Curriculum Vitae

Adil Ahmad, Ph. D., MIRC, MISET, MISCMS

Designation: Associate Professor (Structure)

Postal Address: Department of Architecture

Faculty of Architecture &

Ekistics

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Date of Birth: 10th October 1970

UNIVERSITY EDUCATION

Ph.D.: 2022, Department of Earthquake Engineering, IIT Roorkee,

M.Sc. Engg. (Structures): 1996, 1st Div., 82% Aligarh Muslim University, Aligarh

B.Sc. Engg. (Civil): 1993, 2nd Position, 95% (FCPI), Jamia Millia Islamia, New Delhi

Ph. D. Thesis title: Seismic safety of Sandwich Wall Panel Buildings

M.Sc. Engg. Project: Nondestructive testing of concrete

M.Sc. Engg. Dissertation: Response of Multi-Storeyed buildings to Earthquakes
B.Sc. Engg. Project: Structural Design of Multi-storeyed Residential Building

Major Area: Structural Dynamics and Earthquake Engineering

Specific Area: Working on the "Seismic safety EPS sandwich panel buildings

PROFESSIONAL EXPERIENCE 26-year plus

September 2010 to till date, Associate Professor, Department of Architecture, F/O Architecture & Ekistics Jamia Millia Islamia

July 2002 to September 2010, Assistant Professor, Department of Civil Engineering, F/O Engg. & Tech. Jamia Millia Islamia

May 2001 to June 2002, Structural Design Engineer with RITES on *DELHI METRO RAIL PROJECT*, Elevated rail corridor project from Tis Hazari –Trinagar-Rithala. It is part of *Delhi MRTS*

project. It consists elevated viaduct & stations Proof checking of analysis, design & drawing of super and sub structure of station buildings.

Oct. 1999 to April 2001, Structural / Bridge Engineer with SHELADIA /PBI / MRC from October 1999 to April 2001 On the project "Design Consultancy Project of Feasibility Study and Detailed Project Report of NH-5 in Orissa/ West Bengal & Andhra Pradesh (Package V & VII) Under NHAI, Govt. of India"

Sept. 1996 to Oct. 1999, Structural Engineer with CRAPHTS Consultants (India) Pvt. Ltd Sept. 1993 to Sept 1994, Project In-charge General Const. Company Lucknow

RESEARCH INTERESTS

- Seismic Vulnerability and Risk Evaluation
- Seismic Safety of Sandwich wall panel buildings
- Seismic Vulnerability of Heritage Structures
- Seismic Evaluation and Retrofitting of Structures

RESEARCH SUPERVISION

Ph.D. Theses (In progress)

- 1. Promica Cally Milan, Seismic Assessment of Built Heritage in Delhi, (Solo Supervision)
- 2. Vinit Mirkar, Socio Cultural Practices Transforming Vernacular Architecture: Case Study of Konkan Region, Co-supervisor: Prof. S.M. Akhtar
- 3. Bushra Ali, A Study to Assess the Impact and Integration of VR and BIM Technologies on Construction Industries in India (Solo Supervision)
- 4. Hibretu Kaske Kassa, (CED, IIT Ropar), Application of sandwich panel as infill wall, Cosupervisor: Dr. Putul Haldar, CED, IIT Ropar.

M.Tech. Dissertations (Completed)

- Salama Latif Molavi, Seismic Performance Evaluation of A Reinforced Concrete Hospital Building with and without EPS Core Sandwich Wall Panel Infill Walls, Co-supervisor: Dr. S. B. Kadam, Walchand College of Engineering, Sangli
- 2. Mohd Shoaib, (CED, JMI), Seismic Performance Evaluation of an EPS Core Sandwich Wall Panel Building, (2023), Co-supervisor: Dr. Ibadur Rehman
- 3. Aman Ahmed Ansari, (CED, JMI), Seismic Analysis of RC Building with EPS Core Sandwich Panel Infill Wall, (2023), Co-supervisor: Dr. Ibadur Rehman

4. Mohd Asif, (CED, JMI), Optimum Position of Shear Wall to get the Seismic Response, (2023), Co-supervisor: Dr. Ibadur Rehman

LIST OF PUBLICATIONS

In Journals

- 1. A. Ahmad and Y. Singh "In-plane Behaviour of Expanded Polystyrene Core Reinforced Concrete Sandwich Panels", *Construction and Building Materials*, 269 (2021) 121804.
- 2. A. Ahmad and Y. Singh "Flexural Behaviour of Expanded Polystyrene Core Reinforced Concrete Sandwich Panels with Different Construction Methods and End Conditions", *Structures* 34 (2021) 2900-2911.

