

### Dr. FARHEEN BANO

Sr. Assistant Professor

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COA Registration No: CA/2007/39552

ISHRAE Registration No. 59677

**Short Profile:** Dr Farheen Bano, an alumnus of Government College of Architecture and IIT Roorkee, has 12 years of experience in the architectural profession and Academics. After working as an Architect in Corporate offices and Assistant professor in Jamila Millia Islamia, New Delhi, BBD and Integral University, she joined the Faculty of Architecture and Planning, AKTU, in 2012. She has a diverse range of academic roles in Architectural design, drawing, history, services, energy conservation and simulation. She brings a sustainability perspective to all these roles. With an imminent doctoral degree, she has specialized in the energy-efficient building envelope and building energy simulation. Her field of interest is climate-responsive architecture, thermal comfort, sustainable architecture, energy-efficient buildings, energy modelling and simulation. Her research papers are published in various national and international reputed journals, and she presented her work at National and International Conferences. She received an Award from Rula Awards: Research Peace Awards of 2019 for "International Best Researcher in Architecture."

**OBJECTIVE:** To contribute as architect, researcher and Faculty of Architecture

towards sustainable, resilient society development.

**KEY SKILLS:** Ability to communicate ideas to students through visuals.

Knowledge of different computer programs including Acad, Rhino Grasshopper, DesignBuilder, eQuest, Open Studio, SPSS, etc.

Programming Language: python

Excellent communication skills.

FIELD OF SPECIALIZATION:

- Climate responsive architecture
- Energy-efficient building design
- Building energy modelling and simulation
- Life cycle cost analysis

**EDUCATION:** 

Doctor of Philosophy, 17, August 2020

Topic: An optimized design for building Envelope for office Building of

Lucknow

Dr APJ Abdul Kalam Technical University, India

Master of Architecture, 2008, 80.6 CGPA

Major: Sustainable Water Management in Housing

IIT Roorkee, India

Bachelor of Architecture, 2005, 75.9%

Government College of Architecture, Lucknow, India

### **WORK EXPERIENCE:**

#### **TEACHING:**

**Designation: Sr. Assistant Professor** 

Organization: Faculty of Architecture and Planning, Dr APJ Abdul Kalam

technical University, Lucknow. Duration: 28.07.2012- till date

Designation: Assistant Professor ( Architecture)

Organization: BABU BANASIDAS UNIVERSITY

Duration: 06.05.2011-25.07.2012

**Designation: Assistant Professor (Architecture)**Organization: INTEGRAL UNIVERSITY, LUCKNOW

Duration: 05.07.2010 - 05.05.2011

**Designation: Assistant Professor (Architecture)**Organization: JAMIA MILLIA ISLAMIA, NEW DELHI

Duration: 01.08.2008 - 31-07-2009

**Designation: Lecturer Architecture** 

Organization: INTEGRAL UNIVERSITY, LUCKNOW

Duration: 20.01.2006 - 15.06.2006

PROFESSIONAL:

**Designation: Senior Architect** 

Organization: DesignIcon, New Delhi

Duration: 24.11.08 - 30.01.2010

**Designation: Executive Architect** 

Organization: ARKHION PVT.LMT., GURGAON

Duration: 01.09.08 - 17.12.2008

**Designation: Architect** 

Organization: POINT ARCHITECTS PVT. LMT, LUCKNOW

Duration: 01.07.2005 - 20.01.2006

# PAPER PUBLISHED IN JOURNALS

# Energy-saving potential and cost-effectiveness of active energy-efficiency measures for residential building in Warm-humid climate,

Muhammad Abdul Mujeebu, Farheen Bano (2022)

Energy for Sustainable Development, Elsevier, Volume 67, 163-176,

ISSN 0973-0826, https://doi.org/10.1016/j.esd.2022.01.011.

# Methodology for Effective Daylighting in Courtyard Houses of Composite Climate

Lalit Verma, Farheen Bano (2021)

International Journal of Innovative Technology and Exploring Engineering (IJITEE) Volume 10, Issue 5. 103-113.

