



### Gökhan Tunç, Ph.D.

Assistant Professor (<u>YÖK Associate Professor since July 2024</u>) Atılım University Department of Civil Engineering 06830 İncek, Gölbaşı, Ankara/TURKEY <u>gokhan.tunc@atilim.edu.tr</u> <u>https://orcid.org/0000-0002-8307-1060</u>

### EDUCATION

1997-2002	The University of Cincinnati, Structures, Ph.D.
1996-1997	Northeastern University, Structures, M.S.
1989-1994	Istanbul Technical University, Civil Engineering, B.S.

#### **ACADEMIC POSITIONS**

Sept./2013- Present	Assistant Professor, Department of Civil Engineering, Atilim University, Ankara, Turkey
June/2004- March/2006	Part Time Faculty Member, Department of Engineering, Hofstra University, Hempstead, NY, USA
Sept./2003- March/2006	Part Time Faculty Member, Department of Mathematics, Computer Science, Information Tech., Nassau Comm. College, Garden City, NY, USA
June/1997- August/2001	Research and Teaching Assistant, Department of Civil Engineering The University of Cincinnati, Cincinnati, OH, USA

### **ADMINISTRATIVE DUTIES**

Jan./2020- Present	Executive Committee Member, Graduate School of Natural and Appl. Sciences Atilim University, Ankara, Turkey
June 2020-	Co-op Co-Coordinator, Department of Civil Engineering,
Present	Atilim University, Ankara, Turkey
Jan./2017-	Chair, Department of Civil Engineering,
July/2019	Atilim University, Ankara, Turkey
Jan./2017-	Graduate School Coordinator of Department of Civil Engineering,
July/2019	Atilim University, Ankara, Turkey

### INDUSTRIAL WORK EXPERIENCE

In 20+ years involved in approximately 150 construction projects, totaling an estimated cost of \$500 million. (For further details please click on this link)

July/2016-	International Business Manager, Consultant
Present	rggA Architects, Ankara, Turkey
May/2014-	Senior Structural Engineer, Consultant
July/2016	YDA Group, Ankara, Turkey
Jan./2010-	Partner and Director of Engineering Group
April/2013	Yapı Proje Uygulama, Consulting Firm, Ankara, Turkey

March/2007-	Head of Structural Engineering Group
Jan./2010	Yapı Proje Uygulama, Consulting Firm, Ankara, Turkey
June/2003-	Structural Engineer, Chief Structural Engineer
Feb./2005	Ysrael A. Seinuk, P.C., New York, NY, USA
Sept./2001-	Structural Engineer
June/2003	Cantor Seinuk, New York, NY, USA

### **HONORS & AWARDS**

1	Best Conference Paper Presentation in Online Session 1 at the 5 <sup>th</sup> Int. Conf. on Civil Eng. and Arch. (ICCEA 2022, 16-18 Dec. 2022, Hanoi, Vietnam
2	2020 VEKAM Research Award, Koc University, Istanbul, Turkey
3	2nd Place Award for the Best Conference Paper at the 3 <sup>rd</sup> National Structures Conference, Middle East Tech. Univ., 25-26 Nov. 2016, Ankara, Turkey
4	American Society of Civil Eng. (ASCE): Recipient of the 2005 Moisseiff Award
5	His PhD study was NSF Granted, Award Number: 9632496, 1997-2000
6	Izzettin Silier Award for Outstanding Performance in Civil Eng., Istanbul Tech. University (1993)

## **RESEARCH INTERESTS**

1	Earthquake Resistant Design
2	Reinforced Concrete Structures
3	Tall Buildings
4	Experimental Analysis
5	History of Technology
6	Steel Structures