Conference

- 1. Hibretu Kaske Kasa, Putul Haldar, Adil Ahmad, (Paper ID E0070 Accepted), "Numerical Study on Effect of Variation in Thickness of Expanded Polystyrene Core in Sandwich Panel under Axial Load", 18th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-18), 13–15 November 2024, Chiang Mai, Thailand.
- 2. Hibretu Kaske Kasa, Putul Haldar, Adil Ahmad (2024), "FEA of the in-plane behaviour of reinforced concrete sandwich panels with an EPS core", 18thWorld Conference on Earthquake Engineering (WCEE2024), in Milan, Italy, from 30th June to 5th July 2024.
- 3. Singh, Y., Ahmad, A. and Sarkar, A, "Composite Panel Structural Systems: A Promising Alternative for Future Buildings", Proceeding of International seminar on Emerging Building Materials and Construction Technology, March 21-22, 2016, India Habitat Center, New Delhi.
- 4. Sarkar, A., Ahmad, A., Singh, Y., "Seismic Design of Expanded Polystyrene Core Panel Based Building Systems", International conference on Earthquake Engineering and Post Disaster Reconstruction Planning, ICEE-PDRP, 24th -26th April 2016, Bhaktapur, Nepal.
- 5. A. Ahmad and Y. Singh "Seismic Safety Evaluation of an EPS Core Sandwich Wall Panel Building" International Conference on Composite Materials and Structures, ICCMS2017, 27-29th December 2017, Hyderabad, India
- 6. "Seismic Evaluation of Heritage Brick Masonry School Building" 7th International Conference on Masonry, Royal Society of Masonry, at London, October / November 2006.
- 7. "An alternative Approach Towards Planning of Bridges" II National seminar on Architectural for Masses, 3rd & 4th Oct. 2005, Jamia Millia Islamia, New Delhi.
- 8. "Seismic Performance of a Heritage Brick Masonry School Building", GSEE07, Jamia Millia Islamia, New Delhi
- 9. "Seismic Response of Buildings Using N-Mass Coupled System With Normalized Time History", GSEE07, Jamia Millia Islamia, New Delhi
- 10. "Strength Assessment of A Heritage Brick Masonry School Building Against Earthquake" 1st International Conference on Rehabilitation and maintenance in Civil Engineering, 21-22 March , 2009, at Solo, Indonesia,

11. "Stability Analysis of Monument (A Case Study Safdarjung Tomb)" SAHC-2010, Shanghai, China

Book Chapters:

- Ahmad, A., Singh, Y. (2023). A Promising Alternative for Low Rise Buildings in Seismic Regions: EPS Core Sandwich Panel Structural System. In: Shrikhande, M., Agarwal, P., Kumar, P.C.A. (eds). Proceedings of 17th Symposium on Earthquake Engineering (Vol. 1). SEE 2022. Lecture Notes in Civil Engineering, vol 329. Springer, Singapore. https://doi.org/10.1007/978-981-99-1608-5 40.
- 2. Promica Cally Milan, Adil Ahmad, (2024) Evolution and Transition of Architectural Systems: Study of Historical Built-Forms of Delhi, India, 103-117, Designs Tomorrow, Innovation Online Training Academy, ISBN Number: 978-93-93622-41-9

SHORT TERM COURSES/ TRAINING PROGRAMMES ATTENDED:

- I. "Earthquake Resistant Design and Retrofitting of Reinforced Concrete Building" organized by NPEEE at IIT Roorkee, from 7th 18th July ,2003.
- II. Three training Workshops conducted by the Government of Delhi under the 'Government of India-UNDP Disaster Risk management Programme' on:
 - (a) "Seismic Design of Reinforced Concrete Buildings" 9th-10th January, 2004
 - (b) "Seismic Design of Shear Wall Buildings" 25th June, 2004
 - (c) "Seismic Assessment and Retrofitting of Buildings" 26th June, 2004
- III. "Seismic Design of Masonry Buildings" organized by NPEEE at IIT Kanpur, from $3^{rd} 7^{th}$ October ,2005.
- IV. "Health Monitoring, Non-Destructive Evaluation and Retrofitting of Structures" conducted by IIT Delhi, from 7th 8th March, 2008.
- V. "High Performance Steel Fiber Reinforced Concrete for Seismic Resistant Structures", conducted by NIT Calicut, from 18th 29th May, 2009.
- VI. "Workshop on IS 800: 2007, Indian Standard, General Construction in Steel Code of Practice (Third Revision)", conducted by INSDAG, at New Delhi from 22nd 23rd April, 2009.

CONTRIBUTION TO INSTITUTIONAL ADMINISTRATIVE / ACADEMIC AREA:

Vice-Chancellor nominated as one of the members for the following committees:

- (i) "Conservation work of Madarsa -i-Ghaziuddin Khan, Anglo Arabic School, Ajmeri Gate, Delhi". In collaboration with University of Erfurt, Germany.
- (ii) "Monitoring Committee for the project of 'Construction of Second Floor (20 Rooms) New Boys Hostel".
- (iii) "Monitoring Committee for the project of 'Construction of New Boys Hostel".
- (iv) **Visited to University of Erfurt, Erfurt, Germany.** Under the MOU singed between Jamia Millia Islamia and University of Erfurt

DEPARTMENTAL/ ADMINISTRATIVE WORK:

- (i) Teacher Placement coordinator, Department of Architecture
- (ii) Member of Academic council for two terms from 13.02.2019-12.02.2022 and till date 09.03.2022
- (iii) Departmental Time Table in-charge
- (iv) Member of Departmental Anti ragging and Disciplinary committee for year 2023-2024 and 2024-2025
- (v) Superintendent and Assistant Superintendent for entrance tests of B. Tech., B. Arch., M. Arch. and various Entrance tests of JMI at Guwahati, Srinagar, Lucknow, New Delhi
- (vi) Superintendent for entrance test and examination of Arjun Singh Centre, JMI
- (vii) Observer for RAC Admission test of session 2024-2025
- (viii) Involvement in conducting Faculty Entrance Test (2004 to 2010).
- (ix) Member of the syllabus revision committee (structure group)
- (x) Supervised and monitored Transportation Engineering Lab (CED)
- (xi) Procurement of UTM and Digital Torsion test machine in structural Engg. Lab
- (xii) Member of BOS, Department of Archtecture, since 2010
- (xiii) Time-table incharge for two academic session 2022-2023 and 2024-2025
- (xiv) Coordinator B. Arch. 4th Year for academic sessions 2020-2021, 2021-20222, 2022-2023 and 2023-2024.
- (xv) Survey lab in-charge since joining 2010.
- (xvi) Assistant Superintendent for annual examination of B. Arch. 2022-2023, and 2023-2024

CONSULTANCY: Major Projects Completed/ In hand:

Providing consultancy for Structural design, Proof checking, Structural audit, Retrofitting, Third Party Quality Check of various projects of government body such as CPWD, PWD, Development authorities, MCD, NOIDA, Railways, Airport Authority, MES, BHEL, DFC, Uttar Pradesh Rajkiya Nirman Nigam Ltd etc. and private clients. Only few of them are mentioned below.

