program Reviewer, Civil Engineering Department, Hasan Kalyoncu University, May 2024.
2	MÜDEK Program Reviewer, Civil Engineering Department, Manisa Celal Bayar University, April 2023.
3	MÜDEK Program Reviewer, Civil Engineering Department, Niğde Ömer Halisdemir University, January 2023.
4	MÜDEK Faculty Coordinator, Faculty of Engineering, Atılım University, August 2022-date.
5	MÜDEK Program Reviewer, Civil Engineering Department, Okan University, March 2022.
5	MÜDEK Program Reviewer, Civil Engineering Department, Cyprus Lefke International University, December 2021.
6	MÜDEK Program Reviewer, Civil Engineering Department, Harran University, April 2021.
7	Consultant, Disaster Preparedness and Response Committee, Chamber of Civil Engineers, 2020-2022.
8	Committee President, Civil Engineering Education Committee, Chamber of Civil Engineers, 2018-2020.
9	MÜDEK Program Reviewer, Civil Engineering Department, Fırat University, April 2019.
10	MÜDEK Program Reviewer, Civil Engineering Department, Cyprus International University, March 2018.
11	Committee President, Civil Engineering Education Committee, Chamber of Civil Engineers, 2016-2018.
12	MÜDEK Program Reviewer, Civil Engineering Department, Harran University, December 2016.
13	MÜDEK Program Reviewer, Civil Engineering Department, Okan University, March 2016.
14	Reporter, Civil Engineering Education Committee, Chamber of Civil Engineers, 2014-2016.
15	MÜDEK Program Reviewer, Civil Engineering Department, Yıldız Technical University, March 2015.
16	Reporter, Civil Engineering Education Committee, Chamber of Civil Engineers, 2012-2014.
17	Yüksel Project International A. S. (2007-2008) <ul style="list-style-type: none">• Preparation of Samsun Light Rail Transit System Project Progress Report 1 (English and Turkish)• Preparation of Tender Documents of Samsun Light Rail System Project

	<p>Construction Works (English and Turkish)</p> <ul style="list-style-type: none">• Istanbul Metro, quantity survey of stations of Kadıkoy – Kartal Line (Bostanci, Cevizli, Gulsuyu, Hastane, Kuçuükyali, Soganlik ve Unalan)• Istanbul Metro, performing revisions to Design Report of Kirazlı Station of Kadikoy – Kartal Line• Istanbul Metro, quantity survey of stations of Levent – Ayazağa Line (Haciosman)• Preparation of Tender Documents of Ankara Water Supply Project Gerede – Camlidere Tunnel (Only Turkish)
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PUBLICATIONS