# PUBLICATIONS (SCI, SSCI, AHCI, E-SCI, Scopus, TR, DAAI, and Others)

1	(SSCI)	Tunc, T.E. and Tunc G., "Cold War Aviation: American Technology Transfer and the Construction of Turkey's First International Civilian Airport in Yeşilköy, Istanbul, 1944-1953," The British Journal for the History of Science, Published online first on December 16, 2024. <u>https://doi.org/10.1017/S0007087424001225</u>
2	(SCI)	Tunc, G., Mertol, H.C., and Akış, T., "Lessons Learned from Four Recent Turkish Earthquakes: Sivrice-Elazığ, Aegean Sea, and Dual Kahramanmaraş," Natural Hazards, 120, 12341-12373, Oct. 2024 (Published online first in May 2024). https://doi.org/10.1007/s11069-024-06687-x
3	(SCI)	Mertol, H.C., Tunc, G., Akış, T., Kantekin, Y., and Aydın, İ.C., "Investigation of RC Buildings after 6 February 2023, Kahramanmaraş, Türkiye Earthquakes," Buildings, Vol. 13, No. 7, July 2023. https://doi.org/10.3390/buildings13071789
4	(SCI)	Mertol, H.C., Tunc, G., and Akış T., "A Site Survey of Damaged RC Buildings in İzmir after the Aegean Sea Earthquake on October 30, 2020," Gradevinar, Vol. 75, No. 5, pp. 451-470, June 2023. <u>https://doi.org/10.14256/JCE.3343.2021</u>
5	(SCI)	Tunc, G. and Tunc, T.E., "A Close Examination of Ankara's Reinforced Concrete Buildings Designed and Constructed between 1923 and 1938," Buildings, Vol. 13, No. 46, Jan. 2023. <u>https://doi.org/10.3390/buildings13010046</u>

6	(SCI)	Tunc, G. and Tunc, T.E., "Engineering the public-use reinforced concrete buildings of Ankara during the Early Republic of Turkey, 1923-1938," Endeavour, Vol. 46, No. 3, 100832, August 2022. https://doi.org/10.1016/j.endeavour.2022.100832
7	(SCI)	Tunc, T.E. and Tunc G., ""A Light Bulb in Every House" The Istanbul General Electric Factory and American Technology Transfer to Turkey," Technology and Culture, Vol. 63, No. 3, pp. 749-774, July 2022. https://doi.org/10.1353/tech.2022.0108
8	(SCI)	Tunc, G., Othman, M.M., and Mertol, H.C., "Finite Element Analysis of Frames with Reinforced Concrete Encased Steel Composite Columns," Buildings, Vol. 12, No. 375, Feb. 2022. <u>https://doi.org/10.3390/buildings12030375</u>
9	(E-SCI)	Tunc, G., Azizi, A.B., and Tanfener, T., "Effects of Slab Types on the Seismic Behavior and Construction Cost of RC Buildings," Journal of Polytechnic, Vol. 26, No. 2, pp. 553-567, June 2023 (Published online first in Dec. 2021). <u>https://doi.org/10.2339/politeknik.971343</u>
10	(SCI)	Mertol, H.C., Tunc, G., and Akış T., "Evaluation of Masonry Buildings and Mosques after Sivrice Earthquake," Gradevinar, Vol. 73, No. 9, pp. 881-892, Sept. 2021. <u>https://doi.org/10.14256/JCE.3101.2021</u>
11	(SCI)	Mertol, H.C., Tunc, G., and Akış T., "Damage Observation of Reinforced Concrete Buildings after 2020 Sivrice (Elazığ) Earthquake, Turkey," Journal of Performance of Constructed Facilities, ASCE, Vol. 35, No. 5, 04021053-1-18, Oct. 2021. <u>https://doi.org/10.1061/(ASCE)CF.1943-5509.0001619</u>
12	(SCI)	Tunc, G., Dakhil, A., and Mertol H.C., "Experimental Analysis of the Behavior of Composite Column-Reinforced Concrete Beam Joints," Arabian Journal for Science and Engineering, Vol. 46, pp. 10785-10801, Apr. 2021. <u>https://doi.org/10.1007/s13369-021-05545-3</u>
13	(SCI)	Tunc, T.E. and Tunc, G., "Transferring Technical Knowledge to Turkey: American Engineers, Scientific Experts, and the Erzincan Earthquake of 1939," Notes and Records: The Royal Society Journal of the History of Science, Vol. 76, No. 3, pp. 387-406, Sept. 2022 (Published online first on 24 February 2021). https://doi.org/10.1098/rsnr.2020.0054
14	(AHCI)	Tunc, T.E. and Tunc, G., "Wonderland Eurasia: Theme Parks and Neo-Ottoman Identity Politics in Ankara, Turkey," Popular Entertainment Studies, Vol. 11, No. 1- 2, pp. 93-113, Dec. 2020. http://hdl.handle.net/1959.13/1434642
15	(SCI)	Tunc, T.E. and Tunc, G., "Constructing Containment: Thompson-Starrett, the Çeşme Beach Houses, and the Geopolitics of American Engineering in Cold War Turkey," Engineering Studies, Vol. 12, No. 3, pp. 195-217, Nov. 2020. https://doi.org/10.1080/19378629.2020.1845706
16	(SCI)	Shahrooz, B.M., Deason, J.T., and Tunc, G., "Outrigger Beam-Wall Connections. I: Component Testing and Development of Design Model," Journal of Structural Engineering, ASCE, Vol. 130, No. 2, pp. 253-261, Feb. 2004. <u>https://doi.org/10.1061/(ASCE)0733-9445(2004)130:2(253)</u>
17	(SCI)	Shahrooz, B.M., Tunc, G., and Deason, J.T., "Outrigger Beam-Wall Connections. II: Subassembly Testing and Further Modeling Enhancements," Journal of Structural Engineering, ASCE, Vol. 130, No. 2, pp. 262-270, Feb. 2004. <u>https://doi.org/10.1061/(ASCE)0733-9445(2004)130:2(262)</u>
18	(SCI)	Shahrooz, B.M., Tunc, G., and Deason, J.T., "Seismic Performance of Outrigger Beam-Wall Connections," ACI Special Publication 211-Large-Scale Structural Testing, ACI, Farmington Hills, Michigan, pp. 223-245, 2003. <u>https://doi.org/10.14359/12592</u> or <u>https://www.concrete.org/publications/internationalconcreteabstractsportal.aspx?</u> <u>m=details&amp;id=12592</u>

