

## **CURRICULUM VITAE**

Zühre Sü Gül, PhD

### **1. PERSONAL DATA**

- 1.1. Date & Place of Birth: 7/3/1980, Antalya, Turkey
- 1.2. Address : Department of Architecture: Bilkent University, 06800 Ankara, Turkey
- 1.3. Mobile Phone :+90 532 3341059
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- 1.5. E-mail : [zuhre@bilkent.edu.tr](mailto:zuhre@bilkent.edu.tr), [zuhre@mezzostudyo.com](mailto:zuhre@mezzostudyo.com)

### **2. ACADEMIC DEGREES**

- 2.1. Assoc. Prof. Architecture - Inter University Council-ÜAK, Turkey, March, 2022
- 2.2. Ph.D. Architecture - Middle East Technical University, 2015
- 2.3. MS. Graduate Program in Architectural Acoustics - Rensselaer Polytechnic Institute (RPI), 2006
- 2.4. MFA. Interior Architecture and Environmental Design - Bilkent University, 2004
- 2.5. BS. Architecture - Middle East Technical University, 2002

### **3. EMPLOYMENT HISTORY**

- 3.1. 09/2024 – Present Associate Professor,  
TED University, Dept. of Architecture
- 3.2. 04/2023 – 09/2024 Assistant Professor,  
Bilkent University, Dept. of Architecture
- 3.3. 02/2020 – 04/2023 Assistant Professor of Practice,  
Bilkent University, Dept. of Architecture
- 3.4. 02/2018 - 01/2020 Visiting Assistant Professor  
Bilkent University, Dept. of Architecture
- 3.5. 02/2017 – 01/2018 Part-Time Instructor  
Bilkent University, Dept. of Architecture
- 3.6. 09/2013 - 2015 Part-Time Instructor  
Bilkent University, Dept. of IAED
- 3.7. 07/2009 Founding Partner  
MEZZO Stüdyo Ltd., Ankara
- 3.8. 09/2006 – 06/2008 Intern Architect- Acoustician  
Russ Berger Design Group, Dallas, TX
- 3.9. 08/2005 - 08/2006 Research Assistant, Rensselaer Polytechnic Institute  
(RPI), School of Architecture

- 3.10. 09/2003 – 06/2005 Teaching Assistant, Bilkent University, IAED
- 3.11. 09/2002 – 08/2003 Architect, Kural Architecture, Ankara

#### **4. PROFESSIONAL AWARDS**

- 4.1. Globally Born Incubator Finalist Nominee Award, Turkish Ministry of Industry 2012

#### **5. HONORS, SCHOLARLY AND PROFESSIONAL DUTIES AND ACHIEVEMENTS**

- 5.1. Co-chair of the Technical Session on Sound Propagation in Rooms, 10th Convention of the European Acoustics Association, Forum Acusticum 2023, Torino, Italy, 11-15 September, 2023.
- 5.2. Chairman of the Technical Session on Acoustics in Coupled Volume Systems, 24<sup>th</sup> International Congress on Acoustics (ICA), Gyeongju, Korea, 24-28 October 2022
- 5.3. Co-chair of the Technical Session on Acoustics of Cultural Heritage Buildings, 24<sup>th</sup> International Congress on Acoustics (ICA), Gyeongju, Korea, 24-28 October 2022
- 5.4. "Exploration of Room Acoustics Coupling in Hagia Sophia of İstanbul for its Different States" JASA, 149.1 (2021): 320-339, technical area pick of the journal, August 2021
- 5.5. Co-chair of the Technical Session on Acoustics of Cultural Heritage Buildings" 23<sup>rd</sup> International Congress on Acoustics (ICA), Aachen, Germany, 9-13 September 2019
- 5.6. "Best Thesis of the Year" Mustafa Parlar Foundation Thesis Awards (PhD), METU, 2016
- 5.7. "2006 Medalist" of Robert B. Newman Award for Merit in Architectural Acoustics for Excellence in the Study of Acoustics and in its Application to Architecture, USA, 2006
- 5.8. "Second Price" in the Best Student Paper Award Competition in the Area of Architectural Acoustics for June 2006 ASA Meeting, USA, 2006
- 5.9. "Commendation" from 2006 ASA Student Design Competition - A City Municipal Building, USA, 2006
- 5.10. Graduate Teaching Assistant Fellowship, Rensselaer Polytechnic Institute (RPI), NY, USA, 2005-2006
- 5.11. Graduate Teaching Assistant Fellowship, Bilkent University, Ankara, 2003-2005

## **6. MEMBERSHIP**

- 6.1. Full Member of Acoustical Society of America (MASA), 2008-
- 6.2. Member of Acoustical Society of Turkey (TAKDER), 2019 –
- 6.3. Member of Architectural Chamber of Turkey (TMMOB,) 2002 –

