

## CURRICULUM VITAE

### **TANVIR MANZUR, Ph.D., P.Eng. (ONTARIO, CANADA)**

Professor

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### **EXPERTISE**

**General Civil Engineering, Structural Engineering, Concrete Technology, Structural Fire Protection and Engineering Education**

### **EDUCATION**

#### **Certified Fire Protection Engineering**

(January, 2017)

**A short course jointly offered by University of Maryland, College Park, Maryland and National Fire Protection Association (NFPA), USA**

#### **Ph.D., University of Texas at Arlington, Arlington, Texas**

(Aug, 2011)

Major in Civil and Structural Engineering

GPA: 4.0/4.0

#### **M.Sc., Bangladesh University of Engineering and Technology, Dhaka, Bangladesh**

(Sept, 2006)

Major in Civil and Structural Engineering

GPA: 3.83/4.0

#### **B.Sc., Bangladesh University of Engineering and Technology, Dhaka, Bangladesh**

(Feb, 2003)

Major in Civil Engineering.

GPA: 3.94/4.0 (Degree awarded with Honors; Ranked 2<sup>nd</sup> out of 204)

### **APPOINTMENTS AND POSITIONS**

#### ***March, 2025-Present***

**Chairman**, Board of Accreditation for Engineering and Technical Education (BAETE), Bangladesh

***November, 2024-Present***

**Director**, BUET-Japan Institute of Disaster Prevention and Urban Safety (JIDPUS), Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

***June, 2017-Present***

**Professor**, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

***November, 2018-November, 2020***

**Visiting Scholar**, Department of Civil Engineering, Toronto Metropolitan University, Toronto, Canada

***Oct, 2014-June, 2017***

**Associate Professor**, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

***Feb, 2007 – Oct, 2014***

**Assistant Professor**, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

***May, 2007 – Aug, 2011***

**Graduate Teaching and Research Assistant**, University of Texas at Arlington, Arlington, TX

***April, 2004 – Feb, 2006***

**Lecturer**, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

***April, 2003 – April, 2004***

**Lecturer**, Department of Civil Engineering, Ahsanullah University of Science and Technology (AUST), Dhaka, Bangladesh

## **LIST OF PUBLICATIONS**

Authored or co-authored over **90** technical publications in refereed journals, book chapters and conference proceedings. A list of publications is attached as Appendix.

## **AWARDS AND HONORS**

- **STEM Scholarship**, University of Texas at Arlington
- **Graduate Assistantship**, University of Texas at Arlington
- Recipient of **the Dean's Award** for every session during undergraduate study at BUET

- Received **Merit Scholarship** in every academic year while studying B.Sc. Engineering at BUET

## **RESEARCH INTERESTS**

Cement & Concrete Properties, Nanotechnology Application, Smart Cementitious Composites with self-healing and self-sensing properties, Engineered Cementitious Composites (ECC), Retrofitting/Strengthening using ECC Wrapping/Covering, Geopolymer Concrete, Geopolymer based Engineered Cementitious Composites, Durability Performance of Concrete, Environmental & Climatic Impact on Concrete structures, Structural Analysis, Bridge Engineering, Fragility Analysis, Fire Modeling and Structural Fire Protection, Engineering Education.

## **RESEARCH COLLABORATION**

Have research collaboration on **trenchless technology**, buried pipe retrofitting using different non-invasive approaches, frictional resistance of buried coated steel pipes, and corrosion vulnerability assessment of embedded reinforcement of reinforced concrete with faculty members of CE, CET and Trenchless Technology Centre at Louisiana Tech University, Louisiana, USA.

## **COMPLETED GRADUATE RESEARCH WORKS**

Awarded M.Sc. in Civil and Structural Engineering degree to eleven (11) students at BUET.

## **UNDERGRADUATE PROJECT/THESIS WORKS**

Supervised more than forty (40) undergraduate students to complete their final year thesis (majoring in structural engineering) as part of CE 400 (Project/Thesis) course from 2011 to till date.

