

Personal Data

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Education

Degree	Institution	Discipline	Year
B.Sc.	Aligarh Muslim University, India	Civil Engineering	1982
M.Sc.	Aligarh Muslim University, India	Building Engineering	1984
Ph.D.	Indian Institute of Technology Roorkee, India	Structural Engineering	1993

Academic Experience

Institution	Rank	Title	Years
• Civil Engineering Department, Aligarh Muslim University	Assistant Professor	Lecturer	1984-1993
• Civil Engineering Department, Aligarh Muslim University	Associate Professor	Reader	1993-2000
• Civil Engineering Department, Aligarh Muslim University	Professor	Professor	2000-2009
• Department of Engineering, University of Liverpool, UK	Professor	Visiting Professor	2003-04
• Civil Engineering Department, King Saud University	Professor	Chair Professor	2009-till date

Non-Academic Experience

Company / Entity	Title & Description of Position	Years	Status
• Central Water Commission, India	Assistant Director, Designing of dams and appurtenant structures	1987	-

Certifications or Professional Registrations

- Chartered Engineer (India), The Institution of Engineers, India (F/015951/0).
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Current Membership in Professional Organizations

- Member (ID: 9473115), American Society of Civil Engineering (ASCE) since 2013
- Life Fellow Member (F/015951/0), The Institution of Engineers, India, since July 2001.
- Life Member (LM-648), Indian Society of Earthquake Technology, India, since 1990.
- Life Member (LM-132), Indian Society of Wind Engineering, India, since 1993.
- Life Member (LM-431), Indian Geological Congress, India, since 2001.

Honors and Awards

- **Engineer Al-Qasabi National Award** of Saudi Arabia for excellence in scientific research in Civil Engineering in Saudi Arabia, Dec. 2020.
- **Engineer Al-Qasabi National Award** of Saudi Arabia for excellence in scientific research in Civil Engineering in Saudi Arabia, 30 April 2017.
- **Engineer Al-Qasabi National Award** of Saudi Arabia for excellence in scientific research in Civil Engineering in Saudi Arabia, Feb. 2016.
- Honored and awarded a **silver medal** for patent at 42nd International exhibition of inventions of Geneva, 2-6 April 2014.
- Honored and awarded a **gold medal** for patent by Intellectual Property and Technology Licensing, King Saud University, 2013.
- Chair ranked **FIRST** among all Engineering Chairs of King Saud University, 2012.
- Chair ranked **FIRST** among all Engineering Chairs of King Saud University, 2011.
- Chair received Distinguished performance award from King Saud University Rector, 2010.
- Commonwealth Academic Staff Fellowship, 2003-04 (Visiting Professor, Department of Engineering, University of Liverpool)
- was awarded **Khosla Award** of University of Roorkee for 1998 for the research paper entitled “Aircraft crash upon outer containment of nuclear power plant”.
- was awarded **Khosla Annual Research Prize** of University of Roorkee for 1996 for the research paper entitled “Reaction-time response of aircraft crash”.
- Quality Improvement Program Fellowship, India, 1987-90.
- University Grants Commission Fellowship, India, 1982-84.

Service Activities (within and outside of the institution)

1. Reviewer of several refereed journals
2. Examiner of several PhD thesis

Most Important Publications and Presentations During the Past Five Years

Total No. of Papers during the past 5 years = 60 (51 in ISI Journals)

1. Alrshoudi, F., **Abbas, H.**, Abadel, A., Altheeb, A., Albidah, A., Al-Salloum, Y. (2021). Compression Behavior and Modeling of FRP-Confined High Strength Geopolymer Concrete. *Construction and Building Materials*, 283, 122759.
2. Elsanadedy, H. M., Al-Salloum, Y. A., Alrubaidi, M. A., Almusallam, T. H., & **Abbas, H.** (2021). Finite element analysis for progressive collapse potential of precast concrete beam-to-column connections strengthened with steel plates. *Journal of Building Engineering*, 34, 101875.
3. **Abbas, H.**, Siddiqui, N. A., Almusallam, T. H., Abadel, A. A., Elsanadedy, H., & Al-Salloum, Y. A. (2021). Effect of rebar spacing on the behavior of concrete slabs under projectile impact. *Structural Engineering and Mechanics*, 77(3), 329-342.