## **7. INVITED LECTURES AND INVITED TALKS**

- 7.1. “The Dome Effect and the Acoustics of Historical Masterpieces.” Music and the Brain 2022: Sound, Space, and the Aesthetics of the Sublime, Stanford University, Stanford, CA, USA, 21-22 May 2022.
- 7.2. Seminar Series for D1 Certification on “Turkish Regulation on Noise Control in Buildings”, TAKDER, Başkent University, Ankara, 24 May - 4 June 2021.
- 7.3. “Basic Principles of Acoustical Design,” Guest Lecturer for IAD 131, Interior Architecture and Environmental Design in Interior Architecture,” Ankara Bilim University, Ankara, 30 April 2021.
- 7.4. “Sound in Architecture,” Guest Lecturer for FA 102, Department of Fine Arts, Bilkent University, Ankara, 5 March 2020.
- 7.5. “Sound Fields in Acoustically Coupled Spaces: Case Studies of Monumental Historical versus Contemporary in Architecture,” Department of Architecture, Bilkent University, Ankara, 30 November 2017.
- 7.6. “Architectural Acoustics Design Process in Professional Practice: Case Studies of Heydar Aliyev Center and Flame Towers in Baku, Azerbaijan,” Guest Lecturer for Arch342, Department of Architecture, Bilkent University, Ankara, 31 October - 1 November 2017.
- 7.7. “A Field of Expertise in its Childhood: the Architectural Acoustics Consultancy and its Reflections on Architecture,” Building Science Spring Activities of Architectural Chamber of Turkey; TMMOB Yapı Bahar Etkinlikleri, Ankara, 31 May 2017.
- 7.8. “Revealing Unknowns of the Acoustic Characteristics of Süleymaniye Mosque and Hagia Sophia Museum,” Archaeometry Seminar Series by METU Graduate School of Natural and Applied Sciences, Middle East Technical University, Ankara, 25 March 2016.
- 7.9. “An Academic and Professional Chronology on Sound,” KOBİFEST by METU International Commerce and Logistic Society, Middle East Technical University, Ankara, 24 February 2015.
- 7.10. Laudatio for BASWA Acoustic AG awarded with the Innovation Recognition Prize of the Chamber of Commerce and Industry of Central Switzerland, Luzern, Switzerland, 5 December 2012.

- 7.11. "Acoustics as a Profession in Architectural Grounds" Technical Lecture Series of BASWA Acoustic AG, Baldegg, Switzerland, 4 December 2012.
- 7.12. Interview for "Azerbaijan's Amazing Transformation," Discovery Science, Build it Bigger, Season 5, Episode 3, Baku, Azerbaijan, 15 December 2010.

## **8. ARTISTIC EXHIBITS OR PERFORMANCES**

- 8.1. FA 101 Basic Design I Studio Projects, Dept. of Art Design and Architecture, Bilkent University, "3D - Animal Habitat Exhibition", 27 November - 2 December 2017, hosted by TMMOB Chamber of Architecture, Ankara

## **9. TEACHING**

### **9.1. Graduate Courses:**

#### 9.1.1 Arch 515 Topics in Architectural Technology

Fall 2023-2024; Spring 2021-2022; Spring 2020-2021; Spring 2019-2020

### **9.2. Undergraduate Courses:**

#### 9.2.1. IAED 341 - Architectural Acoustics

Fall 2023-2024

#### 9.2.2. Arch 341 - Architectural Lighting and Acoustics

Fall 2022-2023; Fall 2021-2022; Fall 2020-2021; Fall 2019-2020; Fall 2018-2019

#### 9.2.3. Arch 342 - Environmental Technology

Spring 2023-2024; Spring 2022-2023; Spring 2018-2019; Spring 2017-2018

#### 9.2.4. Arch 201 - Architectural Design Studio I

Fall 2022-2023; Fall 2021-2022; Fall 2020-2021; Fall 2019-2020; Fall 2018-2019

#### 9.2.5. Arch 202 - Architectural Design Studio II

Spring 2022-2023; Spring 2021-2022; Spring 2020-2021; Spring 2019-2020; Spring 2018-2019

#### 9.2.6. FA 101 - Basic Design I

Fall 2017-2018; Spring 2016-2017; Spring 2014-2015

#### 9.2.7. FA 102 - Basic Design II

Spring 2017-2018

#### 9.2.8. IAED 341 - Architectural Acoustics and Fire Safety

Fall 2015-2016; Fall 2014-2015; Summer 2013-2014; Fall 2013-2014

## **10. GRADUATE STUDENT SUPERVISION**

- 10.1. Umut Fidan, MS, "The Acoustics of Zeyrek Mosque: Monastery of the Pantokrator", Music and Acoustic Engineering School, Milano Polytechnic University, Supervisor: Maria Cairoli, Co-supervisor: Zühre Sü Gül, April 2024.
- 10.2. Aslı Altun, MS, "An Investigation on the Effects of Variable Sound Absorption Systems on the Acoustic Performance in Concert Halls for Various Music Types: The Case of Bilkent Music Hall", August 2024.
- 10.3. Damla Tarman, MS, "Sustainable Acoustical Material Investigation Using Fruit Seeds", September 2023.
- 10.4. Gülnihan Atay, MS, "Clay Pots in Ottoman Architecture: A Discussion on Their Acoustical Employment", July 2022. (recipient of Student Grant Award recipient, selected by the Committee for International Research and Education (CIRE) of the Acoustical Society of America (ASA), 2022)
- 10.5. Rozhin Naeemae, MS, "Assessment of Perceived Reverberation in Large Atriums", July 2022.
- 10.6. Zeynep Bora Özyurt, PhD, "Examination of the acoustic properties of traditional Turkish baths with subjective and objective methods and a design methodology approach for adaptive re-use", Depart. of Architecture, Uludağ University, Supervisor: Filiz Şenkâl Sezer, Co-Supervisor: Zühre Sü Gül, June 2024.
- 10.7. Ali H. Adeeb, MS, "An Archeoacoustic Study of Cappadocia; Acoustical Identification of Religious and Secular Indoor Spaces", September 2021.
- 10.8. Beyza Yazıcı, MS, "An Experimental Study on Acoustical Metamaterials (AMM) for Architectural Applications", August 2020. (recipient of Student Grant Award recipient, selected by the Committee for International Research and Education (CIRE) of the Acoustical Society of America (ASA), 2021)
- 10.9. Hasan Yıldırım, MS, "Theater and Music in Palazzo Ducale of Mantova an Analysis of the Historical Spaces for Music in the Palacean Palace", School of Architecture, Urban Planning Construction Engineering, Milano Polytechnic University, Supervisor: Antonio Giovanni Mazzeri, Co-supervisor: Zühre Sü Gül, May 2020.

