#### Prof. Hatice Sözer

#### **Personal Information**

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#### **Education Information**

Doctorate, Illinois Institute of Technology, United States Of America 1997 - 2002

Postgraduate, University of Colorado at Denver, United States Of America 1995 - 1997

Undergraduate, Istanbul Technical University, Mimarlık Fakültesi, Mimarlık Bölümü, Turkey 1987 - 1992

#### Foreign Languages

**English** 

#### **Dissertations**

Doctorate, Identification of barriers to the Building Integrated Photovoltaic Design Process as Applied to Curtain Wall, Illinois Institute Of Technology, 2002

Postgraduate, Evaluation of Ski Resorts Case study for Erciyes Mountain in Turkey & Design of four sessions resort hotel project, University Of Colorado At Denver, 1997

### **Research Areas**

Technical Sciences, Environmental Engineering, Environmental Technology, Environmental Modeling, Architecture, Building Information, Building Design

### **Academic Titles / Tasks**

Professor, Istanbul Technical University, Enerji Enstitüsü, Enerji Planlaması Ve Yönetimi, 2021 - Continues Associate Professor, Istanbul Technical University, Enerji Enstitüsü, Enerji Planlaması Ve Yönetimi, 2012 - 2021 Assistant Professor, Istanbul Technical University, Enerji Enstitüsü, Enerji Planlaması Ve Yönetimi, 2011 - 2012

#### **Courses**

### Published journal articles indexed by SCI, SSCI, and AHCI

I. Comparing energy profiles of different building types by determining their sensitivities Zafaranchi M., Sözer H.

Architectural Engineering and Design Management, 2023 (SCI-Expanded)

II. Waste capacity and its environmental impact of a residential district during its life cycle Sözer H., Sozen H.

ENERGY REPORTS, vol.6, pp.286-296, 2020 (SCI-Expanded)

III. An evaluation process for natural ventilation using a scenario-based multi-criteria and multi-interaction analysis

Utkucu D., Sözer H.

ENERGY REPORTS, vol.6, pp.644-661, 2020 (SCI-Expanded)

IV. Calibrating the building energy model with the short term monitored data A case study of a largescale residential building

Tuysuz F., Sözer H.

ENERGY AND BUILDINGS, vol.224, 2020 (SCI-Expanded)

V. Interoperability and data exchange within BIM platform to evaluate building energy performance and indoor comfort

Utkucu D., Sözer H.

AUTOMATION IN CONSTRUCTION, vol.116, 2020 (SCI-Expanded)

VI. Dynamic evaluation method to increase the effect of the automation system on the building energy performance

Sözer H., Tuysuz F.

JOURNAL OF CLEANER PRODUCTION, vol.253, 2020 (SCI-Expanded)

VII. Energy saving, global warming and waste recovery potential of retrofitting process for a district Sözer H., Sozen H.

JOURNAL OF CLEANER PRODUCTION, vol.238, 2019 (SCI-Expanded)

VIII. Predicting the indoor thermal data for heating season based on short-term measurements to calibrate the simulation set-points

Sözer H., Aldin S. S.

ENERGY AND BUILDINGS, vol.202, 2019 (SCI-Expanded)

IX. Evaluation of innovative sustainable design techniques from traditional architecture: a case study for the cold dry climatic region in Turkey

Sözer H., Bekele S.

ARCHITECTURAL SCIENCE REVIEW, vol.61, no.3, pp.143-155, 2018 (AHCI)

X. Applying traditional architectural rules for energy efficiency and lateral structural stiffness to an 80 story tower

Sozer H., Clark R. J., Elnimeiri M.

ENERGY, vol.36, no.8, pp.4761-4768, 2011 (SCI-Expanded)

XI. Improving energy efficiency through the design of the building envelope

Sozer H.

BUILDING AND ENVIRONMENT, vol.45, no.12, pp.2581-2593, 2010 (SCI-Expanded)

XII. Qualitative and Quantitative Evaluation of Energy Conversation Measures (ECM) Over Baseline as Given by ASHRAE

Sözer H., Elnimeiri M.

Architectural Science and Review, vol.49, no.2, pp.127-132, 2005 (SSCI)

### Articles Published in Other Journals

I. Building Performance Optimization throughout the Design-Decision Process with a Holistic Approach Utkucu D., Sözer H.

Journal of Architectural Engineering, vol.29, no.1, 2023 (ESCI)

II. Effectiveness of interventions to convert the energy consumption of an educational building to zero energy

Zaferanchi M., Sözer H.