1	Tunc, G., Mertol, H. C., and Akis, T., "Lessons learned from four recent Turkish earthquakes: Sivrice-Elazığ, Aegean Sea, and Dual Kahramanmaraş," <i>Natural Hazards</i> , Springer, May 2024. DOI: 10.1007/s11069-024-06687-x.
2	Mertol, H. C., Tunc, G., Akis, T., Kantekin, Y., and Aydın, İ. C., "Investigation of RC Buildings after 6 February 2023, Kahramanmaraş, Türkiye Earthquakes," <i>Buildings</i> , 13 (1789), July 2023, pp. 1-29. DOI: 10.3390/buildings13071789.
3	Mertol, H. C., Tunc, G., and Akis, T., "A Site Survey of Damaged RC Buildings in İzmir after the Aegean Sea Earthquake on October 30, 2020," <i>Gradevinar</i> , 75 (5), June 2023, pp. 451-470. DOI: 10.14256/JCE.3343.2021.
4	Kartal, S., Kalkan, I., Mertol, H. C., Baran, E., "Influence of the Proportion of FRP to Steel Reinforcement on the Strength and Ductility of Hybrid Reinforced Concrete Beams," <i>European Journal of Environmental and Civil Engineering</i> , 27 (12), November 2022, pp. 3546–3565. DOI: 10.1080/19648189.2022.2143429.
5	Tunc, G., Othman, M. M., and Mertol, H. C., "Finite Element Analysis of Frames with Reinforced Concrete Encased Steel Composite Columns," <i>Buildings</i> , 12 (3), March 2022. DOI: 10.3390/buildings12030375.
6	Mertol, H. C., Tunc, G., and Akis, T., "Evaluation of Masonry Buildings and Mosques after Sivrice Earthquake," <i>Gradevinar</i> , 73 (9), pp. 881-892, 2021. DOI: 10.14256/JCE.3101.2021.
7	Mertol, H. C., Tunc, G., and Akis, T., "Damage Observation of Reinforced Concrete Buildings after 2020 Sivrice, Elazığ, Turkey Earthquake," <i>Journal of Performance of Constructed Facilities</i> , 2021. DOI: 10.1061/(ASCE)CF.1943-5509.0001619.
8	Tunc, G., Dakhil, A., and Mertol, H. C., "Experimental Analysis of the Behavior of Composite Column-Reinforced Concrete Beam Joints," <i>Arabian Journal for Science and Engineering</i> , April 2021, 17 p. DOI: https://doi.org/10.1007/s13369-021-05545-3 .
9	Mertol, H. C., Baran, E., and Bello, H. J., "Flexural Behavior of Lightly and Heavily Reinforced Steel Fiber Concrete Beams," <i>Construction and Building Materials</i> , Vol. 98, 2015, pp. 185-193. DOI: 10.1016/j.conbuildmat.2015.08.032.
10	Baran, E., Mertol, H. C., and Gunes, B., "Damage in Reinforced Concrete Buildings during October 23 and November 9, 2011 Van, Turkey Earthquakes," <i>Journal of Performance of Constructed Facilities</i> , Vol. 28, No. 3, 2014, pp. 466-479. DOI: 10.1061/(ASCE)CF.1943-5509.0000396.
11	Gürbüz, A. and Mertol H. C., "Interaction Between Assembled 3-D Honeycomb Cells Produced from High Density Polyethylene and a Cohesionless Soil," <i>Journal of Reinforced Plastics and Composites</i> , Vol. 31, 2012, pp. 826-836. DOI: 10.1177/07316844124475.
12	Mertol, H. C., Rizkalla, S., Zia, P., and Mirmiran, A., "Creep and Shrinkage Behavior of High-Strength Concrete and Minimum Reinforcement Ratio for Bridge Columns," <i>PCI Journal</i> , Vol: 55, No: 3, Summer 2010, pp. 138-153. DOI: 10.15554/pcij.06012010.138.154.
13	Mertol, H. C., Rizkalla, S., Zia, P., and Mirmiran, A., "Characteristics of Compressive Stress Distribution in High-Strength Concrete," <i>ACI Structural Journal</i> , Vol: 105, No: 5, Sept. - Oct. 2008, pp. 626-633. DOI: 10.14359/19946.