19	(SCI)	Shahrooz, B.M., Gong, B., Tunc, G., and Deason, J.T., "An Overview of Reinforced Concrete Core Wall-Steel Frame Hybrid Structures," Progress in Structural Engineering and Materials, Vol. 3, No. 2, pp. 149-158, 2001. https://doi.org/10.1002/pse.67
20	(SCI)	Deason, J.T., Tunc, G., and Shahrooz, B.M., "Seismic Design of Connections between Steel Outrigger Beams and Reinforced Concrete Walls," Steel & Composite Structures: An International Journal, Vol. 1, No. 3, pp. 329-340, 2001. https://doi.org/10.12989/SCS.2001.1.3.329
21	(Scopus)	Tunc, G., Tanfener, T., and Khayyat, Z.K., "Structural Analyses of RC Buildings with Various Support Types," In: Kang, T. (eds) Proceedings of 5th International Conference on Civil Engineering and Architecture (ICCEA 2022), published by: Lecture Notes in Civil Engineering, vol 369. Springer, Singapore. ISBN: 978-981- 99-4049-3, September 23, 2023. <u>https://doi.org/10.1007/978-981-99-4049-3_86</u>
22	(TR)	Aral, M. and Tunc, G., "Türkiye'de Deprem Performansına Dayalı Bina Kimlik Bilgilerinin Oluşturulmasına Yönelik Çalışma ve Öneriler," Afet ve Risk Dergisi, Vol. 4, No. 1, pp. 20-41, May 2021. <u>https://doi.org/10.35341/afet.825123</u>
23	(TR)	Tunc, G. and Tanfener, T., "Reinforced Concrete Design of Tall Buildings According to the Turkish Earthquake Code," Erzincan Üniversitesi, Fen Bilimleri Enstitüsü Dergisi, Vol. 14, No. 1, pp. 27-40, March 2021. https://doi.org/10.18185/erzifbed.771628
24	(TR)	Wardi, A., Tunc, G., and Khalil, I., "Structural behavior of shear connectors embedded in different types of concrete," Challenge Journal of Structural Mechanics, Vol. 6, No. 4, pp. 160-175, Dec. 2020. https://doi.org/10.20528/cjsmec.2020.04.001
25	(TR)	Tunc, G. and Al-Ageedi, M., "A Parametric Study of the Optimum Shear Wall Area for Mid-to High-Rise RC Buildings," Konya Journal of Engineering Sciences, Vol. 8, No. 3, pp. 601-617, Sept. 2020. <u>https://doi.org/10.36306/konjes.666748</u>
26	(DAAI)	Tunc, G., "The History of Earthquake Codes and Their Current Status," Yapı Dergisi, Vol. 472, pp. 20-24, Dec. 2021 and Jan. 2022 (in Turkish). <u>https://yapidergisi.com/deprem-yonetmeliklerinin-tarihcesi-ve-mevcut-durum/</u>
27	(DAAI)	Tunc, G., "Technological Advances in Earthquake Resistant Structural Design, Yapı Dergisi, Vol. 459, pp. 62-67, Sept. 2020 (in Turkish). <u>https://yapidergisi.com/depreme-dayanikli-yapi-tasariminda-teknolojik-gelismeler/</u>
28	(DAAI)	Tunc, G., "The Art of Good Handwriting and Drawing Skills in Civil Engineering Education," Yapı Dergisi, Vol. 431, pp. 38-42, Oct. 2017 (in Turkish).
29	(DAAI)	Tunc, G. and Demirtürk, D., "Habitat Structures on the Moon," Yapı Dergisi, Vol. 409, pp. 134-140, Dec. 2015 (in Turkish). https://yapidergisi.com/ayda-yasam-alani-yapilari/
30	(Others)	Mertol, H.C., Akış, T., and Tunç, G., "30.10.2020 Aegean Sea Earthquake and its Impact on the Reinforced Concrete Structures," Türkiye Mühendislik Haberleri Dergisi, Vol. 66, No. 506, pp. 19-40, Nov. 2021 (in Turkish). https://eski.imo.org.tr/resimler/dosya_ekler/4511298f56923fd_ek.pdf?dergi=1606
31	(Others)	Demirtürk, D. and Tunc, G., "Undergraduate Civil Engineering Education in Turkey through the Perspective of the Construction Sector," Engineering Sciences, Vol. 16, No. 1, pp. 15-38, Jan. 2021 (in Turkish). http://dx.doi.org/10.12739/NWSA.2021.16.1.1A0466
32	(Others)	Tunc, G. and Tanfener, T., "The Importance of Assumptions in Civil Engineering," Türkiye Mühendislik Haberleri Dergisi, Vol. 65, No. 501, pp. 18-26, March 2020 (in Turkish). https://eski.imo.org.tr/resimler/dosya_ekler/48ddce5a3ca620d_ek.pdf?dergi=1461