## **11. PATENTS / UTILITY MODEL**

- 11.1. "Sound Scattering and Absorbing Panel System for Interior Spaces". (Utility Model) No: TR-2012-03077-Y. Co-owners: Sü Gül, Z., Çalışkan, M. and Odabaş, E.

## 12. SCHOLARLY PUBLICATIONS

### 12.1. Ph.D. Dissertation

- 12.1.1. "Assessment of Non-Exponential Sound Energy Decays within Multi-Domed Monuments by Numerical and Experimental Methods." January 2015, Ayşe Tavukçuoğlu, Middle East Technical University

### 12.2. MS Dissertation

- 12.2.1. "Systematic Investigations on Energy Decays in Acoustically Coupled Spaces using Scale-model Technique", July 2006, Ning Xiang, Rensselaer Polytechnic Institute (RPI)

### 12.3. MFA Dissertation

- 12.3.1. "Acoustical Performance Analysis of Bilkent University Amphitheater - ODEON", May 2004, Semiha Yilmazer, Bilkent University

### 12.4. Articles in refereed journals

- 12.4.1. Naeemae, R. and Sü Gül, Z. "Assessment of Acoustical Comfort in Educational Atriums of Closed Central and Linear Typologies: Reverberation Perception and Preference" *Building and Environment*, 252 (2024) doi.org/10.1016/j.buildenv.2024.111230  
Q1 Building and Construction, h-index:189, Impact factor: 7.093, SCIE
- 12.4.2. Atay, G., Sü Gül, Z. and Önen, O. "The Acoustical Characterization of Clay Pots in Ottoman Architecture through Experimental and Numerical Analysis " *Journal of Acoustical Society of America*, 154.3 (2023): 1389-1400. Technical area pick of JASA, May 2024  
Q1 Acoustics and Ultrasonics, h-index:194, Impact factor: 2.482, SCIE
- 12.4.3. Bora Özyurt, Z. and Sü Gül, Z. "Acoustical Footprint of the Traditional Turkish Baths in Historic Settings" *International Journal of Architectural Heritage*, Accepted on 04-04-2023. <https://doi.org/10.1080/15583058.2023.2201574>  
Q1 Architecture, h-index:38, Impact factor: 3.00, SCIE & AHCI
- 12.4.4. Adee, A. H., Sü Gül, Z. and Henry, A. "Characterizing the Indoor Acoustical Climate of the Religious and Secular Rock-Cut Structures of Cappadocia" *International Journal of Architectural Heritage*, 17.7 (2023): 1093-1114.  
Q1 Architecture, h-index:38, Impact factor: 3.00, SCIE & AHCI
- 12.4.5. Sü Gül, Z., Eşmebaşı, M. and Bora Özyurt, Z. "The Effects of Stage House Coupling on Multipurpose Auditorium Acoustics" *Applied Acoustics*, 198, Published online on 19-08-2022.

- Q1 Acoustics and Ultrasonics, h-index:89, Impact factor: 3.614, SCIE
- 12.4.6. Sü Gül, Z. and Çalışkan, M. "Acoustics for Architects: A Potpourri of Undergraduate and Graduate Level Teaching Styles, Tools and In-course Projects" *Journal of Acoustical Society of America*, 151.4 (2022): 2326-2335.
- Q1 Acoustics and Ultrasonics, h-index:194, Impact factor: 2.482, SCIE
- 12.4.7. Adeeb, A. H. and Sü Gül, Z. " Investigation of a Tuff Stone Church in Cappadocia via Acoustical Reconstruction" *Journal Acoustics*, 4, (2022): 419-440. "Special issue on Acoustics, Soundscapes and Sounds as Intangible Heritage" ESCI
- 12.4.8. Atalay, T.B., Sü Gül, Z., Sena, E.D., Cvetkovic, Z. and Hacıhabiboğlu, H. "Scattering Delay Network Simulator of Coupled Volume Acoustics" *IEEE/ACM Transactions on Audio/Speech and Language Processing*, 30 (2022):582-593.
- Q1 Acoustics and Ultrasonics, h-index:60, Impact factor: 4.364, SCIE
- 12.4.9. Yazıcı, B., Sü Gül, Z. "Biomimetic Metamaterial Design Simulation and Evaluation for Building Acoustics by Impedance Measurements" *Journal of Testing and Evaluation*, 49.5 (2021):3183-3203.
- Q3 Materials Science, h-index:40, Impact factor: 1.333, SCIE
- 12.4.10. Sü Gül, Z. "Exploration of Room Acoustics Coupling in Hagia Sophia of İstanbul for its Different States" *Journal of Acoustical Society of America*, 149.1 (2021): 320-339. Technical area pick of JASA, August 2021
- Q1 Acoustics and Ultrasonics, h-index:194, Impact factor: 2.482, SCIE
- 12.4.11. Sü Gül, Z., Odabaş E. and Çalışkan M. "Comparative Evaluation of Ray Tracing and Diffusion Equation Modeling in Room Acoustics Design of Subway Stations." *Acoustics Australia*, 48.1 (2020): 93-105.
- Q2 Acoustics and Ultrasonics, h-index:24, Impact factor: 1.891, SCIE
- 12.4.12. Sü Gül, Z. "Acoustical Impact of Architectonics and Material Features in the Lifespan of Two Monumental Sacred Structures." *Journal Acoustics*, 1.3 (2019): 493-516. ESCI, Special issue book chapter Historical Acoustics: Relationships between People and Sound over Time
- 12.4.13. Sü Gül, Z., Odabaş E., Xiang N. and Çalışkan M. "Diffusion Equation Modeling for Sound Energy Flow Analysis in Multi Domain Structures." *Journal of Acoustical Society of America*, 145.4 (2019): 2703-2717. (special issue cover page image) "Special Issue on Room Acoustics Modeling and Auralization"
- Q1 Acoustics and Ultrasonics, h-index:194, Impact factor: 2.482, SCIE