4. Elsanadedy, H., Alrubaidi, M., **Abbas, H.**, Almusallam, T., & Al-Salloum, Y. (2021). Progressive collapse risk of 2D and 3D steel-frame assemblies having shear connections. *Journal of Constructional Steel Research*, 179, 106533.
5. Elsanadedy, H. M., **Abbas, H.**, Almusallam, T. H., & Al-Salloum, Y. A. (2021). Hybrid UHPC/NSM CFRP strips vs. traditional systems for flexural upgrading of RC beams—Experimental and FE study. *Composite Structures*, 113291.
6. Elsanadedy, H. M., Al-Salloum, Y. A., Alrubaidi, M. A., Almusallam, T. H., Siddiqui, N. A., & **Abbas, H.** (2021). Upgrading of precast RC beam-column joints using innovative FRP/steel hybrid technique for progressive collapse prevention. *Construction and Building Materials*, 121130.
7. Abadel, A., **Abbas, H.**, Alrshoudi, F., Altheeb, A., Albidah, A., & Almusallam, T. (2020, December). Experimental and analytical investigation of fiber alignment on fracture properties of concrete. In *Structures* (Vol. 28, pp. 2572-2581). Elsevier.
8. Almajed, A., **Abbas, H.**, Arab, M., Alsabhan, A., Hamid, W., & Al-Salloum, Y. (2020). Enzyme-Induced Carbonate Precipitation (EICP)-Based Methods for Ecofriendly Stabilization of Different Types of Natural Sands. *Journal of Cleaner Production*, 274, 122627.
9. Khateeb, B. M., Siddiqui, N. A., Almusallam, T. H., **Abbas, H.**, & Al-Salloum, Y. A. (2020). Behavior of novel CFST circular column-to-foundation connections under cyclic loading. *Engineering Structures*, 221, 111051.
10. Alrubaidi, M., Elsanadedy, H., **Abbas, H.**, Almusallam, T., & Al-Salloum, Y. (2020). Investigation of different steel intermediate moment frame connections under column-loss scenario. *Thin-Walled Structures*, 154, 106875.
11. N. Siddiqui, **H. Abbas**, T. Almusallam, A. Binyahya, Y. Al-Salloum (2020). Compression behavior of FRP-strengthened RC square columns of varying slenderness ratios under eccentric loading. *Journal of Building Engineering*, 101512.
12. Tarek Almusallam, Yousef Al-Salloum, Hussein Elsanadedy, Tuan Ngo, Priyan Mendis, **Husain Abbas** (2020). Development limitations of compressive arch and catenary actions in reinforced concrete special moment resisting frames under column-loss scenarios. *Structures and Infrastructure Engineering*, 16(12), 1616-1634.
13. Elsanadedy, H. M., Al-Salloum, Y. A., Almusallam, T. H., Ngo, T., **Abbas, H.** (2019). Assessment of progressive collapse potential of special moment resisting RC frames—Experimental and FE study. *Engineering Failure Analysis*, 105, 896-918.
14. Abdulrahman Albidah, Aref Abadel, **Husain Abbas**, Tarek Almusallam, Yousef Al-Salloum (2019) Experimental and Analytical Study of Strengthening Schemes for Shear Deficient RC Deep Beams, *Construction and Building Materials*, 216, 673-686.
15. M Shariq, **Husain Abbas**, J Prasad (2019) “Effect of magnitude of sustained loading on the long-term deflection of RC beams”, *Archives of Civil and Mechanical Engineering*, 19(3), 779–791.
16. Hussein Elsanadedy, Yousef Al-Salloum, Tarek Almusallam, Abdulhafiz Alshenawy, **Husain Abbas**, (2019), “Experimental and numerical study on FRP-upgraded RC beams with large rectangular web openings in shear zones”, *Construction and Building*

Materials, 194, 322–343.

17. Y Al-Salloum, G Al-Amri, N Siddiqui, T Almusallam, **H Abbas** (2018). Effectiveness of CFRP Strengthening in Improving Cyclic Compression Response of Slender RC Columns. *Journal of Composites for Construction*, 22(3): 04018009.
18. H Elsanadedy, T Almusallam, Y Al-Salloum, **H Abbas** (2017). Investigation of precast RC beam-column assemblies under column-loss scenario. *Construction and Building Materials*, 142, 552–571.
19. T Almusallam, Y Al-Salloum, T Ngo, P Mendis, **H Abbas** (2017). Experimental investigation of progressive collapse potential of ordinary and special moment-resisting reinforced concrete frames. *Materials and Structures*, 50:137.
20. Y Al-Salloum, **H Abbas**, QI Sheikh, S Hadi, S Alsayed, T Almusallam (2017). Effect of some biotic factors on microbially-induced calcite precipitation in cement mortar. *Saudi Journal of Biological Sciences* 24(2), 286–294.
21. **H Abbas**, Y Al-Salloum, S Alsayed, M Alhaddad, R Iqbal (2017). Post-heating response of concrete-filled circular steel columns. *KSCE Journal of Civil Engineering*, 21(4), 1-12.
22. M Shariq, J Prasad, **H Abbas** (2016). Creep and drying shrinkage of concrete containing GGBFS. *Cement and Concrete Composites* 68, 35-45.
23. SH Alsayed, HM Elsanadedy, ZM Al-Zaheri, YA Al-Salloum, **H Abbas** (2016). Blast response of GFRP-strengthened infill masonry walls. *Construction and Building Materials* 115, 438-451.
24. HM Elsanadedy, YA Al-Salloum, ZM Al-Zaheri, SH Alsayed, **H Abbas** (2016). Behavior and Design Aspects of FRP-Strengthened URM Walls under Out-of-Plane Loading. *Journal of Composites for Construction* 20(6), pp. 1-16, 04016048.
25. T Almusallam, SM Ibrahim, Y Al-Salloum, A Abadel, **H Abbas** (2016). Analytical and experimental investigations on the fracture behavior of hybrid fiber reinforced concrete. *Cement and Concrete Composites* 74, 201-217.
26. A Abadel, **H Abbas**, T Almusallam, Y Al-Salloum, N Siddiqui (2016). Mechanical properties of hybrid fibre-reinforced concrete–analytical modelling and experimental behaviour. *Magazine of Concrete Research* 68(16), 823-843.
27. ZI Baig, SH Alsayed, **H Abbas** (2016). Punching of slab–column connections strengthened using external steel shear bolts. *Magazine of Concrete Research* 68(2), 55-68.

Most Recent Professional Development Activities

- Twenty-four patents during the last five years (Eighteen US and six Saudi patents)
- “Development of Genetically Engineered Biocement Mortar”, Funded by National Plan for Sciences and Technology, King Abdulaziz City for Science and Technology (Project No.: 11-BIO1959-02), Recently Completed.
- “Performance of Prestressed Fiber-Reinforced Concrete under Projectile Impact”, Approved for funding by National Plan for Sciences and Technology, King Abdulaziz City for Science and Technology (Project No.: 14-ADV1056-02), Ongoing.

- “Studying FRP-schemes for the strengthening and repair of wall-like RC columns”, Approved for funding by National Plan for Sciences and Technology, King Abdulaziz City for Science and Technology (Project No.: 13-ADV858-02), Ongoing.