Dr. Ashish Agarwal

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Educational Qualifications:

Course	Institution	University/Board
Ph.D. Structural Engineering (Submitted)	Zakir Hussain College of Engineering &Technology	Aligarh Muslim University
M. Tech Structural Engineering	Zakir Hussain College of Engineering &Technology	Aligarh Muslim University
B. Tech Civil Engineering	Vivekananda College of Technology& Management	Uttar Pradesh Technical University

❖ Achievements & Awards:

- Got qualified in *GATE-2013* with *GATE score 588* and consecutively qualified five times.
- ***BrijMohan Lal Memorial Prize*** awarded by *Institution of Engineers (India)* for publishedpaper "*CFD Simulation of Turbulent Wind Effect on an Array of Ground–mounted Solar PV Panels*" Journal of The Institution of Engineers (India) Series A, Springers Publications, Vol. 99(2), 2018, 205-218.
- ***Co-organized*** *the Faculty Development Program on* ***"Engineering Materials"*** at Civil Engineering Department, JCBUST, on January 24-30, 2022.

❖ Publications:

- Manahel S. K., Amer M. I., Hadee M. N., Mohanad M. S., Samadhan M., ***Ashish Agarwal***, M. A. Alamir, Ibrahim M. A., *"*Experimental Analysis of Steel Circular Hollow Section under Bending Loads: Comprehensive Study of Mechanical Performance*" Materials, MDPI, Vol 15, Issue 12, 2022, 4350*, https://doi.org/10.3390/ma15124350

- ***Ashish Agarwal***, Hassan Irtaza, M. Jamil Ahmad, *"Numerical analysis of the ground- mounted solar PV panel array mounting systems subjected to basic wind for optimum design"* Canadian Journal of Civil Engineering, Canadian Science Publishing, Vol 48, Issue 6, 2021, 656-668. https://doi.org/10.1139/cjce-2019-0280

- ***Ashish Agarwal***, Hassan Irtaza, Mehboob A. Khan, *"Experimental Study of Pulling-Out Capacity of Foundation for Solar Array Mounting Frames"* Indian Geotechnical Journal, Springer Nature, Vol 51, 2021, 414–420. https://doi.org/10.1007/s40098-020-00456-w

- ***Ashish Agarwal***, Hassan Irtaza, "*Turbulent wind flow through permeable claddings mounted on elevated scaffold using CFD Simulation*" Engineering Report, Wiley Publication, Vol 3, Issue 6, 2021, 1-12. https://doi.org/10.1002/eng2.12350

- ***Ashish Agarwal***, Hassan Irtaza, "*Experimental study of bond strength between existing roof slab and concrete support of Flat Roof Mounted Solar Arrays*" Science & Technology Journal, Mizoram University, Vol 8, Issue 2, 2020, 69-77.

- ***Ashish Agarwal***, Hassan Irtaza, AzharJameel, "*Wind Pressure Distribution over Solar PV Panels Mounted on Pitched Building Roofs*", Technical Volume of 35th Indian Engineering Congress, The Institution of Engineers (India), ISBN 978-81-950662-0-9. https://www.ieindia.org/webui/ajax/Downloads/WebUI_PDF/IEC/IEC_35.pdf?v20210205.1

- ***Ashish Agarwal***, Hassan Irtaza, *"Numerical Investigation of the Turbulent Wind Flow Through Elevated Windbreak"* Journal of The Institution of Engineers (India) Series A, Springer Nature, Vol. 99, Issue 2, 2018, 311-320.

- ***Ashish Agarwal***, Hassan Irtaza, AzharJameel*"Numerical study of lift and drag coefficients on a ground-mounted photo-voltaic solar panel"Materials Today proceedings* of Elsevier Publications Vol 4, Issue 9, 2017, 9822-9827.

- Kamran Shahab, Hassan Irtaza, ***Ashish Agarwal***, "Comparative Study of Aerodynamic Coefficients of Prismatic and Twisted Tall Buildings with various Cross Sections using CFD"Journal of The Institution of Engineers (India) Series C, Springer Nature, Vol. 102, 2021, 635-650.

- Hassan Irtaza, ***Ashish Agarwal***, "*CFD Simulation of Turbulent Wind Effect on an Array of Ground–mounted Solar PV Panels*" Journal of The Institution of Engineers (India) Series A, Springer Nature, Vol. 99, Issue 2, 2018, 205-218.

- MoinulHaq, ***Ashish Agarwal***,*"Analysis of Progressive Collapse of Regular and Irregular RCBuilding"* GCEC 2017, Lecture Notes in Civil Engineering, Springer Nature Vol 9, 2017, 451-462.

