Prof. SOOFIA TAHIRA ELIAS ÖZKAN

Personal Information

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Education Information

Doctorate, Middle East Technical University, Faculty of Architecture, Department of Architecture, Turkey 1997 - 2000 Postgraduate, Middle East Technical University, Faculty of Architecture, Department of Architecture, Turkey 1995 - 1996 Undergraduate, Middle East Technical University, Faculty of Architecture, Department of Architecture, Turkey 1975 -1981

Dissertations

Doctorate, Recovery and Reuse of Demolition Waste; Recycling Rubble for Concrete Components, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2000 Postgraduate, Analytical Study of Low-Cost Housing: Pakistan's Experience and Proposed Project for Southeastern Turkey, Middle East Technical University, Faculty of Architecture, Department of Architecture, 1996

Research Areas

Social Sciences and Humanities, Engineering and Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2013 - Continues Associate Professor, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2006 - 2013 Assistant Professor, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2001 - 2006 Lecturer, Middle East Technical University, Faculty of Architecture, Department of Architecture, 1997 - 2001

Advising Theses

ELİAS ÖZKAN S. T., Embodied Energy Assessment of Three Types of Iranian Clay Bricks and Comparison Of The

Embodied Energy Of Five Exterior Wall Configurations, Postgraduate, A.GHARBI(Student), 2022 ELİAS ÖZKAN S. T., EVALUATING THE USABILITY OF BIOLUMINESCENCE IN BUILDING INTERIORS, Postgraduate, Ö.DEMİRCİ(Student), 2022

ELİAS ÖZKAN S. T., Design and simulation of a dynamic PCM integrated trombe wall system for ensuring thermal comfort in highly glazed buildings, Postgraduate, E.SOYER(Student), 2022

ELÍAS ÖZKAN S. T., EVALUATION OF SUSTAINABILITY IN HOSPITALITY SECTOR IN TURKEY AND COMPARATIVE LIFECYCLE ASSESSMENTS OF ACCOMMODATION OPTIONS, Postgraduate, K.AKDEMÍR(Student), 2022

ELİAS ÖZKAN S. T., An investigation into the implementation of construction automation and robotics technologies for construction waste management, Postgraduate, S.MELEK(Student), 2022

ELİAS ÖZKAN S. T., Investigation of the impacts of building and urban parameters onurban heat island formation in Ankara, Postgraduate, D.ERKAYA(Student), 2022

ELİAS ÖZKAN S. T., Kinetic facades for maximizing human comfort and increasing space use efficiency in highly glazed building interiors, Postgraduate, I.BÜKE(Student), 2022

ELİAS ÖZKAN S. T., An evaluation of material characteristics and hygrotermal performance of ecological thermal insulation materials for use in timber frame buildings, Postgraduate, I.AZRA(Student), 2022

ELİAS ÖZKAN S. T., The relationship between life cycle embodied energy and flexible design characteristics of traditional Ottoman houses in Ankara, Postgraduate, E.KILIÇ(Student), 2021

Elias Özkan S. T., Adapting the quality function deployment method to design appropriate building facades, Doctorate, N.DELJAVAN(Student), 2020

ELİAS ÖZKAN S. T., A research on the design criteria of subway stations, Doctorate, Ö.Öztürk(Student), 2020

ELİAS ÖZKAN S. T., Parametric design and simulation of a smart façade for hot and humid climates using biomimetics, PCMs AND SMAs: a case study in İran, Postgraduate, N.Ghaeili(Student), 2020

ELİAS ÖZKAN S. T., A Study on the utilization of microalgaefor producing light and biofuel in the built environment, Postgraduate, Y.Sünger(Student), 2019

ELİAS ÖZKAN S. T., A Facade mapping method to understand human comfort in buildings with highly glazed facades, Postgraduate, C.Tüzer(Student), 2019

ELİAS ÖZKAN S. T., Bioclimatic interventions for reducing cooling energy demand in hot and humid climates,

Postgraduate, B.Dönmez(Student), 2019

ELİAS ÖZKAN S. T., Changing residents' stance on building energy retrofits by using building performance simulations, costs and payback period data, Postgraduate, G.Nur(Student), 2019

