



Noman Ashraf

Lecturer

Personal Data

Nationality | India
Department | Building Engineering
College | Collage of Architecture and Planning
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Language Proficiency

Language	Read	Write	Speak
Arabic	✓		
English	✓	✓	✓

Academic Qualifications

Date	Academic Degree	Place of Issue	Address
2011	Master of Technology – Mechanical Engineering (Thermal Sciences)	India	Aligarh Muslim University, India
2008	Bachelor of Technology – Mechanical Engineering	India	CCS University, India

PhD, Master, Bachelor Research Title:

Master's Dissertation	Heat Transfer and Fluid flow studies on Natural Convection over Heated plane.
Master's Project	Analysis of Natural Convection over a vertical flat plate.
Bachelor's Project	Optimization of thickness of packed bed Solar air heater using iron screen matrices.



Professional Record:

Job Rank	Place and Address of Work	Date
Lecturer	Imam Abdulrahman Bin Faisal University, Dammam, Kingdom of Saudi Arabia	2013- To Date
Lecturer	Vivekananda College of Technology and Management, India	2011-2013
HVAC Design Engineer	Comfort Design HVAC Consultant, India	2008-2009

Scientific Achievements:

Published Refereed Scientific Research

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Mujeebu, M. A., and Noman Ashraf	Energy-saving benefits of thermal insulation and glazing in code-compliant office building in cooling-dominated climates	Renewable and Sustainable Energy Reviews, 2024.
2	B. U. Mohammed, Noman Ashraf , et al.,	Pathways for efficient transition into net zero energy buildings (nZEB) in Sub-Sahara Africa. Case study: Cameroon, Senegal, and C ^o te d'Ivoire	Energy & Buildings, 2023.
3	Noman Ashraf and M. A. Wahid	Natural convection over a vertical flat plate: A numerical and experimental investigation	AIP Conference Proceedings, 2023
4	M. A. Aziz, M. Zubair, Noman Ashraf , et al.,	Mechanical, non-destructive, and thermal characterization of biochar-based mortar composite	Biomass Conversion and Biorefinery, 2023
5	S. H. Alyami, A. Alqahtany, Noman Ashraf , N. A. Aldossary, A. Almutlaqa, Faris Al-Maziad et. al	Impact of Location and Insulation Material on Energy Performance of Residential Buildings as per Saudi Building Code (SBC) 601/602 in Saudi Arabia	Materials, 2022
6	Muhammad Nasir, M. Zubair, Noman Ashraf , et. al	Engineered Cellulose Nanocrystals-Based Cement Mortar from Office Paper Waste: Flow, Strength, Microstructure, and Thermal Properties	Journal of Building Engineering, 2022
7	M. Nasir, M. Zubair, Noman Ashraf et. al	Recent review on synthesis, evaluation, and SWOT analysis of nanostructured cellulose in construction applications	Journal of Building Engineering, 2022



8	Saleh H. Alyami, Noman Ashraf , et. al	Likelihood of Reaching Zero Energy Building Design in Hot Dry Climate: Saudi Arabia”,	IEEE Access, 2021
9	Noman Ashraf , Muhammad Nasir, Walid Al-Kutti & Faris A. Al-Maziad,	Assessment of thermal and energy performance of masonry blocks prepared with date palm ash	Materials for Renewable and Sustainable Energy, 2020
10	Muhammad Abdul Mujeebu, Noman Ashraf ,	Impact of location and deadband on energy performance of nano aerogel glazing for office building in Saudi Arabia	Building Research & Information, 2020
11	Othman S Alshamrani, M Abdul Mujeebu, Noman Ashraf et. al	Selection of External Wall Material by LCC Technique for Office-cum-Commercial Building in the Eastern Province of Saudi Arabia	Journal of Architecture and Planning, 2017
12	M. Abdul Mujeebu, Noman Ashraf	Energy performance and economic viability of nano aerogel glazing and nano vacuum insulation panel in multi-story office building	Energy, 2016
13	M. Abdul Mujeebu, Noman Ashraf	Effect of nano vacuum insulation panel and nanogel glazing on the energy performance of office building	Applied Energy, 2016
14	Othman Subhi Alshamrani, Noman Ashraf et al.	Significance of Life-Cycle Costing for Selection of Building Construction Materials	International Journal of Civil and Structural Engineering, 2015

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Othman Al-Shamrani, M. Essam Shaawat, Noman Ashraf and Abdussalam Alsudairi	Minimizing the Environmental Emissions Associated with Energy Consumption of Mosque Building in Saudi Arabia	The First International Conference on Mosque Architecture, 2016
2	Othman Subhi Alshamrani, Noman Ashraf , M. Esam Shaawat et al.	Significance of Life-Cycle Costing for Selection of Building Construction Materials	Second Intl. Conf. on Advances in Civil, Structural and Construction Engineering - CSCE 2015
3	Noman Ashraf and Faris Al-Maziad	Effects of façade on the energy performance of Education Building in Saudi Arabia	World SB14 Barcelona Conference, 2014



4	M. Essam Shaawat, Noman Ashraf	Comparative study of energy performance of an institutional building for different façade configurations in Saudi Arabia	SB 13 Conference, Graz University, Austria, 2013
5	Noman Ahsraf , Mustafa J. and Altamush M.	Experimental and Numerical analysis of Natural Convection over a Constant Heat flux vertical Plate	2nd National Conference on Advances in Heat Transfer and Fluid Dynamics, 2013

Scientific & Academic Awards

#	Name of Winners	Award Title	Year	Details
1	Mukarram Zubair, Noman Ashraf , Mohammad Saood, Muhammad Arif, Walid Al-Kutti	Annual Student Research Publishing Initiative Award	2022	Awarded by Deanship of Scientific Research, Imam Abdulrahman Bin Faisal University <i>Category: Second Track of Students Research Publishing Initiative</i>

