PROFESSIONAL DETAILS

Fullname Kawar Tahseen Salih

E-mail kawar.salih@dpu.edu.krd

Phone 9647504963826

Gender male

Birth Date 1990-01-21

Address Iraq - Duhok

Nationality Iraqi

- Presidency of Duhok Polytechnic University (DPU)
- Scientific Research Center

LANGUAGE

- **Kurdish** (Native)
- **English** (Proficient)
- **Arabic** (Proficient)

SOCIAL LINKS

ResearchGate google scholar Personal Webpage

EDUCATION

Jul, 2017

Diploma of Teaching

Training Center

University of Duhok

Sep, 2016

MSc. Sustainable Buildings and Environments

Architecture, planning and Landscape

Newcastle University

Jul, 2012

BSc. Architectural Engineering

Architecture

University of Duhok

TITLE

Mar, 2021

Lecturer

PROFESSIONAL EXPERIENCE

Sep, 2018 - Apr, 2022

Part time Lecturer (adjunct)

American University of Kurdistan

Duhok

• Lecturer of three Courses in Architecture Dep. • Lecturer of Environmental System and Sustainability • Lecturer of Building Technology (Materials and System) • Lecturer of Architectural Drawing II • Lecturer of Geometric Design Modeling in the Interior Design dep. • Lecturer of Materials: Resources & Assemble in the Interior Design Dep

Mar, 2018 - Apr, 2022

Researcher in Sustainable Buildings & Environments and Director of the Skills Development (DSDL)

Duhok Polytechnic University- Research Center- Directorate of Skills Development and Innovation

Duhok

• Research conduction in the field of Sustainable Buildings and Environments at the Research Center. • Managing the department of skills development in term of admission and coordination stuff. • “Academic leadership” of different type of short and long-term courses in for university capacity building for the academic staff and students. (I.e. Language courses, academic writing and research methodology). • Course plan reviewer.

Oct, 2017 - Jun, 2018

Part time Lecturer

Nawroz University

Duhok

• Second-supervisor of the fifth year projects (20 projects). • Lecturer of Descriptive Geometry module (1st year students). • Lecturer of Engineering Drawing Module (1st year students, Participated in the

Nov, 2016 - Apr, 2017

Volunteering Assistant Lecturer

Duhok University

Duhok

• Member of the Teaching staff in Design studios of 3rd-year undergraduate students. • Supervised more than six student's project.

Dec, 2013 - Apr, 2017

Site Engineer

Atresh Company for general contracting

Duhok

• Supervision of the refurbishment of 8 schools in refugee's campus in 2017 • Supervision of the presidency building construction of Duhok Polytechnic University in 2015 • Contract Estimator

Oct, 2013 - Dec, 2013

Building Designer

Line Engineering Consultant- Duhok

Duhok

• Design of more than 5 multi-storey buildings (hotels, apartment buildings, restaurants and motels) in Duhok and Zakho. • Design and supervising of more than 10 villas and houses in Duhok. • The interior design of different villas at Zozan city in Duhok.

Dec, 2012 - Apr, 2015

Teaching Assistant

Duhok University

Duhok

• Member of the Teaching staff in Design studios of undergraduate students. • Teaching assistant of the Building Construction and Working Drawing modules. • Member of the committee of managing and supervising the library of the Architecture dep. • Member of the committee of supervising the architecture department's maintenance.

Oct, 2012 - Dec, 2012

Junior architect

Dahinan Engineering Bureau

Duhok

• Design and supervision of more than 5 house and villas in Duhok. • Design of a hotel and an apartment building in Duhok.

SKILLS

Researcher:

Researcher in the field of Sustainable Buildings and the Environments and topic related to zero-carbon buildings, carbon-free cities, and future cities.

licensed Architect, and Interior Designer:

10 years of practicing architectural and Interior design

AutoCAD: Professional in the Autodesk AutoCAD

3DMAX:

Professional in the Autodesk 3DMAX

BIM: Professional in Building Information Modelling (BIM) software such as Autodesk REVIT

Building Performance Simulation (BPS): Expert in the building performance simulations skills and software such as (IES-VE)

Urban Performance Simulation (EPS) Skills: Expert in the urban performance simulations and like ENVI-MET softwater.

MEMBERSHIP

Sep, 2012 - Current

Kurdistan Engineers Union

Kawar Tahseen Salih

Kurdistan Region of Iraq

PUBLICATION JOURNAL

Apr, 2022

Lessons from New York High Line Green Roof: Conserving Biodiversity and Reconnecting with Nature

Urban Science

The concept of sustainable urban design has appeared in different perspectives to minimize and reduce the negative impacts of urban expansion in terms of climatic and environmental drawbacks. One of the undeniable approaches of sustainable urban design is the adoption of green urban roofs. Green roofs are seen to have a substantial role in addressing and resolving environmental issues in the context of climate change. Research investigations have indicated that green roofs have a remarkable impact on decreasing rainwater runoff, reducing the heat island effect in urban spaces, and increasing biodiversity. Nevertheless, green roofs in urban spaces as a competent alternative to nature remain a standing question. To what extent can green roofs mimic the biodiversity that is seen in nature? Moreover, to what level is this approach practical for achieving a tangible reconnection with nature, or so-called biophilia? This study attempts to discuss the essence and impact of green roofs in urban spaces based on a case study approach. The study reflected lessons from the New York High Line Green Roof regarding biophilia and biodiversity in this case study. It concludes with key lessons that can be transferred to other urban spaces with similar settings.