OTHER PUBLICATIONS

1	Mertol, H. C., "Explanation of the Problems in Reinforced Concrete Buildings Observed in the February 6th, 2023 Earthquakes with a Hierarchical Triangle," Journal of the Institute of Science and Technology, 12 (4), December 2023, pp. 2717-2729. DOI: 10.21597/jist.1263348.
2	Mertol, H. C., "Failure of Gedikbulak K-12 School Building on October 23, 2011, in Van, Turkey Earthquake," Yüzüncü Yıl University Journal of the Institute of Natural and Applied Sciences, 28 (2), August 2023, pp. 544-560. DOI: 10.53433/yyufbed.1229265.
3	Mertol, H. C., Akış, T., Tunç, G., Kantekin, Y. and Aydın, İ. C., "6 Şubat 2023 Kahramanmaraş Depremleri Raporu," Nobel Bilimsel Eserler, Ankara, Turkey, 2023, 180 p. ISBN: 978-625-398-529-5.
4	Mertol, H. C., Akış, T., and Tunç, G., "Ege Denizi Depremi Raporu (30.10.2020)," Hiperlink Eğt. İlet. Yay. Gıda San. ve Paz. Tic. Ltd. Şti, İstanbul, Turkey, 2021, 116 p. ISBN: 978-625-7499-48-4.
5	Mertol, H. C., Akış, T., and Tunç, G., "Elazığ-Sivrice Depremi Raporu (24.01.2020)," Hiperlink Eğt. İlet. Yay. Gıda San. ve Paz. Tic. Ltd. Şti, İstanbul, Turkey, 2021, 130 p. ISBN: 978-625-7499-46-0.
6	Bingöl, A. F., Ertuğrul, Z. Ç., Çobanoğlu, M., Keskin, R.S.O., Mertol, H. C., Oğuz, C. ve Özkul, C., "İnşaat Mühendisliği Eğitimi Mevcut Durum Raporu 2019," Union of Chambers of Turkish Engineers and Architects, Chamber of Civil Engineers, 2019, 199 p. ISBN: 978-605-01-1281-8.
7	Özcebe, G., Mertol, H. C., Erdem, C., Çobanoğlu, M., and Keskin, R. S. O., "İnşaat Mühendisliği Eğitimi Vizyon Raporu 2016," TMMOB İnşaat Mühendisleri Odası, 2016, 142 p.
8	Çobanoğlu, M., Ertutar, Y., Hüsem, M., Mertol, H. C., Özcebe, G., and Ünlüoğlu, E., "İnşaat Mühendisliği Eğitimi Vizyon Raporu 2014," TMMOB İnşaat Mühendisleri Odası, 2014, 120 p.
9	Mertol, H. C., Baran, E., and Gunes, B., "23.10.2011 Van Deprem Raporu," Civil Engineering Department, Atılım University, Ankara, Türkiye, Kasım 2011, 66 p.
10	Mertol, H. C., "Characteristics of High Strength Concrete for Combined Flexure and Axial Compression Members," Ph. D. Thesis, Department of Civil, Construction and Environmental Engineering, North Carolina State University, Raleigh, North Carolina, ABD, Aralık 2006, 320 p.
11	Özcebe, G., Ersoy, U., Tankut, T., Erduran, E., Keskin, S. R., and Mertol, H. C., "Strengthening of Brick-Infilled RC Frames with CFRP," Report No. 2003/1, Structural Engineering Research Unit, Civil Engineering Department, ODTÜ, Mart 2003, 67 p.
12	Mertol, H. C., "Carbon Fiber Reinforced Masonry Infilled Reinforced Concrete Frame Behavior," M. Sc. Thesis, Department of Civil Engineering, Orta Dogu Teknik Universitesi, Ankara, Türkiye, Haziran 2002, 67 p.
13	Mertol, A. and Mertol, H. C., "Deprem Mühendisliğine Giriş", Kozan Ofset, Ankara, Türkiye, 2002, 644 p.

PROJECTS

1	"Yerli Modüler 350 Ton Kapasiteli Sondaj Kulesi Tasarımı ve İmalatı," TÜBİTAK KAMAG 1007, Researcher, 2016-2022.
2	"Lifli Polimer Donatı Çubuklarının Kenetlenme Boyları ile Lifli Polimer Donatı Oranının Hibrid FRP-Çelik Donatılı Beton Kirişlerin Eğilme Davranışı Üzerindeki Etkileri," Scientific Research Project, Kırıkkale University, Researcher, 2016-2018.
3	"Laboratuvar Ve Beton Santrali Ortamında Elde Edilen Yüksek Dayanımlı Betonun Temel Özellikleri," Scientific Research Project, Atılım University, Principal Investigator, 2012-2013.
4	"Beton Karışımında Kullanılan Farklı Katkı Malzemelerinin Taze Ve Sertleşmiş Beton Özellikleri Üzerindeki Etkileri," Scientific Research Project, Atılım University, Principal Investigator, 2010-2011.

PATENTS

1	None
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CONFERENCE PRESENTATIONS

1	Mertol, H. C., Tunc, G., and Akis, T., "Field Observations of Four Recent Turkish Earthquakes: January 24, 2020 Elazığ-Sivrice, October 30, 2020 Aegean Sea, And February 6, 2023 Kahramanmaraş," ACE 2023, Gazimagusa, TRNC, September 2023.
2	Baran, E., Mertol, H. C. and Akis, T., "Improvement of Mechanical Performance in Different Concrete Applications through Use of Steel Fibers," 4th International Conference on Sustainability Construction Materials and Technologies, Las Vegas, USA, August 7-11, 2016.
3	Mertol, H. C., "Enhancing Civil Engineering Education Using Active Learning Techniques in Reinforced Concrete Course," International Civil Engineering & Architecture Symposium for Academicians (ICESA 2014), Antalya, Turkey, May, 2014.
4	Mertol, H. C., "Enhancing Civil Engineering Education at Atılım University," 2nd International Engineering Education Conference, Antalya, Turkey, October – November 2012.
5	Mertol, H. C. "Enhancing Civil Engineering Education for 21st Century Civil Engineers," 10th International Congress on Advances in Civil Engineering, Middle East Technical University, Ankara, Turkey, October 2012.
6	Mertol, H. C. and Yilmaz, F., "The necessity of Active Learning Techniques in Civil Engineering Education," 2. Civil Engineering Education Conference, Mugla, Turkey, September 2011 (in Turkish).
7	Mertol, H. C. "Using Active Learning Techniques in Mechanics of Materials Course," 100th Year in Civil Engineering Technical Congress, Istanbul, Turkey, November 2012 (in Turkish).
8	Mertol, H. C., "Revisions to Extend the Applicability of AASHTO LRFD Bridge Design Specifications for High-Strength Concrete," 2. Bridges and Viaducts Conference, Eskisehir, Turkey, September 2011 (in Turkish).
9	Yilmaz, F. and Mertol, H. C., "The Use of High Strength Concrete in Turkey – Standards, Design and Construction," 2. Bridges and Viaducts Conference, Eskisehir, Turkey, September 2011 (in Turkish).
10	Mertol, H. C., Ozcelik, E., and Ugur, U., "The Use of Engineering Education for Teaching K-12 Mathematics, Science and Technology Courses," Proceedings of International Engineering Education Conference, Antalya, Turkey, November 2010, pp. 243-247 (in Turkish).

