

ZÜHRE SÜ GÜL

Visiting Assistant Professor
Department of Architecture
Faculty of Art, Design and Architecture
Bilkent University, Ankara, Turkey

EDUCATION

Ph.D. in Architecture, Grad. Program in Building Science, Middle East Technical University, Ankara, 2015.

Master of Science, School of Architecture, Grad. Program in Architectural Acoustics, Rensselaer Polytechnic Institute (RPI), Troy, New York, 2006.

Master of Fine Arts, Interior Architecture and Environmental Design, Bilkent University, Ankara, 2004.

Bachelor of Science in Architecture, Middle East Technical University, Ankara, 2002.

ACADEMIC EMPLOYMENT

Visiting Assistant Professor, Department of Architecture, Bilkent University, 2018-ongoing

Part-Time Instructor, Department of Architecture, Bilkent University, 2016-2017

Part-Time Instructor, Department of Interior Architecture and Environmental Design, Bilkent University, 2013-2016

Research Assistant, School of Architecture, Rensselaer Polytechnic Institute (RPI), 2005-2006

Teaching Assistant, Interior Architecture and Environmental Design, Bilkent University, 2003-2005

PROFESSIONAL EMPLOYMENT

Architect - Principle Acoustical Consultant, MEZZO Stüdyo Ltd, Ankara, 2009-2018

Int. Architect- Acoustician, Russ Berger Design Group (RBDG), Dallas, TX, 2006-2008

Architect, Kural Architecture, Ankara, 2002-2003

ARTICLES IN REFEREED JOURNALS

Sü Gül, Z., Xiang N. and Çalışkan, M. "Diffusion Equation Based Finite Element Modeling of a Monumental Worship Space." **Journal of Computational Acoustics**, 25.4 (2017): 1750029 1-16.

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.

Sü Gül, Z., Çalışkan, M. and Tavukçuoğlu, A. "Geçmişten Günümüze Süleymaniye Camii Akustiği." **Megaron**, 9.3 (2014): 201-216.

Sü Gül, Z. and Çalışkan, M. "Impact of Design Decisions on Acoustical Comfort Parameters: Case Study of Doğramacızade Ali Paşa Mosque." (Technical Note), **Applied Acoustics**, 74, (2013): 834-844.

Sü, Z. and Yılmaz, S. "The Acoustical Characteristics of the Kocatepe Mosque in Ankara, Turkey." **Architectural Science Review**, 51.1 (2008): 21-30.

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.

Yılmaz, S. and Sü, Z. "A Touching Past and A Desperate Future: History and Acoustics of Kocatepe Mosque." **Arkitekt**, 3, (2007): 12-18.

Sü, Z. and Yılmaz, S. "The Acoustical Performance Analysis of Bilkent Amphitheater: Proposal for Acoustical Renovation." **Architectural Science Review**, 49.2 (2006): 167-178.

ARTICLES IN NON-REFEREED JOURNALS

Sü Gül, Z. "Konforun Üç Bilinmeyenli Denklemi - X: Akustik." **Konsept Projeler**, 42 (2014): 98-108.

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.

INVITED LECTURES AND TALKS

"Sound Fields in Acoustically Coupled Spaces: Case Studies of Monumental Historical versus Contemporary in Architecture," Department of Architecture, Bilkent University, Ankara, 30 November 2017.

"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.

"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.

"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.

"An Academic and Professional Chronology on Sound," KOBİFEST by METU International Commerce and Logistic Society, Middle East Technical University, Ankara, 24 February 2015.

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.

"Acoustics as a Profession in Architectural Grounds" Technical Lecture Series of BASWA Acoustic AG, Baldegg, Switzerland, 4 December 2012.

Interview for "Azerbaijan's Amazing Transformation," Discovery Science, Build it Bigger, Season 5, Episode 3, Baku, Azerbaijan, 15 December 2010.

CONFERENCE PRESENTATIONS AND REFEREED PROCEEDINGS

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.

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.

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.

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.

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.

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.

Sü Gül, Z. 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.

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.

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.

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.

Sü Gül, Z., Xiang N. 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.

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.

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.

Odabaş, E., Sü Gül, Z. and Çalışkan, M. "Acoustical Design of Doğramacizade Ali Paşa Mosque and Assessment of Acoustical Characteristics by Real-size Measurements." 9th National Acoustics Congress (TAKDER), METU, Ankara, Turkey, 26-27 May 2011.

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.

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.

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.

Xiang, N., Jasa, T. and Sü, Z. "Schroeder Decay Function Decomposition for Sound-Energy Decay Analysis of Acoustic Coupled-Volume Systems." Wespac IX: the 9th Western Pacific Acoustics Conference, Seoul, Korea., 6-28 June, 2006.

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.

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.

OTHER PUBLICATIONS

Ph.D. Dissertation

"Assessment of Non-Exponential Sound Energy Decays within Multi-Domed Monuments by Numerical and Experimental Methods." January 2015, Middle East Technical University (METU), Ankara.

M.Sc. Theses

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

M.F.A. Theses

"Acoustical Performance Analysis of Bilkent University Amphitheater - ODEON." May 2004, Bilkent University, Ankara.

AWARDS/HONORS/GRANTS

"Best Thesis of the Year" Mustafa Parlar Foundation Thesis Awards, METU, 2016

KOSGEB - Industrial Applications Funding Support by Turkish Ministry of Science, Industry and Technology, 2014

KOSGEB - Research, Development and Innovation Funding Support by Turkish Ministry of Science, 2013

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

Technological Enterprise Funding Support by Turkish Ministry of Industry and Commerce, 2009

“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, 2006

“Second Price” in the Best Student Paper Award Competition in the Area of Architectural Acoustics for June 2006 ASA Meeting, 2006

“Commendation” from 2006 ASA Student Design Competition - A City Municipal Building, 2006

Graduate Teaching Assistant Fellowship, Rensselaer Polytechnic Institute (RPI), 2005-2006

UTILITY MODEL / PATENT

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

SCHOLARLY AND PROFESSIONAL DUTIES

Appointed FA 102 Basic Design II Studio Coordinator, Department of Art Design and Architecture, Bilkent University, 2018-ongoing.

Referee, Journal of Acoustical Society of America, since 2006.

EXHIBITIONS

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

MEMBERSHIP

Full Member of Acoustical Society of America (MASA)

Member of Architectural Chamber of Turkey (TMMOB)