Mar, 2021

Construction Beyond War: Assessing Time and Cost of Prefabrication in Rebuilding Post-Disaster Cities

IOP Conference Series: Materials Science and Engineering

The urgent need for housing in challenging contexts such as Middle East and developing countries contradicts with the long time required to provide adequate responses, especially in the case of severely affected cities by war and mass destruction. The city of Mosul in Iraq is a case where there is an urgent need for reconstruction, especially in the housing sector. Advanced technologies in construction present opportunities in facing post-war reconstruction challenges. Prefabrication has been used for housing delivery around the world due to its efficiency in terms of time and cost as construction time-frame and costs form the core challenges of a successful and functional approach for reconstruction in post-war cities. This paper is part of a comprehensive research that investigates the potential of adopting prefabrication in housing delivery through a BIM-based inspection. This paper inspects a developed housing prototype to examine the cost and time feasibility of the design approach and application of prefabrication. The main findings include identifying the significance of prefabrication in presenting cost-efficient and time-effective construction approach for the restoration of the damaged housing sector in the city of Mosul.

Mar, 2021

Simulation of Energy Efficiency Measures for the Residential Building Stock: A Case Study in the Semi-Arid Region

IOP Conference Series: Materials Science and Engineering

IOP Conference Series: Materials Science and Engineering PAPER • THE FOLLOWING ARTICLE ISOPEN ACCESS Simulation of Energy Efficiency Measures for the Residential Building Stock: A Case Study in the Semi-Arid Region Kawar Salih1, Gabriela Ledesma2 and Zaid O. Saeed3 Published under licence by IOP Publishing Ltd IOP Conference Series: Materials Science and Engineering, Volume 1090, 1st International Conference on Engineering Science and Technology (ICEST 2020) 23rd-24th December 2020, Samawah, Iraq Citation Kawar Salih et al 2021 IOP Conf. Ser.: Mater. Sci. Eng. 1090 012018 DownloadArticle PDF References Download PDF 188 Total downloads Turn on MathJax Share this article Share this content via email Share on Facebook (opens new window) Share on Twitter (opens new window) Share on Mendeley (opens new window) Article information Abstract Global energy use has risen due to increased demands and inefficient grids in developing countries. Energy saving is detrimental in countries in which their energy supply capacity is lower than their demand. Energy Efficiency Measures (EEMs) can easily be incorporated in new buildings; however, existing buildings have limitations in geometry, orientation, and materiality which restrict their applicability. This research analyses the efficiency of applying several EEMs in the residential stock in hot semi-arid regions to reduce their energy demand. A typical residential house in Duhok, Iraq was selected as a case study. The EMMs efficiency was analysed using building energy simulation. As heating and cooling loads have similar contributions to the house thermal demand -with 56% and 44% respectively, the potential energy reduction considered both loads simultaneously. The optimal combination of EEMs can reduce the thermal load by 48.7%, while individual passive measures can only reduce the thermal load up to 16%. In urban scale, the energy reduction potential presented in this paper would represent a shift from a heating-dominated scenario to a cooling-dominated one. This in turn would aid in decreasing the energy demand during winter months in which the largest energy shortages in the city are registered.

Jan, 2019

Impact of the Design of Urban Block on Buildings' Indoor Daylight and Energy Loads in Semi-Arid Regions

Urban and Transit Planning

It has been proven that designing sustainable buildings starts from early stages of urban design. The design of urban blocks, specifically, is deemed one of the pragmatic approaches of sustainable urban design. Studies have focused on the impact of urban block design and regulation on the outdoor thermal comfort in the semi-arid regions. However, limited studies have been found in the semi-arid regions, which examined that impact, on the indoor behaviour of buildings (specifically, the daylight quality and energy performance). Further, heating load is neglected in most studies of the semi-arid regions in which the focus is only on the cooling load reduction. The study has focused on two parameters of urban block distribution, which are the surface-to-volume ratio of blocks and their orientation with the consideration of both heating and cooling loads of buildings. In Duhok (a semi-arid city in the Kurdistan region of Iraq), daylight quality and energy consumption of various types of residential blocks have been observed

using dynamic simulation. The results propose that there is a substantially higher energy demand for heating than cooling, providing attention to the heating load in semi-arid regions. Reasonably, because of the high U-values of buildings in Duhok. The findings also suggest that changing blocks' orientation can alter the total energy consumption by 8%. With regards to the surface-to-volume ratio (S/V), an increment of 15% of overall energy consumption is noticed after doubling the ratio (S/V), though the research reveals the opportunity of decreasing energy consumption with the rise of the S/V through passive design strategies of urban blocks. Based on the results, recommendations are given for revising the design of current/future residential urban blocks to maximise indoor daylight quality with a higher S/V and more energy saving in these regions.