## **PROFESSIONAL AFFILIATIONS**

- Registered Professional Engineer with Profession Engineers Ontario (PEO), Canada
- Fellow, The Institution of Engineers, Bangladesh (IEB)
- Former Member, Canadian Society for Civil Engineering (CSCE)
- Former Member, American Society of Civil Engineers (ASCE) and Structural Engineering Institute (SEI)

## **OUTREACH**

- Chairman, Cement and Cementing Materials Sub-committee, BSTI, 2025-2027
- Board Member, Bangladesh Professional Engineers Registration Board (BPERB), 2025 – till date
- Member, Policy & Strategic Planning Committee, The Institution of Engineers, Bangladesh (IEB), 2025 – till date
- Member, Board of Directors, BANSDOC, 2024-till date

- Member, Executive Committee, BUET Alumni, 2025 –till date
- Associate Director, Directorate of Students' Welfare, BUET, 2016-2017
- Moderator, Civil Engineering Students' Association (CESA), Department of Civil Engineering, BUET, 2012-2016
- Editor of the "Proceedings of the 1<sup>st</sup> Bangladesh Civil Engineering Summit 2016", 2016
- Moderator, BUET Debating Club (BUETDC), 2013-2017
- Associate Secretary of the First International Workshop on Nanotechnology in Bangladesh, September, 2012
- Member, Editorial Board, Discover Concrete and Cement Journal, Springer Nature
- Reviewer, Journal of Construction and Building Materials, Elsevier (*Received certificate of outstanding contribution in reviewing*)
- Reviewer, Journal of Cement and Concrete Composites, Elsevier
- Reviewer, Journal of Engineering Structures, Elsevier
- Reviewer, Journal of Case Studies in Construction Materials, Elsevier
- Reviewer, ACI Materials Journal
- Reviewer, Journal of Materials in Civil Engineering, ASCE
- Reviewer, Journal of Building Engineering, Elsevier
- Reviewer, KSCE Journal of Civil Engineering, Springer
- Reviewer, Materials, MPDI
- Reviewer, Crystals, MPDI
- Reviewer, Polymers, MPDI
- Reviewer, Applied Sciences, MPDI
- Reviewer, Advances in Civil Engineering, Hindawi

## WORKSHOPS AND TRAINING COURSES

- Attended a 4 week-long short-course on “Overview of Fire Protection Engineering” organized by Department of Fire Protection Engineering, University of Maryland and National Fire Protection Association, USA in January 2017
- Attended a one day seminar on “NFPA 101, Life Safety Code” organized by National Fire Protection Association, USA in January 2017
- Attended a one day seminar on “NFPA 72, National Fire Alarm and Signaling Code” organized by National Fire Protection Association, USA in January 2017
- Attended a one day seminar on “NFPA 13, Standard for the Installation of Sprinkler System” organized by National Fire Protection Association, USA in January 2017
- Attended a seminar/training session on “Waste to Resource” and “Recycle, Reuse and Reduce of Solid Waste” organized by Zhejiang University, China in August 2014
- Attended the Award Leader Training Program organized by the Duke of Edinburgh's Award Foundation, Bangladesh in 21 to 22 June, 2013
- Attended the Award Leader Training Program organized by the International Secretariat, Duke of Edinburgh's Award International Association Asia Pacific Region in 31st March, 2012
- Attended the workshop on "Disaster Response Exercise & Exchange", organized by the Bangladesh Armed Forces and U.S. Army Pacific, held during 25-29 September, 2011 at Dhaka, Bangladesh