INTERNATIONAL JOURNAL OF BUILDING PATHOLOGY AND ADAPTATION, 2022 (ESCI)

III. Calculation of the Sensitivity Factors within the Defined Indexes in a Building Level Sözer H., Takmaz D.

JOURNAL OF SUSTAINABLE DEVELOPMENT OF ENERGY WATER AND ENVIRONMENT SYSTEMS-JSDEWES, vol.8, no.1, pp.1-21, 2020 (ESCI)

IV. Waste Potential of a Building Through Gate-to-Grave Approach Based on Life Cycle Assessment (LCA)

SÖZER H., Sözen H., Utkucu D.

International Journal of Sustainable Development and Planning, vol.15, no.2, pp.165-171, 2020 (Scopus)

V. INVESTIGATION of a TRADITIONAL HOUSE based on its ENERGY CONSERVATION Utkucu D., SÖZER H.

Journal of Building Energy Environment: BEE, vol.3, no.3, 2019 (Peer-Reviewed Journal)

VI. Energy Efficiency for Hot-Humid Climate Based On Openings and Roof Type, Adana Case YÜKSEL Ç. Y., SÖZER H.

International Multilingual Journal of Science and Technology (IMJST), vol.4, no.4, 2019 (Peer-Reviewed Journal)

VII. Evaluation of Sustainable Design Strategies Based on Defined Indexes at a District Level Sözer H., Kükrer E.

JOURNAL OF SUSTAINABLE DEVELOPMENT OF ENERGY WATER AND ENVIRONMENT SYSTEMS-JSDEWES, vol.6, no.4, pp.609-630, 2018 (ESCI)

VIII. Evaluating the effects of increasing of building height on land surface temperature Rad R., Rafieian M., Sözer H.

International Journal of Urban Management and Energy Sustainability (IJUMES), vol.1, no.1, pp.11-16, 2017 (Peer-Reviewed Journal)

IX. Critical Factors in Reducing the Cost of Building Integrated Photovoltaic BIPV Systems SÖZER H., Elnimeiri M.

Architectural Science Review, vol.50, no.2, pp.115-121, 2007 (Scopus)

X. Critical Factors on Reducing the Cost of Building Integrated Photovoltaic (BIPV) Systems Sözer H., Elnimeiri M.

Architectural Science and Review, vol.50, no.2, pp.115-121, 2007 (Scopus)

## **Supported Projects**

Sözer H., Güven D., Kayalıca M. Ö., Çolak Ü., Yavuzsoy Keven E., Erasmus Project, NextGenSportsFacilities, 2023 - 2025 Sözer H., Kırant H. T., Project Supported by Higher Education Institutions, Geleneksel Rus Şöminesi Isıtma Sisteminin Günümüz Mimarisinde Isı Akış Modellemesi, 2017 - 2018

Sözer H., Project Supported by Higher Education Institutions, SUSTAİNABLE CİTİES, 2015 - 2018

Sözer H., Project Supported by Higher Education Institutions, SMART CİTİES, 2015 - 2018

Sözer H., Project Supported by Higher Education Institutions, INVESTIGATING THE IMPORTANCE OF MEASUREMENT & VERIFICATION (M&V) STUDY FOR MAXINIZING ENERGY SAVING IN EXISTING BUILDINGS, 2015 - 2018

Sözer H., Project Supported by Higher Education Institutions, Effect Of High-Rise Developments On A Microclimate, 2015 - 2018

Sözer H., Project Supported by Higher Education Institutions, Enrgy Efficient Building Design, 2013 - 2018

Sözer H., Project Supported by Higher Education Institutions, Effect of High-Rise Developments on a Microclimate, 2012 - 2018

Sözer H., Project Supported by Higher Education Institutions, INDENTIFICATION OF BARBIERS TO BUILDING INTEGRATED RENAWABLE SYTEMS INTO THE TALL BUIL DING DESIGN IN TURKEY, 2011 - 2018

Sözer H., Project Supported by Higher Education Institutions, Enerji Enstitüsü Binasının Yeşil Bina Kriterelrine Göre Mimari iyileştrime Çalışması, 2011 - 2018

Sözer H., Project Supported by Higher Education Institutions, RESESRCH STRATEGIES İN TALL BUİLDİNGS, 2010 - 2018

### **Metrics**

Publication: 47

Citation (WoS): 149 Citation (Scopus): 242 H-Index (WoS): 4 H-Index (Scopus): 6