# Design guidelines for Net Zero Energy Building (NZEB) in Warm and Humid Climate of India

Dhruv Repuriya, Farheen Bano (2021)

Journal of Emerging Technologies and Innovative Research (JETIR) 8 (2), 294-2315.

# Energy Savings by Improved Envelope Design: A Case Study of Office Buildings in Lucknow India

Farheen Bano, Ritu Gulati

International Journal of Architecture, Engineering and Construction (2021) 10 (1), 32021002, 1-10

# Comparative Study: Energy Performance Analysis of Conventional Office Buildings at Lucknow.

Bano, F., & Sehgal, V. (2020). A Journal of Design and Built Environment, 20(1),24-34.

# Finding the gaps and methodology of passive features of building envelope optimization and its requirement for office buildings in India.

Bano, F., & Sehgal, V. (March 2019). Thermal Science and Engineering Progress, Volume 9, 66-93. doi:https://doi.org/10.1016/j.tsep.2018.11.004

# Evaluation of energy-efficient design strategies: Comparison of the thermal performance of energy-efficient office buildings in composite climate, India.

Bano, F., & Sehgal, V. (December 2018). Solar energy, Volume 176, 506-519. doi:https://doi.org/10.1016/j.solener.2018.10.057

# Examining the Role of Building Envelope for Energy Efficiency in Office Buildings in India

Architecture Research (2016); Vol 6(5) Page No. - 107-115. p-ISSN: 2168-507X e-ISSN:2168-5088. doi:10.5923/j.arch.20160605.01

Early-Stage Design Guidelines for Net-Zero-Energy Office Buildings in Tropical Climate", (April 2020) IEEExplore, IEEE, 2020 International Conference on Contemporary Computing and Applications (IC3A), doi:10.1109/IC3A48958.2020.233286

### Significance of Daylighting for Drug Addicts in Rehabilitations Centre

Renna Roy. Farheen Bano (2020), International Journal of Science and Research (IJSR) ISSN: 2319-7064, Volume 9 Issue 7, July 2020, 213-217, DOI: 10.21275/SR20702170654

### Sustainable Water Management in Housing

Pushplata, Farheen Bano (2008) Paper published in Journal: 'Architecture: Time Space and People, July 2008

# PAPER PUBLISHED IN CONFERENCE PRECEEDINGS

# An Integrated Review on Construction and Demolition Waste Management in India: Most Recent Developments and Way Forward

Dr. Ritu Gulati, Dr. Farheen Bano, Mohammad Aamir

11th International Conference on Sustainable Waste Management &
Circular Economy 2021 (11th IconSWM-CE) & IPLA Global Forum 2021

Management Services of Local Authorities

# Early-Stage Design Guidelines for Net-Zero-Energy Office Buildings in Tropical Climate

Bano, F., & Sehgal, V.. and Tahseen. M., (2020). International Conference on Contemporary Computing and Applications (IC3A), Lucknow, India, 2020, pp. 143-149, doi: 10.1109/IC3A48958.2020.233286.

### Healthy Dwellings In Accordance With Green Building Rating Systems

Paper presented in Conference: National Seminar on Housing , Kolkata, India, 15-17 dec., 2007

### PAPER PRESENTED IN CONFERENCE/ SYMPOSIUM/ SEMINAR/WEBINAR/FDP

# Scio- Environmental Sustainability of Traditional Courtyard houses of Lucknow and Varanasi

Ar Lalit Akash Verma, Dr Farheen Bano

ICOMOS India Scientific Symosium 2021: Curtural Landscapes: Transformations and emerging ideas, 19th-20th Nov 2021. Organized by ICOMOS and facult of Architecture and Planning, AKTU, Lucknow

# An Integrated Review on Construction and Demolition Waste Management in India: Most Recent Developments and Way Forward

Dr. Ritu Gulati, Dr. Farheen Bano, Mohammad Aamir 11th International Conference on Sustainable Waste Management & Circular Economy 2021 (11th IconSWM-CE) & IPLA Global Forum 2021 Venue: IconSWM-ISWMAW Secretariat, Jadavpur University, Kolkata, India

Venue: IconSWM-ISWMAW Secretariat, Jadavpur University, Kolkata, India (Virtual Mode); December 01-04, 2021.