- Attended the workshop on "Effective College Teaching by Richard M. Felder and Rebecca Brent", organized by the UT Arlington College of Engineering, held during 13-14 November, 2009 at UT Arlington
- Successfully completed the short course on “Engineering 3D CAD with Solid Works and Finite Element Analysis (FEA) with ANSYS”, organized by the Directorate of continuing education, BUET held during 4-6 October, 2004 at BUET, Dhaka
- Attended the Teacher’s Appreciation Workshop organized by the Directorate of continuing education, BUET held during 26-27 February, 2005 at BUET, Dhaka
- Successfully completed the short course on “Earthquake Resistant Design and Retrofitting of Buildings”, organized by the Directorate of continuing education, BUET held during 26-30 April, 2005 at BUET, Dhaka

## **UNIVERSITY/DEPARTMENTAL SERVICES**

- Member, Research Committee, Research and Innovation Centre for Science and Engineering (RISE), BUET, 2024-till date
- Serving as one of the faculty members of the Fire Safety Program, BUET from 2016-till date. The program resulted from a joint collaboration between BUET, University of Maryland (UMD) and National Fire Protection Association (NFPA) and was funded by the International Labour Organization (ILO)
- Lab-in- charge, Concrete Laboratory of the Department of Civil Engineering, BUET, 2017-2018 and 2022-2024
- Member, Self-Assessment Committee of Civil Department, Institutional Quality Assurance Cell (IQAC), BUET, 2016-2018
- Member, Academic Council, BUET, 2015-till date
- External Member, Faculty of Architecture and Planning, BUET, 2014-2017
- Member, Board of Post-graduate Studies (BPGS) of the Department of Civil Engineering, BUET, 2011-2018
- Member, Board of Undergraduate Studies (BUGS) of the Department of Civil Engineering, BUET, 2011-2018
- Member, Management Committee (MC), Bureau of Research, Testing and Consultation (BRTC), Department of Civil Engineering, BUET, 2013 and 2016.
- Member, GoC (Group of Consultants), Bureau of Research, Testing and Consultation (BRTC), Department of Civil Engineering, BUET, 2011- 2018
- Member Secretary, Facilities development Committee, Department of Civil Engineering, BUET, 2012-2018

## **LABORATORY DEVELOPMENT:**

- Development of Rapid Migration Test (RMT) setup for research in Concrete Lab, Department of Civil Engineering, BUET, Dhaka.
- Development of Rapid Chloride Penetration Test (RCPT) setup for research in Concrete Lab, Department of Civil Engineering, BUET, Dhaka.

## **SYNERGISTIC ACTIVITIES**

**Member, Committee for Preparation of Draft Work Plan to Prevent Fire Accident, RAJUK (2024 – till date)**

**Member, Committee for Preparation of Action Plan to Ensure Livability of Dhaka City, RAJUK (2024 – till date)**

**Chairman and Focal Point, Disaster Management, Climate Change, Urban Safety and Carbon Neutral Development Sub-committee, RAJUK, (2024 – till date)**

**Member, Committee for Reviewing DPP of Rail-cum-Road Bridge at Kalurghat, Bangladesh Railway (2024 – till date)**

**Member, Committee for Providing Recommendations to Reduce Water Clogging Issues of Dhaka City, DNCC (2024 – till date)**

**Member, National Review Panel for RMG (Ready Made Garment) buildings of Bangladesh (2014 – 2015)**

**Structural Consultant (September, 2011 – till date, Bureau of Research Testing and Consultation (BRTC), Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.**

### ***Responsibilities:***

Providing consultancy services (analysis, design and vetting) to the Projects of national importance as a member of the BRTC team of the Department

### ***Summary:***

- Structural Engineer and concrete materials expert with more than 20 years of professional experience in design and consulting of concrete and steel structures.
- Primary experience in bridge, grade separated structures, high rise concrete structures, industrial steel buildings, commercial buildings, forensic investigation of buildings, light industrial buildings, concrete mix design, construction materials, etc.
- Experience in structural fire protection design.
- Experience in Civil and Architectural scopes, deliverables, schedule and budget.
- Familiar with major building codes (ASCE, CSA, IBC, BNBC).
- Expert user of FEM softwares like ETABS, SAP, CSI Bridge etc.
- Experience in providing technical sessions/ seminars to colleagues and peers.