11	Mertol, H. C., "Comparison of Normal and High-Strength Concrete Designs," 5. National Construction Materials Conference, Istanbul, Turkey, November 2010, pp. 99-108 (in Turkish).
12	Mertol, H. C., "Success Methods for New Civil Engineering Faculty," 1. Civil Engineering Education Conference, Antalya, Turkey, November 2009 (in Turkish).
13	Choi, W., Mertol, H. C., Rizkalla, S., Zia, P., and Mirmiran, A., "Flexural Design of Prestressed High-Strength Concrete Girders," 4th International Conference on Bridge Maintenance, Safety and Management (IABMAS'08), Seoul, Korea, July 13-17 2008.
14	Mertol, H. C., "Flexural Design of High-Strength Concrete Members," 1. Bridges and Viaducts Conference, Antalya, Turkey, November 2007 (in Turkish).
15	Mertol, H. C., Rizkalla, S., Scott, P., Lees, J., and El-Hacha, R., "Durability and Fatigue Behavior of Concrete Beams Prestressed with CFRP," 3rd International Conference on Durability & Field Applications of FRP Composites for Construction, Quebec City, Quebec, Canada, May 23-25, 2007.
16	Mertol, H. C., Rizkalla, S., Scott, P., Lees, J., and El-Hacha, R., "Durability of Concrete Beams Prestressed with CFRP," Special Session – Subcommittee 440I, "FRP Prestressed Concrete", ACI Fall Convention, Denver, Colorado, USA, November 5-9, 2006.
17	Mertol, H. C., Choi, W., Rizkalla, S., Zia, P., and Mirmiran, A., "Shrinkage and Creep Properties of High-Strength Concrete Up To 120 MPa," 7th International Congress on Advances in Civil Engineering (ACE 2006), Istanbul, Turkey, October 11-13, 2006.
18	Kim, S., Mertol, H. C., Rizkalla, S., Zia, P., and Mirmiran, A., "Behavior of High-Strength Concrete Columns," 7th International Congress on Advances in Civil Engineering (ACE 2006), Istanbul, Turkey, October 11-13, 2006.
19	Mertol, H. C., Rizkalla, S., Zia, P., and Mirmiran, A., "High Strength Concrete for Flexural Design of Bridge Girders," 7th International Conference on Short and Medium Span Bridges, Montreal, Quebec, Canada, August 23-25, 2006.
20	Mertol, H. C., Rizkalla, S., Zia, P., and Mirmiran, A., "Flexural Design of Bridge Girders Using High Strength Concrete," Proceedings of the 2006 Concrete Bridge Conference, Reno, Nevada, USA, May 7-9, 2006.
21	Mertol, H. C., Logan, A., Choi, W., Rizkalla, S., Zia, P., and Mirmiran, A., "Material Characteristics of High-Strength Concrete Up to 18 ksi," Proceedings of the 2006 Concrete Bridge Conference, Reno, Nevada, USA, May 7-9, 2006.
22	Mertol, H. C., Kim, S., Mirmiran, A., Rizkalla, S., and Zia, P., "Behavior and Design Of HSC Members Subjected To Axial Compression and Flexure," Proceedings of the Seventh International Symposium on Utilization of High-Strength/High Performance Concrete, Washington, D.C., USA, June 20-24, 2005 , (SP-228-28), pp. 395-420.