- 12.4.14. Sü Gül, Z., Çalışkan M., Xiang N. and Tavukçuoğlu, A. "Assessment of Acoustical Indicators in Multi-domed Historic Structures by Non-exponential Energy Decay Analysis." *Acoustics Australia*, 46.2 (2018): 181-192.  
Q2 Acoustics and Ultrasonics, h-index:24, Impact factor: 1.891, SCIE
- 12.4.15. Sü Gül, Z., Xiang N. and Çalışkan, M. "Diffusion Equation Based Finite Element Modeling of a Monumental Worship Space." *Journal of Theoretical and Computational Acoustics*, 25.4 (2017): 1750029 1-16. "Special Issue on Numerical Methods for Vibro-Acoustics and Aeroacoustics"  
Q2 Acoustics and Ultrasonics, h-index:40, Impact factor: 1.171, SCIE
- 12.4.16. Sü Gül, Z., Xiang N. and Çalışkan, M. "Investigations on Sound Energy Decays and Flows in a Monumental Mosque." *Journal of Acoustical Society of America*, 140.1 (2016): 344-355.  
Q1 Acoustics and Ultrasonics, h-index:194, Impact factor: 2.482, SCIE
- 12.4.17. Sü Gül, Z., Çalışkan, M. and Tavukçuoğlu, A. "On the Acoustics of Süleymaniye Mosque: From Past to Present." *Megaron*, 9.3 (2014): 201-216.  
ESCI & Avery Index, Impact factor: 0.60
- 12.4.18. Sü Gül, Z. and Çalışkan, M. "Impact of Design Decisions on Acoustical Comfort Parameters: Case Study of Doğramacızade Ali Paşa Mosque." *Applied Acoustics*, 74.6, (2013): 834-844.  
Q1 Acoustics and Ultrasonics, h-index:89, Impact factor: 3.614, SCIE
- 12.4.19. Sü, Z. and Yilmazer, S. "The Acoustical Characteristics of the Kocatepe Mosque in Ankara, Turkey." *Architectural Science Review*, 51.1 (2008): 21-30.  
Q1 Architecture, h-index:39, Impact factor: 0.682, AHCI
- 12.4.20. Sü, Z. and Çalışkan, M. "Acoustical Design and Noise Control in Metro Stations: Three Cases in Ankara Metro System." *Building Acoustics*, 14.3 (2007): 231-249.  
Q3 Materials Science, h-index:25, Impact factor: 2.474, ESCI
- 12.4.21. Yilmazer, S. and Sü, Z. "A Touching Past and A Desperate Future: History and Acoustics of Kocatepe Mosque." *Arkitekt*, 3, (2007): 12-18.
- 12.4.22. Sü, Z. and Yilmazer, S. "The Acoustical Performance Analysis of Bilkent Amphitheater: Proposal for Acoustical Renovation." *Architectural Science Review*, 49.2 (2006): 167-178.  
Q1 Architecture, h-index:39, Impact factor: 0.682, AHCI



12.5. Articles in non-refereed or general journals

- 12.5.1. Atay, G., and Sü Gül, Z. "Clay Pots of Ottoman Architecture: Acoustics, Structure and Ventilation" Proceedings of Meetings on Acoustics (POMA), 42, 015003 (2020): 1-12.
- 12.5.2. Sü Gül, Z., Çalışkan M., and Bora Özyurt, Z. "Acoustical Design Challenges of Public Interiors: Cultural Centers and Terminal Buildings" Proceedings of Meetings on Acoustics (POMA), 42, 015002 (2020): 1-13.
- 12.5.3. Sü Gül, Z. "Konforun Üç Bilinmeyenli Denklemi - X: Akustik." Konsept Projeler, 42 (2014): 98-108.
- 12.5.4. Sü Gül, Z. and Çalışkan, M. "Heydar Aliyev Merkezi Oditoryumu Akustik Tasarım Süreci; the Acoustic Design Process for the Auditorium at the Heydar Aliyev Center." Yapı, March (2014): 144-150.

12.6. Refereed proceedings

- 12.6.1. Xiang, N. and Sü Gül, Z. "Efficiency of Sound energy Decay Analysis in Auditoria." (Invited Paper) 11<sup>th</sup> International Conference on Auditorium Acoustics, Athens, Greece, 28-30 September, 2023.
- 12.6.2. Sü Gül, Z. "A Comparative Analysis of Diffusion Model and Ray Tracing in Room Acoustics through Generative Geometric Forms." (Invited Paper) 10<sup>th</sup> Convention of the European Acoustics Association, Forum Acusticum 2023, Torino, Italy, 11-15 September, 2023.
- 12.6.3. Atay, G., Akın, B., Adeeb, A.H and Sü Gül, Z. "Acoustical Characterization of Authentic Materials and Systems of Historical Structures in Anatolia." (Invited Paper) 10<sup>th</sup> Convention of the European Acoustics Association, Forum Acusticum 2023, Torino, Italy, 11-15 September, 2023.
- 12.6.4. Altun, A. and Sü Gül, Z. "A Study on the Acoustical Performance of Variable Systems in Bilkent Music Hall." 10<sup>th</sup> Convention of the European Acoustics Association, Forum Acusticum 2023, Torino, Italy, 11-15 September, 2023.
- 12.6.5. Sel, E., Düzova, İ. and Sü Gül, Z. "From Waste to Design: The Potentials of Recycled Coffee, Tea Residue and Cardboard Cups as Acoustical Panels." 10<sup>th</sup> Convention of the European Acoustics Association, Forum Acusticum 2023, Torino, Italy, 11-15 September, 2023.
- 12.6.6. Sü Gül, Z., Atay, G., Naeemae, R., Atalay, T.B. and Hacıhabiboğlu, H. "Investigating the Effects of Coupling Factor on Sound Energy Decays of Coupled Volumes." (Invited Paper) ICA2022 42<sup>th</sup> International Congress on

Acoustics, Proceedings of the 24th International Congress on Acoustics, Gyeongju, Korea, 24-28 October 2022.