Completed and Ongoing Funded Research Projects

#	Supported by	Research Title	Amount of Budget	Report Date
1	British Council, UK	Synergies in Energy-Efficient Design Strategies for Net-Zero Energy Residential Buildings: A Case Study of Saudi Arabia and the United Kingdom	£40,000	Ongoing
2	Imam Abdulrahman Bin Faisal University	Process optimization of cellulose nanocrystals from office paper waste and its utilization as renewable additive for strong green concrete	SR 139,700	2022
3	Imam Abdulrahman Bin Faisal University	Comparison of sky luminance distribution models with measurements done in Dammam Area	SR 56,700	2021
4	Imam Abdulrahman Bin Faisal University	The Physico-mechanical and Thermal Properties of Brick and Boards Containing Palm Tree Wood for Construction	SR 159,600	2016
5	Binladin Research Chair on Quality and Productivity Improvement in the Construction Industry, University of Hail	Selection of Construction Material based on Life Cycle Costing Technique.	SR 100,000	2016



Current Researches

#	Research Title	Name of Investigator(s)
1	Performance evaluation of CdTe based PV modules for climatic conditions in Saudi Arabia	Noman Ashraf
2	Energy Performance of Thermal Insulation and Glazing for Office Building in Typical Climatic Locations of Saudi Arabia	Noman Ashraf
3	Techno-Economic Assessment of Photovoltaic Glazing System for an Office Building in Saudi Arabia	Noman Ashraf and Faris Almaziad

Membership of Scientific and Professional Societies and Organizations

- Member of American Society of Mechanical Engineers (ASME)
- Member of The Association for Materials Protection and Performance (AMPP)
- Member of Environment Technology and Management association (ETMA)
- Member of International Society of Automation (ISA)

Teaching Activities

Undergraduate

#	Course/Rotation Title	Course Code	Extent of Contribution
1	Building Services (3): Mechanical Systems	BSTC 432	Lectures
2	Thermodynamics & Fluid Mechanics	BSTC 331	Lectures and Labs
3	Green/Sustainable Buildings	BSTC 400	Lectures and Labs
4	Environmental Control Systems	ARCH 322	Lectures and Labs
5	Environmental Eng. (1): Energy Systems	BSTC 332	Lectures and Tutorials
6	Building Systems (1): Plumbing and Air Conditioning	INAR-321	Lectures and Labs
7	Engineering Mathematics	BSTC 341	Lectures
8	Building Maintenance & Supervision	BSTC 512	Lectures and Labs
9	Advanced Topics in Building Energy	BSTC 583	Lectures and Labs
10	Energy-Efficient Building Automation Systems	ENRG 453	Lectures and Labs
11	Design Studio – 6,7,8, 9, 10	BSTC 302, 401, 402, 501, 502	Design Studio
12	Arch Design Studio 10	ARCH 502	Design Studio



Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution
1	Building Energy Systems and Energy management	BUSC 651	Lectures
2	Thermal properties and performance of building	BUSC 650	Lectures and Labs
3	Solar Energy Technology	BUSC 652	Lectures and Labs
4	Directed Studies in Building Science	BUSC 680	Lectures and Labs
5	Experimentation Techniques	BUSC 613	Lectures and Labs

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Undergraduate	32	2015	2023

Supervision of Bachelors, Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	Bachelors		Imam Abdulrahman Bin Faisal University	Each Year

Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
1	Bachelors	Assessment of the efficiency of glazing integrated PV module for an office building in Saudi Arabia	Imam Abdulrahman Bin Faisal	2023-24



Administrative Responsibilities, Committee and Community Service

Committee Membership

#	From	To	Position	Organization
1	2017	Date	Head	Curriculum Area Committee – Basic Sciences
2 3	2017	Date	Member	Curriculum Area Committee – Building Services
4	2017	Date	Member	KPI Data Collection Committee
5	2018	Date	Member	Program Assessment and APR Committee
6	2014	Date	Member	Laboratories Committee
7	2020	Date	Member	Safety and Fire Diplomas Committee
8	2022	Date	Member	Scientific Committee for Exit Exam
9	2022	Date	Member	MCEM Master Program Accreditation Committees - Steering Committee no. 4 (Faculty Members)

Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Building Energy Simulation Software – DesignBuilder, Ecotect, IES-VE, eQuest, TRACE 700, EnergyPlus.
2	Design of HVAC systems for Buildings – Hourly Analysis Program (HAP), E20, Duct Sizer, DuctMate, Pipesizer, Ductulator, ASHRAE Duct Fitting Database, CARRIER Psychart, Climate Consultant
3	Photovoltaics (PV) and BiPV systems Analysis – RETScreen, HOMER, PVSOL, PVGIS, PVSites
4	Environmental Assessment – OpenLCA, One Click LCA
5	Statistical Analysis – SPSS, Crystal Ball, SuperDecision
6	Building Information Modelling (BIM) – Revit MEP
7	Programing Language – MATLAB, FOTRAN, C

Research Profile and IDs:

Google Scholar Profile	http://scholar.google.com/citations?user=JEuNe58AAAAJ&hl=en
Scopus Profile	https://www.scopus.com/authid/detail.uri?authorId=55816371000
WOS Profile	https://www.webofscience.com/wos/author/record/AAD-5785-2019
Research Gate Profile	https://www.researchgate.net/profile/Noman_Ashraf2
ORCID ID	https://orcid.org/0000-0002-9687-1171
SCOPUS ID	5581637100
WOS Researcher ID	AAD-5785-2019

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