33	(Others)	Tunc, G. and Demirtürk, D., "Waterless Concrete and Its Status in Turkey," Türkiye Hazır Beton Birliği Dergisi, pp. 69-82, March-Apr. 2016 (in Turkish). https://www.thbb.org/media/150340/makale134.pdf
34	(Others)	Tunc, G., Uğraş, B., Yurtsever, M., Ormancı, M., and Tanfener, A., Planetarium Project," Yapı Dergisi, Vol. 329, pp. 104-106, Apr. 2009 (in Turkish).
35	(Others)	Tunc, G., Yurtsever, M., Özuygur, A.R., and Tanfener, A., "AntHill Bomonti Residence and Shopping Mall /Recr. Facility Project," Türkiye Mühendislik Haberleri Dergisi, Vol. 54, No. 453, pp. 65-69, Jan. 2009 (in Turkish). https://eski.imo.org.tr/resimler/ekutuphane/pdf/16157 51 51.pdf
36	(Others)	Tunc, G., Deason, J.T., and Shahrooz, B.M., "Structural Wall-Steel Frame Hybrid Buildings: Connections and System Behavior," Composite Construction in Steel and Concrete IV, ASCE, Banff, Alberta, Canada, pp. 971-982, 2002. https://doi.org/10.1061/40616(281)84
37	(Others)	Shahrooz, B.M., Deason, J.T., and Tunc, G. "Cyclic Behavior of Outrigger Beam-Wall Connections," The Sixth ASCCS International Conference on Steel- Concrete Composite Structures, 2000.