ELİAS ÖZKAN S. T., Adopting sustainability assessment criteria to guide urban regeneraton projects: two case studies in Ankara, Postgraduate, Z.Seyhan(Student), 2019

ELİAS ÖZKAN S. T., Analyzing the impacts of building form on the environment: a case study in Ankara witha focus on solar reflection, Postgraduate, H.Nur(Student), 2019

ELİAS ÖZKAN S. T., INTEGRATING SUSTAINABILITY PRINCIPLES INTO ARCHITECTURAL DESIGN STUDIO, Doctorate, K.ELDIN(Student), 2018

ELİAS ÖZKAN S. T., End-of-life analysis for brick debris: Recovery, strength, life cycle cost and environmental assessment, Doctorate, D.ÜÇER(Student), 2018

ELİAS ÖZKAN S. T., Smart and sustainable urban districts: Assessment systems and case studies, Postgraduate, H.NUR(Student), 2017

ELİAS ÖZKAN S. T., A proposed model for understanding the impacts of climate change on tangible cultural heritage, Doctorate, E.GİZEM(Student), 2016

ELİAS ÖZKAN S. T., Variations in sizes, shapes, materials and colours of mosaic tesserae in Southeastern Anatolia Region, Doctorate, Y.TANRIVERDİ(Student), 2016

ELİAS ÖZKAN S. T., Superimposing eco-village principles on children's villages for a healthier environment, Postgraduate, F.TURHAN(Student), 2016

ELİAS ÖZKAN S. T., Evaluating the impact of different atria configurations on the energy performance of buildings in different climates, Postgraduate, M.FARHOUDI(Student), 2016

ELİAS ÖZKAN S. T., Identifying the barriers of implementing lean construction principals in developing countries, Postgraduate, E.MARKAZI(Student), 2016

ELİAS ÖZKAN S. T., Model making as a value-added tool in public, educational and professional domains, Doctorate,

H.AHMED(Student), 2015 ELIAS ÖZKAN S. T., Physical and thermal properties of pine-needle lightweight loam, Postgraduate, E.ASLAN(Student), 2015 ELİAS ÖZKAN S. T., Design considerations for modern railway stations; comparing Berlin, Beijing and Ankara, Postgraduate, Z.ATAK(Student), 2015 ELİAS ÖZKAN S. T., Environmental sustainability of university campuses: A practical tool for assessment, Postgraduate, H.ELİF(Student), 2014 ELIAS ÖZKAN S. T., Natural ventilation through double-skin facades in tall buildings, Postgraduate, S.DANIK(Student), 2014 ELİAS ÖZKAN S. T., Energy performance of smart buildings: Simulating the impact of active systems and passive strategies, Postgraduate, B.TETİK(Student), 2014 ELİAS ÖZKAN S. T., Environmental sustainability of university campuses : a practical assessment tool, Postgraduate, H.Elif(Student), 2014 ELİAS ÖZKAN S. T., A Method for performance based design exploration : generating external shading units for an office building in Nicosia, Cyprus, Postgraduate, E.Burak(Student), 2013 ELİAS ÖZKAN S. T., The Impact of surface texture and wind on convective heat transfer from building façades, Doctorate, N.Öztürel(Student), 2013 ELIAS ÖZKAN S. T., Optimizing the fenestration of typical Turkish school building with respect to daylight and thermal performance, Postgraduate, D.DİLBER(Student), 2013 ELİAS ÖZKAN S. T., The impact of double skin facades on thermal performance of buildings, Postgraduate, S.DANESHKADEH(Student), 2013 ELIAS ÖZKAN S. T., Comparing environmental impacts of four building envelope configurations using e-tool LCA, Postgraduate, T.FAZLI(Student), 2013 ELİAS ÖZKAN S. T., Life cycle assessment of masonry wall types using simulation technique, Postgraduate, D.ÜÇER(Student), 2012 ELİAS ÖZKAN S. T., Evaluating intelligence in intelligent buildings: case studies in Turkey, Postgraduate, M.FARZİN(Student), 2012 ELİAS ÖZKAN S. T., Life cycle assessment of masonry wall types using simulation techniques, Postgraduate, D.Üçer(Student), 2012 ELİAS ÖZKAN S. T., Assessment of indoor air quality in crowded educational spaces, Postgraduate, N.Ebru(Student), 2012 ELİAS ÖZKAN S. T., Impacts of participant related factors on rebar supply chain performance in SMEs, Doctorate, Z.BANU(Student), 2012 ELIAS ÖZKAN S. T., Opportunities and barriers of architect led design build projects, Postgraduate, A.DENIZ(Student), 2012 ELİAS ÖZKAN S. T., Energy benchmarking method for urban settlements, Doctorate, A.TERECİ(Student), 2012 ELİAS ÖZKAN S. T., Schedule delay analysis in construction projects: a case study using time impact analysis method, Postgraduate, S.Dayı(Student), 2010 ELİAS ÖZKAN S. T., The effect of sun spaces on temperature patterns within buildings: Two case studies on the METU campus, Postgraduate, H.KIRMIZI(Student), 2009 ELİAS ÖZKAN S. T., Models for estimating construction duration: An application for selected buildings on the METU campus, Postgraduate, E.ODABAŞI(Student), 2009 ELIAS ÖZKAN S. T., An analysis of the thermal performance of METU staff housing units and calibration of their simulated model, Postgraduate, M.Özlem(Student), 2008 ELİAS ÖZKAN S. T., Appropriate passive cooling strategies for hot and humid climates : a case study in cyprus, Postgraduate, M.Yılmaz(Student), 2008 ELİAS ÖZKAN S. T., The role of architectural heritage in the rural built environment: A case study, Postgraduate, E.GİZEM(Student), 2008 ELIAS ÖZKAN S. T., Origins and magnitude of waste in the Turkish construction industry, Postgraduate, M.BAYTAN(Student), 2007 ELİAS ÖZKAN S. T., Life cycle assessment of building materials in hotel refurbishment projects: A case study in Ankara,