Sep, 2018

Finding Alternative Methods for Controlling the Power Shortage in Kurdistan through Improving Buildings' Energy Performance

Academic Journal of Nawroz University

The power shortage is one of the major problems in developing countries. Kurdistan Region of Iraq suffers from this issue, like other developing countries. Especially, after the economy crises that has started in 2014. However, all its efforts for tackling this challenge has been in providing more energy supply stations and more fuel provision. Few studies have been found in the region that seek the relation between the quality of buildings and energy consumption. It is questioned if the building sector in Kurdistan is well managed and environmentally sufficient to consume the minimum amount of energy since it is the largest energy-consuming sector. This research will seek an alternative to decrease the energy demand in buildings instead of expanding the energy sector. This could be achieved by evaluating the quality of building sector environmentally and improving it. Providing guidelines for building's thermal regulations, passive building design and increasing the energy efficiency of buildings by renewal means could be alternative strategies for lowering the energy consumption. Theoretical and numerical research approach have been taken in to account for finding the answer through a case study and comparative analysis. A variation of 21-29% of power consumption can be observed between buildings that have not considered energy efficiency criteria in their design and those who reflected them more in the design.

CONFERENCE

Dec, 2020 - Dec, 2020

1st International Conference on Engineering Science and Technology ICEST-2020

Iraq, Samarah As Presenter

an International Conference

May, 2018 - May, 2018

1st International Conference on Engineering Challenges in Kurdistan Region 2018

Iraq, Nawroz University, Duhok As Presenter

I presented a conference paper titled on "Finding Alternative Methods for Controlling the Power Shortage in Kurdistan through Improving Buildings' Energy Performance

Apr, 2018 - Apr, 2018

Resilient and Responsible Architecture and Urbanism

Netherlands, Hanze University As Guest

I presented a paper in the conference on the name "Urban Block Design's Impact on the Indoor Daylight Quality, Heating and Cooling Loads of Buildings in the Semi-Arid Regions: Duhok City in Kurdistan Region-Iraq as a Case Study"

WORKSHOP

May, 2019 - Current

Pedagogical Training workshop

In All DPU campus As Guest

I was the coordinator and listener in the workshop. look at the link below for more details about the workshop. https://www.dpu.edu.krd/web/page/en/1623/

Nov, 2018 - Nov, 2018

IELTS Exam preparation workshop

Presidency of Duhok Polytechnic University As Guest

A volunteer teacher Mr. Saleem Sadeeq Al-Zebari holder of M.A in English Language has prepared some basics that are helpful for IELTS test for the DPU staff. the course was co-operated by the Directorate of Skills Development (DSDL) that I am a director of it. I was supervisor of the workshop.

SEMINAR

Oct, 2018

Master Plan Design

Directorate of Skills Development, Presidency of DPU As Presenter

TRAINING COURSE

Mar, 2019 - May, 2019

Research Methodolgy

In Duhok and Akre camps of the DPU, National

This course aimed at achieving a set of objectives in scientific research, including: Identify the field of study, its problem, formulate its hypotheses, choose the method of scientific research, determine methods of data collection and analysis, test the validity of scientific hypotheses, reach specific conclusions and recommendation. Course attendant will Understand how to Write with clarity and precision, approach various common writing assignments, Master the basics of sentence structure, formatting, and punctuation, Organize your ideas logically and with clear transitions, Develop and support your own ideas persuasively https://www.dpu.edu.krd/web/page/ku/1711/?fbclid=IwAR0WAkPFxl7bhLZvHJ

nHUogN0GwIkjyW3lMkvo4_tRsEBmhIlNueDozGm8c
https://www.dpu.edu.krd/web/page/ku/1733/?fbclid=IwAR0yNkpWPnkDUmV6I
6Vo102Gga0kkQtbkuX4MPWZ5dYlYM2tFoxDuyra3Qc

Nov, 2018 - Dec, 2018

R.C Buildings Design Using ETABS

Presidency of Duhok Polytechnic University, National

Duhok Polytechnic University Directorate of Skills Development & Laboratories opened a course on (R.C Buildings Design Using ETABS, SAFE, and AutoCAD) for the Engineers on November 11, 2018. The course run for six weeks, three days per week. I was the director of this course.

POSTGRADUATE COMMITTEE

Feb, 2019

Design of Architectural Drawings

Master Degree Degree, As Supervisor

Jan, 2019

Rehabilitation of Research Center Building

Member Degree, As Member

PATENTED

Dec, 2021

Runner-up/ Second Place in International Architectural Competition

International Competition

Architectural competition

1

Dec, 2021

Honorable Mention Place in International Architectural Competition

International Competition

Architectural competition

1

Oct, 2021

Finalist in the Archstorming's architecture competition

International Competition

Architectural competition

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