### ***List of some Notable Projects:***

- **Team Lead and Structural Engineering Consultant, Design Drawing Review of The Substructure & Construction Supervision of the Substructure Works Including all Relevant Test for Padma River Crossing Section under the “Payra Gopalganj-**

Aminbazar 400kv Double Circuit Transmission Line (2 Nd Phase) Project”, 2024 to 2027

- **Team Lead of Civil Engineering Part**, Top Supervision of Construction Work and Related Consulting Service for “Establishment of Logistics and Fleet Maintenance Facilities for Bangladesh Coast Guard" At Gazaria, Munshiganj, 2023-2026
- **Team Lead**, Vetting of Civil BOQs under Project of Expansion and Strengthening of Power System Network under DPDC Area, 2023-till date
- **Structural Engineering Consultant**, Advisory Services on Hazrat Shahjalal International Airport Expansion Project by BRTC, BUET, 2023-till date
- **Structural Fire Protection Consultant**, Supplemental Environmental and Social Impact Assessment (S-ESIA), Fire and Life Safety Risk Assessment and Climate Change and Flood Risk Assessment for Patenga Container Terminal (PCT) and South Container Yard (SCY), 2024
- **Structural Engineering Consultant**, Feasibility study, Detail Design and Drawing for “Construction of Grade Separated Intersection/Underpass at Lalpool Junction Point of Dhaka-Chittagong National Highway (N-1)/Panchgachia Point of Feni-Noakhali National Highway to Facilitate Smooth Traffic Flow”, 2023-till date
- **Structural Engineering Consultant**, Vetting of Detail Structural Drawing of Oil Jetty of SPL Petrochemical Complex Limited, 2022-2023
- **Structural Engineering Consultant**, Construction of Flyover at Chowmuhani Bazar Area and Inter-Changer Development at Begumgonj Chowrasta on Feni-Noakhali National Highway (N-104) to Facilitate Smooth Traffic Flow, 2023-till date
- **Team Lead and Structural Engineering Consultant**, Detail Design, BoQ and Cost Estimate for Construction of a New Building to Accommodate Recovery Equipment of Standard Platform at TTSC, BTCL Compound, Jashore under Package-3 of BTCL Internet Protocol (IP) Network Development and Expansion Project, 2022-2023
- **Structural Engineering Consultant**, Vetting of Structural Design of the Kushiara Bridge, Sunamganj, 2017-2018.
- **Structural Engineering Consultant**, Feasibility Assessment of the Establishment of Technology Lab and Software Finishing School through Strengthening the Regional Offices of Bangladesh Computer Council (BCC), 2017-2018.
- **Team Lead and Structural Engineering Consultant**, Technical Assessment and Review of Cost Estimation of the Proposed Gulshan-Banani-Baridhara Lake Development Project, RAJUK, 2017-2018.
- **Structural Fire Protection Consultant**, Structural fire protection design Ecotex Readymade Garment Factory Building, 2018.
- **Structural Engineering Consultant**, Consultancy and Supervisory Works of Construction of CETP and Dumping Yard of Tannery Estate, Savar, BSCIC, 2013-2016.
- **Structural Engineering Consultant**, Vetting of Structural Design of 17-Storied Grameen Telecom Trust Building, Mirpur, GTT, 2014-2017.
- **Structural Engineering Consultant**, Detailed Engineering Assessment (DEA) of 10-storied HSBC Head quarter building in Bangladesh, 2015

- **Structural Engineering Consultant**, Detailed Engineering Assessment (DEA) of several buildings of Bangladesh Rural Advancement Committee (BRAC) (e.g. BRAC University, BRAC Center, AARONG Uttara etc.), 2013-2014.
- **Structural Engineering Consultant**, Safety Assessment of Foundation and Structural Design of Various Readymade Garment Factory Buildings, 2013-2014.
- **Structural Engineering Consultant**, Vetting of the design of Shadhinata Stambha Glass Tower; 2012.