Doctorate, A.BERRİN(Student), 2007 ELIAS ÖZKAN S. T., Evaluation indicators for selection of sustainable building materials, Postgraduate, Ö.CANARSLAN(Student), 2007 ELIAS ÖZKAN S. T., An investigation on the application of standard contracts in the Turkish construction industry, Doctorate, B.Sertyeşilışık(Student), 2007 ELİAS ÖZKAN S. T., Bio-climatic architecture in Libya: Case studies from three climatic regions, Postgraduate, N.ADEL(Student), 2007 ELIAS ÖZKAN S. T., Assessing thermal comfort conditions: a case Study on the METU Faculty of Architecture building; the case of ODTÜKENT, Postgraduate, C.Cakır(Student), 2006 ELİAS ÖZKAN S. T., Design and production of steel buildings: A case study in Ankara, Postgraduate, Ö.BEŞGÜL (Student), 2006 ELİAS ÖZKAN S. T., Evaluating quality in mass-housing projects via six sigma: The case of Odtükent, Postgraduate, F.FERYAL(Student), 2006 ELİAS ÖZKAN S. T., Assessing thermal comfort conditions; A case study on the METU Faculty of Architecture building, Postgraduate, Ç.ÇAKIR(Student), 2006 ELİAS ÖZKAN S. T., The process and feasibility of building deconstruction: A case study in Ankara, Postgraduate, F.ZEHRA(Student), 2005 ELİAS ÖZKAN S. T., A provision model and design guidelines for permanent post-disaster housing in rural areas of Turkey based on an analysis of reconstruction projects in Çankırı, Doctorate, N.DİKMEN(Student), 2005 ELİAS ÖZKAN S. T., Exploration factors affecting the execution of international design projects, Postgraduate, U.Fığlalı(Student), 2005 ELİAS ÖZKAN S. T., Architectural programming for achieving value-added design, Postgraduate, G.AKINÇ(Student), 2005 ELİAS ÖZKAN S. T., Exploration of factors affecting the execution of international design projects, Postgraduate, U.FIĞLALI(Student), 2005 ELİAS ÖZKAN S. T., Assessing thermal performance of office building envelopes : a case study on energy efficiency, Postgraduate, A.NEŞEN(Student), 2004 ELİAS ÖZKAN S. T., Energy performance of duble-skin faacades in intelligent office buildings : a case study in Germany, Postgraduate, A.Bayram(Student), 2003 ELİAS ÖZKAN S. T., The effects of construction materials on thermal comfort in residential buildings; an analysis using ecotect 5.0, Postgraduate, N.Aydın(Student), 2003 ELİAS ÖZKAN S. T., Energy performance of double-skin façades in intelligent office buildings: A case study in Germany, Postgraduate, A.BAYRAM(Student), 2003 ELİAS ÖZKAN S. T., The effects of passive solar energy systems on the thermal performance of residential buildings; an analysis using ENERGY-10, Postgraduate, Ö.TUĞRUL(Student), 2003 ELİAS ÖZKAN S. T., Disassembly and re-usa of building materials: A case study on salvaged timber components, Postgraduate, A.IŞIK(Student), 2003 ELİAS ÖZKAN S. T., The effects of construction materials on thermal comfort in residential buildings; An analysis using Ecotect 5.0., Postgraduate, N.AYDIN(Student), 2003 ELİAS ÖZKAN S. T., An appraisal of structural glass wall systems with emphasis on spider fitting details, Postgraduate, S.BÜYÜKKILIÇ(Student), 2003 ELİAS ÖZKAN S. T., Disassembly and re-use of building materials : a case study on salvaged timber components, Postgraduate, A.Işık(Student), 2003 ELIAS ÖZKAN S. T., Environmental control and energy generation through building façades: a case study in Ankara, Postgraduate, E.Sönmez(Student), 2001 ELİAS ÖZKAN S. T., Application of fire safety criteria to high-rise buildings: A case study of İstanbul, Postgraduate, Ö.AYHAN(Student), 2001 ELİAS ÖZKAN S. T., An appraisal of discrepancies between estimated and final costs in Turkish Public works projects : a case study, Postgraduate, M.Tamer(Student), 2001 ELIAS ÖZKAN S. T., An Appraisal of discrepancies between estimated and final cost in Turkish public work projects: A case study, Postgraduate, M.TAMER(Student), 2001