## **BOOKS & BOOK CHAPTERS**

1	Tunc, G. and Tunc, T.E., "Expertise across Borders: Transnational Technology Transfer and the Journal of the Turkish Professional Engineers Association, 1935- 1940," a book chapter published by Routledge in Globalizing the History of Science, Technology, and Medicine, ISBN:, pages, 2024 (in progress).
2	Tunc, G., Translation of Chapters 15 and 16 of "Steel Structures, Design and Behavior, Emphasizing Load and Resistance Factor Design" by Salmon C.G., Johnson J.E. and Malhas, F.A., Fifth Edition, Translation Editors: Ilker Kalkan and Fatih Alemdar, Palme Press, ISBN: 9786256154001, 896 pages, October 2024 (in Turkish).
3	Mertol, H.C., Akış, T., and Tunc, G., February 06, 2023, Kahramanmaraş Earthquakes Report, a book published by Nobel Bilimsel Press, ISBN: 978-625-398-529-5, 180 pages, June 2023 (in Turkish).
4	Mertol, H.C., Akış, T., and Tunc, G., Elazığ-Sivrice Earthquake Report (24.01.2020), a book published by Hiperyayın, ISBN: 978-625-7499-46-0, 130 pages, Oct. 2021 (in Turkish).
5	Mertol, H.C., Akış, T., and Tunc, G., Aegean Sea Earthquake Report (30.10.2020), a book published by Hiperyayın, ISBN: 978-625-7499-48-4, 116 pages, Oct. 2021 (in Turkish).
6	Tunc, G., Özuygur, A.R., and Yurtsever, M., Structural Light Weight Aggregate Concrete, a book translation, Yapı Proje Teknik Press, 282 pages, 2010 (in Turkish).

# PROJECTS

1	Researcher: "Building a New Nation: Reinforced Concrete Construction in Ankara during the Early Turkish Republic, 1923-1938", VEKAM 2020
2	Researcher: "RC/Composite Wall - Steel Frame Hybrid Buildings: Connections and System", NSF Grant, Award Number: 9632496, 1997-2000

# **CONFERENCE PRESENTATIONS**

TRESENTATIONS
Tunc, G., Tanfener, T., and Khayyat, Z.K., "Structural Analyses of RC Buildings with Various Support Types," 5th International Conference on Civil Engineering and Architecture (ICCEA 2022), Hanoi, Vietnam, December 16-18, 2022.
Ahmad, A.M. and Tunc, G., "Extended Literature Review on Public Private Partnership," 4th International Conference on Civil Engineering and Architecture (ICCEA 2021), Seoul, South Korea, July 10-12, 2021.
Tunc, G., Azizi, A.B., and Tanfener, T., "A parametric study on the cost comparison of different slab types in multi-story RC buildings," 3rd International Conference on Civil Engineering and Architecture (ICCEA 2020), Compiègne, France, June 28-30, 2020.
Tunc, G., Ozsarac, E., Sahin, B.E., and Cigdem, O.Y., "A Study of the Post- Earthquake Economic Impact of Turkey's Critical Industrial Facilities," 5th International Conference on Earthquake Engineering and Seismology (5ICEES), Ankara, Turkey, October 8-11, 2019.
Cigdem, O.Y. and Tunc, G., "Shaping Public Policy in Turkey to Decrease the Adverse Effects of Natural Disasters," International Civil Engineering and Architecture Conference 2019 (ICEARC19), Advancements in Civil Engineering and Architecture, Trabzon, Turkey, April 17-20, 2019.
Sahin, B.E., Tunc, G., and Ozsarac, E., "Disaster Management and Public-Private Partnership in Turkey," International Civil Engineering and Architecture Conference 2019 (ICEARC19), Advancements in Civil Engineering and Architecture, Trabzon, Turkey, April 17-20, 2019.
Bulbuloglu, T. and Tunc, G., "Credit Rating Agencies and the Effects of Natural Disasters in Turkey," 2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, Ankara, Turkey, October 19-21, 2018.
Tunc, G. and Tanfener T., "High Rise Building Design According to the New Proposed Earthquake Code in Turkey," 13th International Congress on Advances in Civil Engineering, Izmir, Turkey, September 12-14, 2018.
Tunc, G., Tanfener, T., "Comparisons of 2007 and 2016 Turkish Building Earthquakes: Case Studies," 3rd National Structures Conference, Ankara, Turkey, November 25-26, 2016.
Numanoğlu, F. P. and Tunc, G., "Turkey's Credit Rating and Earthquake Fact," 3rd National Young Engineers Symposium, Istanbul, Turkey, May 6-7, 2016.
Bozkuş, M. B. and Tunc, G., "Civil Engineering and Ethics," 3rd National Young Engineers Symposium, Istanbul, Turkey, May 6-7, 2016.
Tunc, G., "Recommendations and Investigations on Earthquake Resistant Building, Concepts of Conscious Consumer and Trust," 3rd National Conference on Earthquake Engineering and Seismology, Izmir, Turkey, October 14-16, 2015.
Tunc, G. and Özsaraç, E., "Recommendations for Improvement of Turkey's Public- Private Partnership Model," 3rd National Conference on Earthquake Engineering and Seismology, Izmir, Turkey, October 14-16, 2015.
Tunc, G. and Khayyat, Z., "The Structural Analysis and Design of Buildings with Shear Wall and Rigid Basements," International Conference on Civil and Environmental Engineering, Nevşehir, Turkey, May 20-23, 2015.
Tunc, G. and Mohammed, A. M., "Strengthening and Repair Methods in Iraq for Reinforced Concrete Beams," World Conference on Technology, Innovation and Entrepreneurship, Istanbul, Turkey, May 20-23, 2015.
Tunc, G., "Public Policy and the Turkish Construction Sector," Twenty Third World Business Congress, Ankara, Turkey, June 24-28, 2014.
Tunc, G., Özuygur, A.R., and Yurtsever, M., "Critiques of the Turkish Seismic Code," 7th National Earthquake Engineering, Istanbul, Turkey, May 30 - June 3, 2011.