Organised by :International Society of Waste Management, Air and Water (ISWMAW), Centre for Sustainable Development & Resource Efficiency Management, Jadavpur University, and IPLA - International Partnership for Expanding Waste Management Services of Local Authorities

#### **Energy-Efficient Building Envelope**

Paper presented on the platform of Webinar Uttar Pradesh Energy Conservation Building Code 2018 in association with AKTU University Lucknow, September 30th | 2020 | 12:00 tO 12:50pm

### Building energy modelling and simulation for Net zero energy buildings

Paper presented on June 26th 2020 from 2:00 to 3:30pm in eFDP "Emerging Trends in Architecture", 22-26, JUNE 2020. organized by FACULTY OF ARCHITECTURE, AKTU, LUCKNOW

# **Building Energy Modelling & Simulations**

Paper presented in Webinar Weekly Series hosted by Faculty of Architecture and Planning, AKTU, Lucknow. Topic –on 02nd May 2020 at 03:00 pm- 5:00pm.

**Early-Stage Design Guidelines for Net-Zero-Energy Office Buildings in Tropical Climate**", International Conference on Contemporary Computing and Applications organized by Dr. APJ Abdul Kalam Technical University, 5-7 Feb 2020.

#### Simulation and Energy Efficiency

Paper Presented in Research in architecture: Tools, Methods and Practices, 12-23 June 2017, organized by FACULTY OF ARCHITECTURE, AKTU, LUCKNOW

# Optimization of Energy Efficient Building Envelope for Office Buildings in Lucknow

International Young Researchers' South Asian Symposium on Sustainable Development Goals (SDGs), 6-8 Oct, 2016, Teri University, new Delhi

### Organized Parking: A keyword to Sustainable Development

Paper presented in Conference: National Seminar on Housing, , Kolkata, India, 15-17 dec., 2007

# RESEARCH/ CONSULTANCY PROJECTS

CAPACITY BUILDING OF FACULTY STAFF, STUDENTS AND YOUTH FOR URBAN CLIMATE RESILIENCE: AYODHYA IMPLEMENTATION

Research Team: Dr Vandana Sehgal, Dr Ritu Gulati, Dr Farheen Bano and Ar. Gaurav Singh

Project type: Dissemination Project

Duration of project (including start and end date) : January 2022 – December 2023

Total project budget: 234960,00 EUR (85% subsidy by Government of Flanders)

# VIABILITY ASSESSMENT OF CONSTRUCTION AND DEMOLITION WASTE AS LOW-COST AND SUSTAINABLE MATERIALS FOR HOUSING SOLUTIONS IN LUCKNOW REGION

Co-PI. Research project received Council of Science and Technology (CST), UP funded Project entitled sanctioned for the period of 3 years. Amount Mobilized: 11 lacs. Started from July 5th 2021.

### THIRD PARTY AUDIT OF PROJECTS BY TOURISM DEPARTMENT

Projects under Ramayana circuit and Buddhist circuit under Swadesh Darshan scheme. Amount Mobilized: 85 lacs. On going

**WORLD BANK PRO-POOR PROJECT FOR SARNATH AND KUSHINAGAR** CONSULTANCIES WORLD BANK. Amount Mobilized: 47.00 crores. Completed.