Articles Published in Other Journals

I. Interventions for Ensuring Thermal Comfort Equality in Apartment Buildings Dikmen N., ELİAS ÖZKAN S. T., SÜMER HAYDARASLAN K. EUROPEAN JOURNAL OF SUSTAINABLE DEVELOPMENT, vol.6, no.3, pp.40-50, 2017 (ESCI)

Books & Book Chapters

- I. Identification of Ancient Mosaics near Adiyaman using an Archaeometry Approach Tanriverdi Y., Akşit I., Akça E., Elias Özkan S. T., Dolaş O.
 in: Architecture, Planning and Design Researches, Z. Özlem Parlak Biçer, Editor, Nobel Yayın Dağıtım, Ankara, pp.405-417, 2018
- II. Chapter 1: Unconventional Insulation Materials
 Dikmen N., Elias Özkan S. T.
 in: Insulation Materials in Context of Sustainability, A. Almusaed and A. Almssad, Editor, InTechOpen, Rijeka, pp.3-23, 2016
- III. 1. ULUSLARARASI LİSANSÜSTÜ ARAŞTIRMALARI SEMPOZYUMU YAPILI ÇEVRE ELİAS ÖZKAN S. T., ÇAKMAKLI A. B., TANER Ö. Metu Press Yayınları, Ankara, 2010
- IV. Proceedings Of The 1st International Graduate Research Symposium On The Built Environment ELİAS ÖZKAN S. T., ÇAKMAKLI A. B., SUMMERS F. Metu Mf Press, Ankara, 2010
- V. Issues of Building Science: What they are and how to tackle them Düzgüneş A., Elias Özkan S. T.
 METU Faculty of Architecture Press, Ankara, 2006