- 12.6.7. Tarman, D. and Sü Gül, Z. "Sustainable Acoustic Material Investigation Using Fruit Seeds." ICA2022 42th International Congress on Acoustics, Proceedings of the 24th International Congress on Acoustics, Gyeongju, Korea, 24-28 October 2022.
- 12.6.8. Edwards, N, Kemp, J.A. and Sü Gül, Z. "Measurement, Modelling and Subjective Responses to the Sound Decay from Coupled Volumes in the McPherson Room, St Andrews University." (Invited Paper) ICA2022 42th International Congress on Acoustics, Proceedings of the 24th International Congress on Acoustics, Gyeongju, Korea, 24-28 October 2022.
- 12.6.9. Eşmebaşı, M., Bora Özyurt, Z. and Sü Gül, Z. "Contemporary Sports Arena Room Acoustics Design." ICSV28-International Congress on Sound and Vibration, Singapore, 24-28 July 2022.
- 12.6.10. Çalışkan, M., İrklı Eryıldız, D. and Sü Gül, Z. "Past Challenges in the Study of Ancient Open-Air Theatre Acoustics." (Invited Paper) Proceedings of the 2nd Symposium: The Acoustics of Ancient Theatres, Verona, Italy, 6-8 July 2022.
- 12.6.11. Sü Gül, Z. "The Sounds of Hagia Sophia" International Hagia Sophia Symposium - II (Invited Paper) Ayasofya Medresesi, İstanbul, 27-29 May 2022.
- 12.6.12. Naeemae, R. and Sü Gül, Z. "Assessment of Reverberation Perception in Atrium Spaces." (Invited Paper) Euronoise 2021, Madeira, Portugal, (Virtual) 25-27 October 2021.
- 12.6.13. Atay, G. and Sü Gül, Z. "Investigation of the Acoustical Properties of the Clay Pottery Employed in the Dome of Süleymaniye Mosque." Proceedings of 14th National Acoustics Congress (TAKDER), İstanbul Bilgi University, İstanbul, Turkey, (Virtual), 7-8 October 2021, pp. 341-352.
- 12.6.14. Sel, E., Düzova, İ., Şireli, A.E., Yazıcı, B. and Sü Gül, Z. "Reuse of Coffee and Tea Waste for Acoustical Panel Applications in Architectural Design Studios" Inter-Noise 2021, Washington, DC, (Virtual) 1-5 August 2021.
- 12.6.15. Bora Özyurt, Z., Eşmebaşı, M. and Sü Gül, Z. "City Hospitals in Turkey: A review of Acoustical Criteria and Design Principles." Proceedings of Inter-Noise 2020, Seoul, South Korea, (Virtual) 23-26 August 2020. INTER-NOISE and NOISE-CON Congress and Conference Proceedings, pp. 2762-2773 (12).

- 12.6.16. Sü Gül, Z. "The Analysis Methods of Multiple-decay Rates in Room Acoustics Coupling." Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019, pp. 67-80.
- 12.6.17. Yazıcı, B. and Sü Gül, Z. "Proposals of 3D Labyrinthine Type Acoustical Meta-Materials for Sound Control in Architecture" Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019, pp. 187-196.
- 12.6.18. Sü Gül, Z., Sinal, Ö. and Odabaş, E. "Acoustical Comfort in Technology Offices: The Case of BASF Turk Office" Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019, pp. 309-320.
- 12.6.19. Erdem, E., Sü Gül, Z. and Çalışkan, M. "Noise Barrier design for Chiller Noise" Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019, pp. 249-260.
- 12.6.20. Bora Özyurt, Z., Eşmebaşı, M. and Sü Gül, Z. "Evaluation of Acoustic Design Criteria and Principles in Integrated Health Campuses" Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019, pp. 153-164.
- 12.6.21. Eşmebaşı, M., Çalışkan, M. and Sü Gül, Z. "Acoustical Design of the Halls in the Music and Fine Arts University" Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019, pp. 285-296.
- 12.6.22. Nursal, I. M., Eşmebaşı, M., Erdem, E. and Sü Gül, Z. "Acoustic Design and Analysis Methods of Underground Subway Stations" Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019, pp. 273-284.
- 12.6.23. Sinal, Ö., Bora Özyurt, Z., Sü Gül, Z. and Çalışkan, M. "Acoustical Design of Music Practice Rooms: CSO Concert Hall Individual and Choir Practice Rooms" Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019. pp. 297-308.
- 12.6.24. Sü Gül, Z. "Review on Acoustics Timeline of Hagia Sophia and Süleymaniye Mosque in İstanbul" (Invited Paper) Proceedings of 23rd International Congress on Acoustics (ICA 2019), Aachen, Germany, 9-13 September 2019, pp.2351-2358.
- 12.6.25. Sü Gül, Z., Odabaş E. and Çalışkan, M. "Single versus Multi-domain Analysis in Diffusion Equation Modeling for Sound Field Analysis of Distinct Room Shapes" (Invited Paper) Proceedings of 21st International Congress