## APPENDIX

### LIST OF PUBLICATIONS

**PEER REVIEWED JOURNAL PUBLICATIONS** (\* designates student author supervised by Dr. Manzur; \* and \*\* means graduate and undergraduate students, respectively; underlining the name means Dr. Manzur served as the corresponding author)

1. Rafiuzzaman\*\*, S. and **Manzur, T.** (2025) “Service Life Estimation of RC Structures Using Surface Resistivity: A Non-Destructive Approach.” J Nondestruct Eval 44(16). (Publisher: Springer)
2. Alam, S., **Manzur, T.**, Matthews, J. C., Bartlett, C., Allouche, E. N., Keil, B., and Kraft, J. K. (2024) “Experimental and Analytical Investigation on Friction Resistance Force between Buried Coated Pressurized Steel Pipes and Soil.” Frontiers of Structural and Civil Engineering 18 615-629. (Publisher: Springer)
3. Hashm, H., Alam, S., Gordon, S., Kraft, J., Saleh, M. Y., Lvov, Y., Matthews, J., Radadia, A., Weiss, L., Amritphale, S., Bailey, D., and **Manzur, T.** (2023) “Halloysite Clay Nanotube Composites as Coating Materials with Enhanced Properties.” Journal of Construction and Building Materials 392 131961. (Publisher: Elsevier)
4. Masum, A. T. M., Rahman, M. R., Kafi, M. A., Ghimire, S., Akter, S., and **Manzur, T.** (2023) “Potential of Waste Distorted Bricks to Produce Internally Cured Concrete under Adverse Curing Conditions.” Innov. Infrastruct. Solut. 8 210. (Publisher: Springer)
5. Matthews, E., Kraft, J., Hossain, G., Bednar, A., Laber, C., Alam, S., **Manzur, T.**, Matthews, J., Howell, J., and Eklund, S. (2022) “Air Quality Dispersion Modelling to Evaluate CIPP Installation Styrene Emissions.” Int. J. Environ. Res. Public Health 2022, 19, 13800. (Publisher: MDPI)
6. Rumman, R., Kamal, M. R., **Manzur, T.**, and Noor, M. A. (2022) “Optimum Proportion of Fly Ash or Slag for Resisting Concrete Deterioration Due to Carbonation and Chloride Ingress.” Structures 41 287-305. (Publisher: Elsevier)
7. Baten\*, B. and **Manzur, T.** (2022) “Formation Factor Concept for Non-Destructive Evaluation of Concrete's Chloride Diffusion Coefficients.” Cement and Concrete Composites 104440. (Publisher: Elsevier)
8. Torsha\*\*, T., **Manzur, T.**, Chowdhury, N. R., and Hasan\*, M. J. (2022) “Significance of Integrating Probabilistic Performance Based Cover Design in Local Construction Guidelines for Adequate Serviceability of Coastal Built Environment: Bangladesh Perspective.” Natural Hazards. (Publisher: Springer)
9. Hossain, K. M. A., Parajuli, S., and **Manzur, T.** (2021) “Axial Behavior of Columns Confined with Engineered Cementitious Composites.” ACI Structural Journal 119(1) 67-76. (Publisher: ACI)