Refereed Congress / Symposium Publications in Proceedings

- I. Hygro-thermal and hydric properties of fibre and aggregate reinforced earth plaster
 Pedergnana M., Elias Özkan S. T.
 Architecture Technology and Innovation Conference (ATI 2020) on Smart Buildings and Smart Cities, İzmir,
 Turkey, 27 30 April 2020, pp.214-227
- II. Bioclimatic Interventions for Reducing Cooling Energy Demand in Hot and Humid Climates Dönmez B., Elias Özkan S. T.
 2nd. International Conference on Contemporary Affairs in Architecture and Urbanism (ICCAUA-2019), Antalya, Turkey, 9 - 10 May 2019, pp.175-192
- III. Attitudes Towards Consuming, Saving Or Producing Energy
 Aydemir G. N., Elias Özkan S. T.

 ICEARC 2019 International Civil Engineering and Architecture Conference , Trabzon, Turkey, 17 20 April 2019,
 pp.371-380
- IV. Bio-Skin: the Design Concept for Efficient Building Envelope From Nature Ghaeili Ardabili N., Elias Özkan S. T.
 . ICEAC 2019 - International Civil Engineering and Architecture Conference, Trabzon, Turkey, 17 - 20 April 2019, pp.296-308
- V. Sustainable architectural design education: A pilot study in a 3rd year studio
 Eldin Mohamed K., Elias Özkan S. T.
 Al-Azhar 14th International Conference on Engineering, Architecture and Technology, Cairo, Egypt, 12 14
 December 2017, pp.126-135
- VI. Occupants' attitudes towards energy retrofits in old residential buildings

Aydemir G. N., Elias Özkan S. T. SB-Lab 2017 International Conference on Advances on Sustainable Cities and Buildings Development, Porto, Portugal, 15 - 17 November 2017, pp.3-14 Smartization of Urban Neighborhoods: A Case Study in Ankara VII. Elias Özkan S. T., Özkan H. N. International Conference on Working Class Districts, Vienna, Austria, 14 - 15 September 2017, pp.10-11 VIII. Incorporating biomimicry principles into building envelopes: An overview on developed examples Moghaddam M. F., ELİAS ÖZKAN S. T. 33rd International on Passive and Low Energy Architecture Conference: Design to Thrive, PLEA 2017, Edinburgh, United Kingdom, 2 - 05 July 2017, vol.2, pp.2610-2617 IX. Taxonomy of sustainable, responsive and adaptive Façades Deljavan N., ELİAS ÖZKAN S. T. 33rd International on Passive and Low Energy Architecture Conference: Design to Thrive, PLEA 2017, Edinburgh, United Kingdom, 2 - 05 July 2017, vol.3, pp.3991-3998 X. Modelling in Architecture: Physical or Virtual? Hadia H. A., Elias Özkan S. T. ASCAAD 2016: International Conference on Parametric Materialism; Evolution of Digital Technologies for Development, London, United Kingdom, 7 - 09 November 2016, pp.135-146 XI. Refurbishing for Thermal Comfort: The rehabilitation of an abandoned village school building Farzin M., Elias Özkan S. T., Summers F. PLEA 2016 Cities, Buildings, People: Towards Regenerative Environments, California, United States Of America, 11 -13 July 2016, pp.1340-1347 XII. Impact of local additives on properties of earthen plasters Elias Özkan S. T. 12th World Congress on Earthen Architecture TERRA, Lyon, France, 11 - 14 July 2016, pp.1-10 XIII. Post-occupancy evaluation of straw-bale buildings in Turkey Pedergnana M., Elias Özkan S. T. International Strawbuilding Conference: Natural Building in the 21st Century, Wellington, New Zealand, 3 - 09 March 2016, pp.25-35 XIV. The Impacts of Model making on Learning Environment Learning by Doing ÖZKAN S. T. E., Hatem Ahmed H. 5th Annual Conference on Scientific Research and its Role in Raising the Level of Technical Education, El-Khoms, Libya, 24 - 25 November 2015 XV. The Kerkenes Eco center a show case for appropriate housing and sustainable development in rural Turkey ÖZKAN S. T. E., Francoise S., Matthieu P. Passive and Low Energy Architecture: Architecture in (R)Evolution, Bologna, Italy, 9 - 11 September 2015 XVI. Assessing environmental sustainability of university campuses ÖZKAN S. T. E., Havva Elif K. 1st Isra International Engineering Conference, Amman, Jordan, 7 - 08 April 2015 Assessing the environmental impact of five different life cycle scenarios for brick masonry wall XVII. ÖZKAN S. T. E., ÜÇER D. 2nd International Sustainable Building Symposium, Ankara, Turkey, 28 - 30 May 2015 Energy efficiency of buildings with a solar space: Two case studies from the Anatolian Plateau XVIII. ELİAS ÖZKAN S. T., Summers F., Taner Ö. 26th International Conference on Passive and Low Energy Architecture: Architecture Energy and the Occupant's Perspective, PLEA 2009, Quebec City, QC, Canada, 22 - 24 June 2009 XIX. Analyzing environmental performance of AAC blocks, strawbales and mud-plaster in hybrid wall construction ELİAS ÖZKAN S. T., Summers F., Karaguzel T., Taner O. 25th International Conference on Passive and Low Energy Architecture: Towards Zero Energy Building, PLEA