### QIP/FDP/WORKSHOP/ CONFERENCE HOSTED

### eFDP on "Emerging Trends in Architecture"

Duration:1 Week, 22-26 June 2020

Organized by: Faculty of Architecture and Planning, AKTU, Lucknow

### Science of Dealing with Data Analysis (SPSS Data Processing)

Webinar conducted in Webinar Weekly Series hosted by Faculty of Architecture and Planning, AKTU, Lucknow. By Anshul Ujlayan, Data Scientist. Date: April 27th 2020 & April 28th 2020. Time: 11:00 am -1:00pm

# **Building Information Modelling**

W1 Session 5 & Session 6:. By Sowmya K R, BIM – Trainer. Date: 29th April 2020 & 30th April 2020. Time: 11:00 am -1:00pm

### QIP/FDP/WORKSHOP/ CONFERENCE ATTENDED

### 2 week online training- Daylight simulation using grasshopper tools

Duration: 2 week from 2nd August 2021 to 15th August 2021 Organized by: Environmental Design Solutions

# eFDP - Data Collection, Assessment and Planning for a Green Campus

Duration: 1 week 14-18 Dec, 2020 Organized by: CSE, New Delhi

### eFDP- Waste Management & Environmental Protection: A Sustainable Approach

Duration: 1 week 12-17 Oct, 2020

Organized by: Nitte Meenakshi Institute of Technology, Bangalore

#### FDP- Joy of Computing with Python

Duration: (1.5 week FDP) 12 weeks 13 sept-05 Dec, 2020

Organized by: Swayam

#### FDP- Principles and applications of building science

Duration: (0.5 week FDP) 4 weeks 14 sept-10 Oct, 2020

Organized by: Swayam

# eFDP on "Waste Management & Environmental Protection: A Sustainable Approach"

Duration: 1 Week, 12-17 Oct' 2020

Organized by: Nitte Meenakshi Institute of Technology, Bangalore.

### eFDP on "Emerging Trends in Architecture"

Duration:1 Week, 22-26 June 2020

Organized by: Faculty of Architecture and Planning, AKTU, Lucknow

### FDP on "Computer Application in Architecture"

Duration: 1 Week, 10-14 June 2019

Organized by: Faculty of Architecture and Planning, AKTU, Lucknow

### A 4 week online certification course on DesignBuilder Software

Duration: 4 WEEKS, MAY 22ND -19 JUNE 2017 Organized by: ITPower India, New Delhi

#### FDP on "Research in architecture: Tools, Methods and Practices"

Duration: 2 WEEKS, 12-23 JUNE 2020

Organized by: Faculty of Architecture, AKTU, Tagore Marg, Lucknow

#### FDP on "Sustainability: Vision to Practice"

Duration: 1 WEEK, 22-26 FEB 2016

Organized by: Faculty of Architecture, UPTU, Tagore Marg, Lucknow

### **Building sense: Sustainable Building Policies and Practices**

Duration: 3 days, 28th - 30th October, 2015

Organized by: Centre for science and Environment, New Delhi

# Workshop on "Advance Digital Practices by Studio Symbiosis: Iconoclastic Tower V2.0"

Duration: 1.5 WEEKS, 5-12 JULY 2014

Organized by: Sushant school of Art and Architecture, Gurgaon

### FDP on "Architectural Pedagogy: Emerging Ideologies & Trends"

Duration: 2 WEEK, 16-27 JUNE 2014

Organized by: FACULTY OF ARCHITECTURE, UPTU, LUCKNOW

#### **ADMINISTRATIVE DUTIES**

### M.Arch. (Environmental Design) – Course Co-coordinator

Warden girls' hostel

Faculty in charge AICTE, COA, UGC, NBA, etc. Work Faculty in charge B.Arch. Dissertation/Thesis Coordinator

### AWARD

#### **BEST TEACHER AWARD and CITATION**

# For growth and development of Institution, both Academically and Administratively

By Dr APJ Abdul Kalam Technical University on the auspicious occasion of Teachers Day September 5 2021

#### INTERNATIONAL BEST RESEARCHER IN ARCHITECTURE

By RESEARCH PEACE AWARD OF 2019 RULA AWARD 2019