

erinc odabaş

(BME, MSc), Senior Acoustical Consultant
Mezzo Stüdyo Architectural Acoustics, Design and Consulting

erinc@mezzostudio.com
+905333154436

education and academic degrees

Ph.D. in mechanical engineering grad. program in building science, yeditepe university, istanbul,
2013 – ongoing
cgpa; 3.92/4.00
thesis proposal – “noise generation characteristics of snake skin under light contact conditions”
supervisor: assist. prof. dr. a. bahadır özcan

master of science, mechanical engineering grad. program in building science, middle east technical university,
ankara
2009-2013
cgpa; 3.57/4.00
thesis submitted – “prediction on absorption and scattering characteristics of acoustic diffusers with micro-perforated
panels”
supervisor: prof. dr. mehmet çalışkan

bachelor of science in mechanical engineering, middle east technical university, ankara,
2004-2009
cgpa; 3.03/4.00

professional employment

acoustical consultant, mechanical engineer, MEZZO Stüdyo Ltd, Ankara,
2010 – ongoing

involved projects

developer acoustic diffusers, RD mezzo stüdyo 2011 - 2013	prediction theories on scattering and absorption characteristics of schroeder diffusers by modifying configuration of the diffuser by means of adding micro perforated panels acoustic diffuser design, optimization on absorption and scattering characteristics for specific purposes geometry and component configuration of schroeder diffusers as space diffusers to enhance low frequency response to absorption
acoustical consultant, developer room acoustics OTEST, METU 2011 - 2012	jury listening room, a listening environment for evaluations of automotive noise, TOFAŞ architectural acoustics design of interior

	sound insulation design to reduce the impact of environmental noise sources in the vicinity of the listening environment
sound quality OTEST, METU 2013 - 2016	identification of sound quality metrics for correlations between objective measurements and customer perception regarding interior car noise, TOFAŞ identification of sound quality metrics in different car segments and models
	assistance to on-road and listening room jury evaluations to capture customer perception regarding car interior noise on different driving conditions
	implementation of correlation analysis to relate objective and subjective test data for future target setting procedures
local non-key expert (LNKE) environmental noise europaaid/131352/D/SER/ TR 2014 - 2015	technical assistance for implementation capacity for the environmental noise directive assistance for environmental noise mapping, noise mitigation measures and action planning to be implemented in related departments of municipalities current environmental noise predictions for industrial, airport, recreational, railway and road traffic noise in preselected 10 pilot areas in Turkey decision making for noise mitigation measures and action planning to reduce the impact of environmental noise in pilot areas' agglomerations

articles in ISI-INDEXED journals

Sü Gül, Z., Odabaş E. & 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. **SCI-E**

Sü Gül, Z., Odabaş E., Xiang N. & 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. **SCI** (special issue cover page image) "Special Issue on Room Acoustics Modeling and Auralization"

conference presentations and refereed proceedings

Odabaş, E. & Caliskan, M. "Vibration Isolation System Design for a Scanning Electron Microscope." Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019.

Odabaş, E. & Caliskan, M. "Raised Steel Platform Design for an Air Handling Unit." Proceedings of 13th National Acoustics Congress (TAKDER), Diyarbakır, Turkey, 17-18 October 2019.

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.

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.

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).

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.

Odabas, E., Bakirci, Ş., E. & Caliskan, M. "Noise Control and Mapping due to Noise Radiation from the Energy Center in a Winter Sports Facility." Proceedings of 10th National Acoustics Congress (TAKDER), YTU, İstanbul, Turkey, 16-17 December 2013.

Odabas, E., Caliskan, M., Girgin Z. & Ozkan A. (2013, September). "Acoustical Design and Experimental Validation of an NVH Listening Room." Internoise 2013, Innsbruck, Austria, 15-18 September 2013.

Odabas, E. & Caliskan, M. "Incorporation of Double Leaf Micro Perforated Panels into Schroeder Diffusers as a Space Absorber." InterNoise 2012, NYC, NY, USA, 19-22 August 2012.

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.

Unal, A., Odabas, E., & Caliskan, M. (2011, May). "Design of Folded Horns by Linear Graph Technique and Finite Element Modeling." Proceedings of 9th National Acoustics Congress (TAKDER), METU, Ankara, Turkey, 26-27 May, 2011.

other publications

M.Sc. Thesis

"predictions on absorption and scattering characteristics of acoustic scatterers modified with micro perforated panels", september 2012, middle east technical university (METU), ankara, turkey

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.

memberships / affiliations

INCE, USA , 2012 -

MMO (chamber of mechanical engineers), 2010 -

TAKDER (Acoustical Society of Turkey), 2011 –

METU bridge society , 2004 - 2006

METU music society , 2004 - 2006

METU musical society , music director, orchestra director, bass player, 2009 - 2011

languages

Turkish, advanced level of written and spoken language - full professional proficiency (native)

English, advanced level of written and spoken language - full professional proficiency

skills

acoustic design tools

odeon, catt acoustics, insul, zorba, dirac, imni, candaA

cad tools

autocad, keycreator, sketchup, solidworks

programming languages

python, matlab, c

modelling tools

matlab, mathcad, comsol multiphysics

editing tools

ms office, adobe illustrator, adobe photoshop, corel drw
architectural acoustics

research interests

vibration isolation and noise control

theoretical approaches in physics

playing piano for 25 years, playing bass guitar for 19 years

personal skills & interests

composing, arranging, performing music

drawing, graphical and visual arts