❖ National & International Conferences:

- ***Ashish Agarwal***, Hassan Irtaza, "Experimental study of bond strength between existing roof slab and concrete support of Flat Roof Mounted Solar Arrays" in International Seminar on Recent Advances in Science and Technology (ISRAST), Mizoram University, November 16- 18, 2020.
- ***Ashish Agarwal***, Hassan Irtaza, AzharJameel, "Wind Pressure Distribution over Solar PV Panels Mounted on Pitched Building Roofs", in 35th Indian Engineering Congress, The Institution of Engineers (India), December 18-20, 2020.
- ***Ashish Agarwal***, Hassan Irtaza, Kamran Shahab, "Aerodynamic Wind Pressure on Solar PV Arrays Mounted on Industrial Pitched Roof Building" in International Conference on Recent Advances in Engineering & Science (ICRAES-2020) held at University Polytechnic, A.M.U. Aligarh on January 11-12, 2020.
- AzharJameel, Hassan Irtaza, ***Ashish Agarwal***, "Effect of Interference and Shielding on Hip Roof Buildings" in International Conference on Recent Advances in Engineering & Science (ICRAES-2020) held at University Polytechnic, A.M.U. Aligarh on January 11-12, 2020.
- Kamran Shahab, Hassan Irtaza, ***Ashish Agarwal***, "Comparison of Aerodynamic Loads on Prismatic and Twisted Tall Buildings Using Computational Fluid Dynamics" in International Conference on Recent Advances in Engineering & Science (ICRAES-2020) held at University Polytechnic, A.M.U. Aligarh on January 11-12, 2020.
- ***Ashish Agarwal***, Hassan Irtaza, "Numerical investigation of the turbulent airflow through elevated windbreak" in Structural Engineering Convention (SEC 2016) held at CSIR Chennai on December 21-23, 2016.
- ***Ashish Agarwal***, Hassan Irtaza, "Foundation design challenges for ground mounted photovoltaic panel" presented in National Conference on Advances in Geotechnical Engineering (AGE 2016) held at Department of Civil Engineering, A.M.U. Aligarh on April 8- 9, 2016.
- ***Ashish Agarwal***, Hassan Irtaza, Azhar Jameel, "Numerical study of lift and drag coefficients on a ground-mounted photo-voltaic solar panel" presented in International Conference onRecent Trends in Engineering and Material Sciences (ICEMS-2016) held at J.N.U. Jaipur on March 17-19, 2016.
- Moin-ul Haq, ***Ashish Agarwal***, "*Analysis of Progressive Collapse of Regular and Irregular RC Building*" in *Global Civil Engineering Conference (GCEC 2017)* held at UPM, Kuala-Lumpur, Malaysia on July 25-28, 2017.

❖ Workshops Attended:

- Participated national workshop on *"Earthquake Disaster and its Mitigation"* held atDepartment of Civil Engineering, A.M.U. Aligarh on November 7th 2015.
- Participated national workshop on *"Seismic Safety of Structures"* held at Department of Civil Engineering, A.M.U. Aligarh on March 23rd 2016.
- Participated national workshop on *"Advances in Sustainable Concrete Construction (ASCC'16)"* held at Department of Civil Engineering, A.M.U. Aligarh on October 14th 2016.
- Participated national workshop on *"Reliability and Structural Safety"* held at Department ofCivil Engineering, A.M.U. Aligarh on October 26th 2016.

- Participated second national workshop on *"Reliability and Structural Safety"* held atDepartment of Civil Engineering, A.M.U. Aligarh on November 11th 2017.
- Participated fourth national workshop on *"Seismic Safety of Structures"* held at Department ofCivil Engineering, A.M.U. Aligarh on September 21-22, 2019.
- Participated AICTE Training and Learning (ATAL) Academy Online FDP on "UndergroundSpace Utilization" at Z.H.C.E.T, A.M.U., on January 18-22, 2021.
- Participated one week Faculty Development Program on Research "Writing and Professional Ethics" at Civil Engineering Department, JCBUST, on September 7-13, 2021.

❖ Training& Skill Development:

- One-month summer training from 3rd July 2012 to 31st July 2012 at *PhataByung HydroElectric Project* on Mandakini River by Lanco Infratech Limited.
- Two-week training of STADD Pro software from 6-18 February 2012 organized by CADDCentre at Civil Engineering Department, Vivekanand College of Technology & Management.

❖ Dissertation Work:

- Ph.D. Thesis: Turbulent Wind Effect on Solar Array Systems
- M. Tech Dissertation: Numerical investigation of the airflow around raised permeable panel (ANSYS FLUENT using CFD techniques).
- B. Tech Dissertation: Seismic analysis of multistoried building using MATLAB.

❖ Scholarship/Fellowship:

- GATE scholarship for M. Tech studies in the Department of Civil Engineering, Z.H.C.E.T.,A.M.U., Aligarh, from August 2014 to August 2016.
- Research Assistant for Ministry of New & Renewable Energy sponsored project from24.12.2016 to 23.12.2018
- Senior Research Fellowship by Council for Scientific & Industrial Research, from 01.04.2019to 31.03.2021.

❖ Memberships

- Associate Member of Institution of Engineers (India) (AM190365-1)

❖ Technical Skills & Knowledge:

- Software Skills: ANSYS Fluent, STADD Pro, ETABs, SAP2000, CSI Bridge, AutoCAD
- Computer Applications: TechPlot360, Origin, Gambit