2008, Dublin, Ireland, 22 - 24 October 2008

XX. A comparative study of the thermal performance of building materials
 ELİAS ÖZKAN S. T., Summers F., Surmeli N., Yannas S.
 23rd International Conference on Passive and Low Energy Architecture, PLEA 2006, Geneva, Switzerland, 6 - 08
 September 2006

Supported Projects

ELİAS ÖZKAN S. T., DELJAVAN N., Project Supported by Higher Education Institutions, Evaluating thermal comfort in METU campus buildings, 2017 - 2017 ELİAS ÖZKAN S. T., TANER DÜZYOL Ö., Project Supported by Higher Education Institutions, Impact of Occupant Behaviour on Energy Consumption in Buildings, 2016 - 2016 Elias Özkan S. T., Çakmakli A. B., Project Supported by Higher Education Institutions, Post occupancy evaluation of strawbale buildings in Turkey, 2016 - 2016 ELİAS ÖZKAN S. T., PEDERGNANA M., ERDOĞAN S. T., Project Supported by Higher Education Institutions, Impact of additives on the properties of earth plasters, 2015 - 2016 Elias Özkan S. T., Project Supported by Higher Education Institutions, Thermal Performance of Buildings with Passive Solar Gains, Insulation and Energy Efficient Heating Systems, 2014 - 2014 ELİAS ÖZKAN S. T., KOÇ H. E., Project Supported by Higher Education Institutions, Measuring infiltration in building envelopes, 2013 - 2013 ELİAS ÖZKAN S. T., DELJAVAN N., Üçer D., ASLAN E., PEDERGNANA M., TURHAN F., Project Supported by Higher Education Institutions, Energy Efficient Design of Buildings, 2013 - 2013 ELİAS ÖZKAN S. T., Project Supported by Higher Education Institutions, Ofis Bunalarında İç Hava Kalitesinin Doğal Havalandırma Yolu İle İyileştirilmesi Odtü Yapı Bilimleri Yapı Fiziği Sahasındaki Çalışmalara Destek, 2011 - 2011 Elias Özkan S. T., Dikmen N., TUBITAK Project, Evaluation of post-disaster housing projects in earthquake affected areas in and around Dinar, Turkey, 2007 - 2010 Elias Özkan S. T., Summers F., Project Supported by Higher Education Institutions, Selection of Appropriate Building Materials and Construction Techniques for Energy Efficient Buildings, 2008 - 2008

Contractual Researches

ELİAS ÖZKAN S. T., Sürdürülebilir Yeşil Bina ile Sürdürülebilir Yerleşmelerin Belgelendirilmesine ilişkin Temel Değerlendirme Kılavuzu ve UYBBS Yazılımına Hazırlık Kapsamında Data Yönetim Planı Hazırlanması İşi, 2016 - 2017

Metrics

Publication: 41 Citation (WoS): 129 Citation (Scopus): 173 H-Index (WoS): 6 H-Index (Scopus): 7

Non Academic Experience

MSO İnşaat Ltd Şti Soofia and Muzaffer Özkan - Consulting Architects