CITATIONS

Sum of times cited without self-citations (ISI Web of Science):	168
H-index (ISI Web of Science):	7

COURSES GIVEN

1	CE110 Engineering Graphics and Design, Atılım University
2	CE201 Basic Mechanics I - Statics, Atılım University
3	CE202 Basic Mechanics II - Dynamics, Atılım University
4	CE204 Mechanics Of Materials, Atılım University
5	CE209 Fundamentals of Surveying, Atılım University
6	CE342 Reinforced Concrete Fundamentals, Atılım University
7	CE404 Occupational Safety and Health, Atılım University
8	CE425 Construction Planning and Cost Estimating, Atılım University
9	CE447 Computer Aided Analysis And Design In Structural Engineering, Atılım University
10	CE449 Computer Aided Analysis and Design of Reinforced Concrete Structural Members, Atılım University
11	CE490 Civil Engineering Design Project, Atılım University
12	CE567 Computer Aided Analysis And Design In Structural Engineering, Atılım University
13	TCE306 İnşaat Mühendisliğinde Bilgisayar Uygulamaları, Near East University
14	CE306 Computer Applications in Civil Engineering, Near East University
16	CE382 Reinforced Concrete Structures, Çankaya University

THESES SUPERVISED

1	Sulaiman Salad Samatar, "External steel brace strengthening of rc buildings having removed columns," MS Thesis, Civil Engineering Department, Atılım University, 2023.
2	Ghadeer Haitham Hasan Hasan, "Evaluation of modified and extended pushover methods for rc buildings having setback irregularity," MS Thesis, Civil Engineering Department, Atılım University, 2022.
3	Berk Erpek, "Strengthening deficient RC buildings using external steel braces," MS Thesis, Civil Engineering Department, Atılım University, 2022.
4	Mohamed El Sharida, "Evaluation of enhanced pushover analysis procedures for regular and irregular reinforced concrete buildings," MS Thesis, Civil Engineering Department, Atılım University, 2021.
5	İbrahim Elost, "Development of custom load and resistance factors for design of reinforced concrete structures," MS Thesis, Civil Engineering Department, Atılım University, 2021.
6	Mohammed Moatasem Othman Othman, "Finite element analysis of concrete encased steel composite columns and reinforced concrete beams," MS Thesis, Civil Engineering Department, Atılım University, 2021. (Co-Advisor)
7	Abdulrahman A. Dakhil, "Experimental analysis of the behavior of composite column-reinforced concrete beam joints," MS Thesis, Civil Engineering Department, Atılım University, 2020. (Co-Advisor)
8	Tuğana Asil Çamurdan, "Structural Evaluation of Buildings under Urban Transformation in Ankara," MS Thesis, Civil Engineering Department, Atılım University, 2020.

9	Azdeen Saleh Najah, "Experimental and Analytical Investigation on Impact Behavior of Conventional and Steel Fiber Reinforced Concrete Beams," PhD Thesis, Civil Engineering Department, Atılım University, 2018.
10	Saad Abdelmola, "Fatigue Behavior of Prestressed Steel Fiber Reinforced Concrete Beams," MS Thesis, Civil Engineering Department, Atılım University, 2018.
11	Arda Uzunömeroğlu, "Evaluation of occupational safety and health in construction companies in Turkey," MS Thesis, Civil Engineering Department, Atılım University, 2016.
12	Basheer Qahtan Durib Janabi, "Design of Prestressed Concrete Girders using Various Creep, Shrinkage, and Modulus of Elasticity Relationships," MS Thesis, Civil Engineering Department, Atılım University, 2016.
13	Mohammed Nozad Faeq Faeq, "Flexural behavior of reinforced concrete beams having various layers of conventional and steel fiber reinforced concrete," MS Thesis, Civil Engineering Department, Atılım University, 2015.
14	Alfadhil. A. Gheit. Alfadhil Abdussalam, "Compressive and tensile behaviors of steel fiber reinforced concrete," MS Thesis, Civil Engineering Department, Atılım University, 2015.
15	Hussain Jibril Bello, "Flexural behavior of lightly and heavily reinforced steel fiber concrete beams," MS Thesis, Civil Engineering Department, Atılım University, 2014.
16	Nihan Tuğba Çalışkan, "Enhancing civil engineering education using active learning techniques," MS Thesis, Civil Engineering Department, Atılım University, 2013.