18	Tunc, G., Uğraş, B., and Tanfener, A., "Steel Case Study: Planetarium Building and the Gaziantep Zeugma Mosaic Museum," 3rd National Steel Symposium, Gaziantep, Turkey, October 8-10, 2009.
19	Shahrooz, B.M., Deason, J.T., and Tunc G. "Structural Wall-Steel Frame Hybrid Buildings: Connections and System Behavior", Composite Construction in Steel and Concrete IV, Banff, Alberta, Canada, 2000.
20	Shahrooz, B.M., Deason, J.T., and Tunc, G. "Cyclic Behavior of Outrigger Beam- Wall Connections," The Sixth ASCCS International Conference on Steel-Concrete Composite Structures, Los Angeles, CA, USA, 2000.
21	Tunc, G., Deason J.T., and Shahrooz, B.M. "Hybrid Structural Wall-Steel Frame Systems", American Concrete Institute Fall Convention, USA, 1998.

## WOS CITATIONS

Sum of times cited without self-citations (ISI Web of Science):	85
H-index (ISI Web of Science):	6

# **COURSES GIVEN**

1	Mechanics of Materials (BS)
2	Structural Analysis (BS)
3	Reinforced Concrete I (BS)
4	Reinforced Concrete II (BS)
5	Fundamentals of Steel Design (BS)
6	Design and Construction of Tall Building Systems (BS, MS)
7	Earthquake Engineering (BS, MS)
8	Civil Engineering Design Project (BS)
9	Research Methodology and Communication Skills (MS, PhD)

## THESES SUPERVISED

1	MS Thesis, "Policy, Financing and Risk Management Issues of Public Private Partnership Projects", 2021
2	MS Thesis, "Finite Element Analysis of Concrete Encased Steel Composite Columns and Reinforced Concrete Beams", 2021
3	MS Thesis, "Experimental Analysis of the Behavior of Composite Column- Reinforced Concrete Beam Joints", 2020
4	MS Thesis, "Comparative Study of Wind and Earthquake Loads on Reinforced Concrete Buildings with Different Floor Configurations", 2020
5	MS Thesis, "Structural Behavior and Cost Comparison of Various Slab Types in Reinforced Concrete Tall Buildings", 2020
6	MS Thesis, "Determination of the Optimum Shear Wall Area to Floor Area Ratio for Reinforced Concrete Buildings", 2019
7	MS Thesis, "Behavior of High Strength Shear Connectors Embedded in Concrete", 2019
8	MS Thesis, "Structural Analysis of Buildings with Horizontal and Vertical Irregularities", 2016

9	MS Thesis, "Structural Analysis and Design of Buildings with Shear Walls and Basements", 2015
10	MS Thesis, "Study on the Fundamental Period of Vibration for Buildings with Different Configurations", 2015
11	MS Thesis, "Strengthening and Repair Methods in Iraq for Reinforced Concrete Beams", 2015

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