- on Acoustics (ICA 2019), Aachen, Germany, 9-13 September 2019, pp.6020-6027.
- 12.6.26. Yazıcı, B. and Sü Gül, Z. "3D Labyrinthine-type Acoustical Metamaterial Proposals for Sound Control in Architectural Applications" Inter-Noise 2019, Madrid, Spain, 16-19 June 2019, INTER-NOISE and NOISE-CON Congress and Conference Proceedings, 259.3, pp. 6543-6554. Institute of Noise Control Engineering. Publication date: 30 September 2019.
- 12.6.27. Sü Gül, Z., Odabaş E. and Çalışkan, M. "Acoustical Assessment of Subway Stations by Diffusion Equation Modelling." Proceedings of Wespac 2018: the 13th Western Pacific Conference on Acoustics, New Delhi, India, 11-15 November 2018. ISSN 0973-3302, p.41 (2018).
- 12.6.28. Sü Gül, Z., Meriç Nursal, I., Bora, Z. and Çalışkan, M. "Acoustical Design of Awaza Convention Center." Proceedings of the 22nd International Congress on Acoustics (ICA2016), Buenos Aires, Argentina, 5-9 September 2016. ISBN 978-987-24713-6-1, p.222 (2016).
- 12.6.29. Sü Gül, Z., Odabaş, E., Meriç Nursal, I. and Çalışkan, M. "Acoustical Design of İzmir Opera House." International Symposium on Musical and Room Acoustics (ISMRA2016), La Plata, Buenos Aires, Argentina, 11-13 September 2016.
- 12.6.30. Sü Gül, Z., Xiang N. and Çalışkan, M. "Sound Field Analysis of Monumental Structures by the Application of Diffusion Equation Model." COMSOL Conference 2014, Cambridge, UK, 17-19 September 2014.
- 12.6.31. Sü Gül, Z., Tavukçuoğlu, A. and Çalışkan, M. "A Discussion on the Acoustics of Süleymaniye Mosque for its Original State." 9th International Congress on Conservation of Monuments in Mediterranean Basin (MONUBASIN9), METU, Ankara, Turkey, 3-5 June 2014. Improvements in Conservation and Rehabilitation - Integrated Methodologies, Materials Conservation Laboratory, METU, Abstracts Book, (2014), p.46.
- 12.6.32. Sü Gül, Z., Çalışkan, M. and Tavukçuoğlu, A. "Acoustical Characteristics of Süleymaniye Mosque after 2007-2011 Renovations: Measurements and Comparative Evaluations." 10th National Acoustics Congress (TAKDER), Yıldız Teknik Üniversitesi, İstanbul, Turkey, 16-17 December 2013. pp. 21-28.
- 12.6.33. Sü Gül, Z. and Çalışkan, M. "Acoustical Design of Turkish Religious Affairs Mosque." Proceedings of 21st International Congress on Acoustics (ICA 2013), Montreal, Canada, 2-7 June 2013. Proceedings of Meetings on Acoustics, Vol. 19, 015083 (2013).

- 12.6.34. Sü Gül, Z., Xiang N. and Çalışkan, M. "Investigations on Multi-Slope Sound Energy Decays in Domed Structures." Inter-Noise 2012, New York City, NY, USA, 19-22 August 2012.
- 12.6.35. Sü Gül, Z. and Çalışkan, M. "Acoustical Design of Underground Stations within Warsaw Metro System Phase II." 9th National Acoustics Congress (TAKDER), METU, Ankara, Turkey, 26-27 May 2011.
- 12.6.36. Odabaş, E., Sü Gül, Z. and Çalışkan, M. "Acoustical Design of Doğramacızade Ali Paşa Mosque and Assessment of Acoustical Characteristics by Real-size Measurements." 9th National Acoustics Congress (TAKDER), METU, Ankara, Turkey, 26-27 May 2011.
- 12.6.37. Sü Gül, Z. and Çalışkan, M. "Acoustical Design of Inner Galleries in Heydar Aliyev Center" Proceedings of 20th International Congress on Acoustics (ICA 2010), Sydney, Australia, 23-27 August, 2010, p.157.
- 12.6.38. Sü Gül, Z. and Çalışkan, M. "Acoustical Considerations in the Design of Heydar Aliyev Center Auditorium." Proceedings of the International Symposium on Room Acoustics (ISRA 2010), Melbourne, Australia, 29-31 August 2010. ISBN:978-0-646-54052-8, p.16.
- 12.6.39. Xiang, N., Jasa, T. and Sü, Z. "Schroeder Decay Function Decomposition for Sound-Energy Decay Analysis of Acoustic Coupled-Volume Systems." Proceedings of Wespac IX: the 9th Western Pacific Acoustics Conference, Seoul, Korea., 6-28 June, 2006.
- 12.6.40. Arslan, S., Sü, Z. and Çalışkan, M. "Contribution of the Computer Simulation to the Process of Design in the Courses of Architectural Acoustics: A Study of 500 Seated Concert Hall." 7th National Acoustics Congress (TAKDER), Cappadocia, Nevsehir, Turkey, 17-19 November 2004, pp.129-137.
- 12.7. Published conference abstracts (or extended abstracts)
- 12.7.1. Xiang, N. and Sü Gül, Z. "Diffusion Equation Modeling in Room-Acoustic Applications." (Invited Paper) 186th Meeting of the Acoustical Society of America, Ottawa, Ontario, Canada, 13-17 May 2024.
- 12.7.2. Sü Gül, Z. "The Dome Effect and the Acoustics of Historical Masterpieces." (Invited Paper) Music and the Brain 2022: Sound, Space, and the Aesthetics of the Sublime, Stanford University, Stanford, CA, USA, 21-22 May 2022.
- 12.7.3. Sü Gül, Z. "Coupled Spaces: from Theory to Practice" (Invited Paper) Acoustics in Focus, the 180th Meeting of the Acoustical Society of America,