- Vetting of GA, Structure drawing of 7MLD STP and 9 MLD MPS along with Sewer network drawing of above-mentioned project, Providing Sewer House Connection & associate infrastructure work in Suzabad (Extended Area) of Nagar Nigam Varanasi Under Amrut 2.0Programme
- ii. Third Party Quality Check regarding construction 2 Numbers barracks for 100 and 150 person's capacity at 47-Vahini PAC Ghaziabad. Uttar Pradesh Rajkiya Nirman Nigam Ltd
- iii. Proof checking for the project "Construction of Degree College in Village Dhaulana at Hapur- 50KL Over Head Tank and Ramp for handicapped in Govt. College Dholana. Uttar Pradesh Rajkiya Nirman Nigam Ltd
- iv. Structural Audit and feasibility analysis of Income Tax Residential quarters of Rajendra
 Nagar, Bareilly Executive Engineer CPWD Bareilly
- v. Proof checking of structural design and drawing of the exiting BHEL SADAN at BHEL MDI Complex, Plot No- 25, Sector-16A, Film City, Noida
- vi. Conservation and restoration of hollow block masonry TTI building at JMI
- vii. Structural Design of Spanish center building at Jamia Millia Islamia
- viii. Structural Design of RAC buildings and Hoatel at Jamia Millia Islamia
 - ix. Structural Design of 3rd wing of Faculty of Architecture and Ekistics building at JMI
 - x. Proof checking of Goa Airport terminal and car parking building.
- xi. Proof checking of buildings for Central University of Karnatka at Gulbarga
- xii. Proof checking of four major bridges of NH-24, with well foundation
- xiii. Proof checking of three ROBs on Bhadurgarh Rohtak section of NH-10.
- xiv. Proof checking of ROB at Mathura Vrindavan.
- xv. Proof checking of Depot Building at Dwarka for Delhi Airport Metro Express Line.
- xvi. Proof Checking of DPS School Building at Gaziabad.
- xvii. Proof Checking of two bridges across Agra canal at Faridabad for water pipe line
- xviii. Structural design of community center at Meerut, for MDA
 - xix. Proof checking of Rail Tel building at Gurgaon for RITES
 - xx. Proof checking of STP tank for ACMEC.
- xxi. Proof checking of School of Social Sciences at JNU, New Delhi, for RITES

- xxii. Structural Design of Indian Institute of Chemical Biology, Kolkota, for HSCC
- xxiii. Structural Design of Private ward and staff quarter of LSRI at New Delhi, for HSCC
- xxiv. Structural Design of Laboratry at Regional Medical Research Center, Dibrugarh Assam, for HSCC
- xxv. Proof checking of analysis, design & drawing of super and sub structure for six stations (Kanhaya Nagar,Lawerance Road,Kohat Enclave,Pitam Pura,RohiniEast & West) of **DMRC**. The elements of these stations are precast prestressed (pretension & post tension) supported on cast-in- situe piers with pile foundation. Precast elements are U-type track girder,Double T-beams & X-girder 16.m long .
- xxvi. Proof checking of track girder (box type) of Pratapnagar & Vevekanand puri stations along with auxiliary building.
- "Design Consultancy Project of Feasibility Study and Detailed Project Report of NH-5 in Orissa & Andhra Pradesh (Package V) Under NHAI, Govt. of India" This project is 233 Km long stretch of NH-5 (World Bank Aided) consisting over 70 major / minor bridges and 6 flyovers / R.O.B. 's and number of underpasses.
- xxviii. "Design Consultancy Project of Feasibility Study and Detailed Project Report of NH-5 and NH-6 / NH-60 in Orissa/ West Bengal (Package VII) Under NHAI, Govt. of India" This project is 350 Km long stretch of NH-5 and NH-6 / NH-60 (World Bank Aided) consisting over 120 major / minor bridges and 12 flyovers / R.O.B. 's and number of underpasses.
- xxix. Design of 35.0 m span flyovers, Superstructure Prestressed Voided slab, Substructure pile foundation and solid pier / abutment. NHAI
- xxx. Design of 47.0 m span major bridges, Superstructure Prestressed Girder (Post Tensioned), Substructure Well foundation and solid pier / abutment. NHAI
- xxxi. Design of 40.5 m, 27.0m, 20.0m span (skew) ROB's, Superstructure Prestressed T-Beam, Substructure pile foundation, circular pier, Couterfort / Spillthrough abutment. NHAI
- xxxii. Design of 14.5m, 17.0m & 20.0m span minor bridges, Superstructure R.C.C Voided Slab, Substructure open foundation and solid / spill-through abutment. NHAI
- xxxiii. Design of Bridge across supplementary drain on NH-1 near Mukarba Chowk-- (It is 8 lane wide, 75.0m long R.C.C. T-beam bridge with well foundation)- PWD, Govt. of Delhi

(Dr. ADIL AHMAD)