- 8-10 June 2021. The Journal of the Acoustical Society of America 149.4, A116 (2021).
- 12.7.4. Atalay, T.B., Sü Gül, Z., Sena, E.D., Cvetkovic, Z. and Hacıhabiboğlu, H. "Simulation of Coupled Volume Acoustics with Coupled Volume Scattering Delay Network Models" Acoustics in Focus, the 180th Meeting of the Acoustical Society of America, 8-10 June 2021. The Journal of the Acoustical Society of America 149.4, A117 (2021).
- 12.7.5. Atay, G. and Sü Gül, Z. "Clay Pots in Ottoman Architecture: A Discussion on Their Acoustical Employment" 179th Meeting of the Acoustical Society of America, Acoustics Virtually Everywhere, 7-11 December 2020. The Journal of the Acoustical Society of America 148, 2797 (2020).
- 12.7.6. Sü Gül, Z., Çalışkan, M. and Bora Özyurt, Z. "Acoustical Design Challenges of Colossal Public Interiors" 179th Meeting of the Acoustical Society of America, Acoustics Virtually Everywhere, 7-11 December 2020. The Journal of the Acoustical Society of America 148, 2772 (2020).
- 12.7.7. Sü Gül, Z. "Diffusion Equation Modeling in Sound Field Analysis of Disproportionate Rooms and Coupled Spaces." (Invited Paper) 177th Meeting of the Acoustical Society of America, Louisville, KY, USA, 13-17 May 2019. The Journal of the Acoustical Society of America 145, 1890 (2019).
- 12.7.8. Sü Gül, Z., Xiang N. and Çalışkan, M. "Non-exponential Sound Energy Decay Analysis of a Monumental Worship Space by Diffusion Equation Modeling in a Finite Element Medium." The 12th International Conference on Theoretical and Computational Acoustics (ICTCA), Hangzhou, Zhejiang, China, 11-16 October 2015, Book of Abstracts, pp. 105-106.
- 12.7.9. Sü Gül, Z. "Acoustic Adventures over Continents, among Cultures: Under Tides of Academia and Profession." (Invited Paper) 169th Meeting of the Acoustical Society of America, Pittsburgh, PA, USA, 18-22 May 2015. The Journal of the Acoustical Society of America 137, 2359 (2015).
- 12.7.10. Sü Gül, Z., Xiang N. and Çalışkan, M. "Investigations on Multi-Slope Energy Decay Formation within Single-Space Monumental Structures by Diffusion Equation Modeling and Intensity Probe Measurements." 169th Meeting of the Acoustical Society of America, Pittsburgh, PA, USA, 18-22 May 2015. The Journal of the Acoustical Society of America 137, 2393 (2015).
- 12.7.11. Sü Gül, Z., Xiang N. and Çalışkan, M. "Investigations on Acoustical Coupling within Single-Space Monumental Structures using a Diffusion

Equation Model.” 168th Meeting of the Acoustical Society of America, Indianapolis, Indiana, USA, 27-31 October 2014. The Journal of the Acoustical Society of America 136, 2219 (2014).

12.7.12. Sü Gül, Z. and Çalışkan, M. “Acoustical Considerations in Design and Construction of Turkish Contractors Association Headquarters.” 167th Meeting of the Acoustical Society of America, Providence, Rhode Island, USA, 5-9 May 2014. The Journal of the Acoustical Society of America 135, 2333 (2014).

12.7.13. Sü Gül, Z., Xiang N. and Çalışkan, M. “Multiple-Slope Sound Energy Decay Investigations in Single Space Enclosures with Specific Geometrical and Material Attributes.” (Invited Paper) 166th Meeting of the Acoustical Society of America, San Francisco, California, USA, 2-6 December 2013. The Journal of the Acoustical Society of America 134, 3985 (2013).

12.7.14. Sü, Z. and Xiang, N. “Further Investigations on Acoustically Coupled Spaces using Scale-model Technique.” Fourth Joint Meeting of Acoustical Society of America and Acoustical Society of Japan, Honolulu, Hawaii, USA, 28 November - 2 December 2006. The Journal of the Acoustical Society of America 120, 3263 (2006).

12.7.15. Sü, Z., Xiang, N. and Summers, J.E. “Experimental Investigations of Acoustically Coupled Spaces.” 151st Meeting of Acoustical Society of America, Providence, RI, USA, 5-9 June, 2006. The Journal of the Acoustical Society of America 119, 3208 (2006).

#### 12.8. Chapters in books

12.8.1. Sü, Z., “The dome effect and the acoustics of historical masterpieces.” Listening in the Past: Sound, Space, and the Aesthetics of the Sublime to be published by Lever Press. Stanford University. Under publication, 2023.

### **13. TOTAL NUMBER OF CITATIONS (LISTED IN CITATION INDEX) TO PUBLICATIONS IN (12):**

13.1. Scopus, Total: 245 (h-index: 9)

13.2. Google Scholar, Total: 543 (h-index:12)

### **14. CURRENT RESEARCH INTEREST(S)**

14.1. Acoustics of coupled volume systems

14.2. Diffusion equation model applications in room acoustics

14.3. Acoustics of cultural heritage buildings

14.4. Worship space acoustics

## **15. GRANTS**

- 15.1. KOSGEB - Industrial Applications Funding Support by Turkish Ministry of Science, Industry and Technology, 2014
- 15.2. KOSGEB - Research, Development and Innovation Funding Support by Turkish Ministry of Science, 2013
- 15.3. Technological Enterprise Funding Support by Turkish Ministry of Industry and Commerce, 2009

## **16. EDUCATIONAL DEVELOPMENT ACTIVITIES**

- 16.1. Workshops with students on acoustical material development for design studios of architecture, 2019-2022

## **17. CONTRIBUTION TO UNIVERSITY**

### **17.1. Course Coordinator**

- 17.1.1. ARCH 341 Architectural Lighting and Acoustics, Department of Architecture, Bilkent University, since 2019.
- 17.1.2. ARCH 202 Architectural Design Studio II, Department of Architecture, Bilkent University, since 2019.
- 17.1.3. ARCH 201 Architectural Design Studio I, Department of Architecture, Bilkent University, since 2018.
- 17.1.4. FA 102 Basic Design II, Department of Art Design and Architecture, Bilkent University, 2018.

### **17.2. Committees**

- 17.2.1. Recruitment Committee Member, Department of Architecture, Bilkent University
- 17.2.2. Departmental Degree Qualifications Committee Member, Department of Architecture, Bilkent University
- 17.2.3. Departmental Advisory Board Committee Member, Department of Architecture, Bilkent University
- 17.2.4. Keystone Academic, Departments Committee Member, Graduate School of Engineering and Science, Bilkent University
- 17.2.5. Open House Committee Member, Graduate School of Engineering and Science, Bilkent University



## **18. CONTRIBUTION TO SOCIETY AT LARGE**

### **18.1. Editorial Board Membership**

18.1.1. Member of the Editorial Board for the Rivista Italiana di Acustica (The Italian Journal of Acoustics), date of election: 01.12.2023

### **18.2. Referee, Ad-Hoc Referee**

18.2.1. Journal of Acoustical Society of America

18.2.2. Journal of Applied Acoustics

18.2.3. Journal of Testing and Evaluation ASTM (American Society for Testing and Materials)

18.2.4. Journal of Building Acoustics

18.2.5. Journal of Materials and Design

18.2.6. Journal Acoustics

18.2.7. Journal of Archives of Acoustics

18.2.8. Journal of Asian Architecture and Building Engineering

18.2.9. ICONARP (International Journal of Architecture and Planning)

18.2.10. METU Journal of the Faculty of Architecture

18.2.11. Turkish National Construction Congress Technical Board Member

18.2.12. The Scientific and Technological Research Council of Turkey 1002 Projects

18.2.13. İstanbul Technical University BAP (Scientific Research Projects)

### **18.3. PhD, MS, MFA Jury Membership, PhD Thesis Tracking Committee Membership**

18.3.1. Işın Meriç Nursal, PhD Thesis Proposal Committee Member, Dept. of Architecture, Middle East Technical University, June 2024

18.3.2. İbrahim Tahir Haliru, PhD Thesis Proposal Committee Member, Dept. of Architecture, Bilkent University, June 2024

18.3.3. Gülce Erincik, PhD Thesis Proposal Committee Member, Dept. of Architecture, Bilkent University, May 2024

18.3.4. Zinah Albayyar, PhD Thesis Tracking Committee Member, Dept. of Interior Architecture, Çankaya University, December 2023, June 2024

18.3.5. Georg Goetz, PhD Pre-Examination Reporter of PhD Thesis, Aalto University, April 2024

18.3.6. Beyza Yazıcı, PhD Thesis Tracking Committee Member, Dept. of Interior Architecture and Environmental Design, Bilkent University, December 2023

18.3.7. Khawaja Talha Ejaz, MS Thesis Defense Jury Member, Dept. of Architecture, Bilkent University, August 2023

- 18.3.8. Asya Larisa Coutinho Kitapçı, MS Thesis Defense Jury Member, Dept. of Interior Architecture, Çankaya University, July 2023
- 18.3.9. Zinah Albayyar, PhD Thesis Proposal Committee Member, Dept. of Interior Architecture, Çankaya University, May 2023
- 18.3.10. Beyza Yazıcı, PhD Thesis Tracking Committee Member, Dept. of Interior Architecture and Environmental Design, Bilkent University, December 2022
- 18.3.11. Eray Erdemli, PhD Thesis Tracking Committee Member, Dept. of Interior Architecture and Environmental Design, Bilkent University, December 2022
- 18.3.12. Zinah Albayyar, PhD Qualifying Exam Jury Member, Dept. of Interior Architecture, Çankaya University, Nov 2022
- 18.3.13. Beyza Yazıcı, PhD Thesis Proposal Committee Member, Dept. of Interior Architecture and Environmental Design, Bilkent University, September 2022
- 18.3.14. Irem Merve Makinacı, MS Thesis Defense Jury Member, Dept. of Architecture, Bilkent University, July 2022
- 18.3.15. Franck Zagala, PhD Thesis Defense Jury Member, Mechanical, Acoustic, Electronics and Robotics Sciences of Paris - SMAER, Institut Jean le Rond d'Alembert & IRCAM, Sorbonne University, June 2022
- 18.3.16. Özge Demirci, MS Thesis Defense Jury Member, Dept. of Architecture, Middle East Technical University, June 2022
- 18.3.17. Vicdan Cangür Ateş, MS Thesis Defense Jury Member, Dept. of Architecture, Middle East Technical University, February 2022
- 18.3.18. Elif Mercan, MFA Thesis Defense Jury Member, Dept. of Interior Architecture and Environmental Design, Bilkent University, July 2022
- 18.3.19. Suard Cengu, MS Thesis Defense Jury Member, Dept. of Architecture, Bilkent University, July 2021
- 18.3.20. Beyza Erçakmak, PhD Qualifying Exam Jury Member, Dept. of Interior Architecture, Çankaya University, May 2021
- 18.3.21. Eray Erdemli, PhD Thesis Proposal Committee Member, Dept. of Interior Architecture and Environmental Design, Bilkent University, October 2020
- 18.3.22. Zekiye Şahin, MS Thesis Defense Jury Member, Dept. of Architecture, Dept. of Interior Architecture and Environmental Design, Bilkent University, July 2020

18.3.23. Ege Erdem, MS Thesis Defense Jury Member, Dept. of Multimedia Informatics, Middle East Technical University, January 2020

18.3.24. Merve Erođlu, MS Thesis Defense Jury Member, Dept. of Mechanical Engineering, Middle East Technical University, September 2019

18.3.25. Merve Eřmebaşı, MS Thesis Defense Jury Member, Dept. of Architecture, Middle East Technical University, August 2019

18.3.26. R. Hilmi Kanlıođlu, MS Thesis Defense Jury Member, Dept. of Mechanical Engineering, Middle East Technical University, September 2018