10. Alam, S., **Manzur, T.**, Banjara, A., Eklund, S., Radadia, A., Johnston, W., Hashm, H., Williams, J., and Matthews, J. (2021) "Rapid curing prospects of geopolymer cementitious composite using frontal polymerization of methyl methacrylate monomer." *Journal of Construction and Building Materials* 309, 125198. (Publisher: Elsevier)
11. Baten\*, B., **Manzur, T.**, Torsha, T, and Alam, S. (2021) "Parametric Study with Graphical Approach for Assessing Corrosion Vulnerability of Concrete Mixes in Chloride Environment." *Journal of Construction and Building Materials* 309, 125115. (Publisher: Elsevier)
12. Alam, S., **Manzur, T.**, Borquist, C., Williams, J., Rogers, C., Hall, D., Patterson, W. B., Higuera, J., Eklund, E., Wang, J. X., and Matthews, J. C. (2021) "In-situ Assessment of Soil-root Bonding Strength to Aid in Preventing Soil Erosion." *Soil and Tillage Research* 213 105140. (Publisher: Elsevier)
13. Alam, S., **Manzur, T.**, Matthews, J. C., Bartlett, C., and Allouche, E. N. (2021) "Experimental Evaluation of Deteriorated CMPs Retrofitted by Different Non-invasive Approaches." *KSCE Journal of Civil Engineering*. (Publisher: Springer)
14. Mahmud\*, S., **Manzur, T.**, Samrose, S., Torsha\*\*, T. (2021) "Significance of Properly Proportioned Fly Ash Based Blended Cement for Sustainable Concrete Structures of Tannery Industry." *Structures* 29 1898-1910. (Publisher: Elsevier)
15. Afroz\*, S., **Manzur, T.**, Borno\*\*, I. B., Hasanuzzaman, M., and Hossain, K. M. A. (2021) "Potential of Starch as Organic Admixture in Cementitious Composites." *ASCE Journal of Materials in Civil Engineering* 33(2) 04020449. (Publisher: American Society of Civil Engineers)
16. **Manzur, T.**, Mahmood\*, M. H., Baten\*, B., Hasan\*, M. J., Hossain, M. R., Noor. M. A. and Yazdani, N. (2020) "Progressive Collapse Vulnerability Assessment of Typical Garment Factory Buildings of Bangladesh." *ASCE Journal of Performance of Constructed Facilities* 34(5) 04020092. (Publisher: American Society of Civil Engineers)
17. Hossain, K. M. A., Sathiyamoorthy, K., **Manzur, T.** and Lotfy, A. (2020) "Shear Behavior of Lightweight Slag Aggregate Self-Consolidating Concrete Beams." *ACI Structural Journal* 17(5) 259-268. (Publisher: ACI)
18. Kamal, M. R., Rumman, R., **Manzur, T.**, Bari, M. S., and Noor, M. A. (2020) "A Novel Durability Based Concrete Mix Design Using Supplementary Cementitious Materials and Modified Aggregate Band Gradation." *International Journal of Civil Engineering*. (Publisher: Springer)
19. Hossain, K. M. A., Hossain, M. A., and **Manzur, T.** (2020) "Performance of Self-Consolidating Concrete Beams Covered or Wrapped with Engineered Cementitious Composite Subjected to Corrosion." *Journal of Engineering Structures* 219, 110801. (Publisher: Elsevier)

20. Afroz\*, S., **Manzur, T.**, and Hossain, K. M. A. (2020) “Bio-Admixture for Performance Enhancement of Concrete: Revisiting Biomass as an Alternative to Toxic Chemicals.” *Journal of Building Engineering* 30, 101313. (Publisher: Elsevier)
21. Baten\*, B., **Manzur, T.**, and Ahmed, I. (2020) “Combined Effect of Binder Type and Target Mix-Design Parameters in Delaying Corrosion Initiation Time of Concrete under Marine Environment.” *Journal of Construction and Building Materials* 242, 118003. (Publisher: Elsevier)
22. Hossain, K. M. A., Hossain, M. A., and **Manzur, T.** (2020) “Structural Performance of Fiber Reinforced Lightweight Self-Compacting Concrete Beams Subjected to Accelerated Corrosion.” *Journal of Building Engineering* 30, 101291. (Publisher: Elsevier)
23. Rumman, R., Bari, M. S., **Manzur, T.**, Kamal, M. R. and Noor, M. A. (2020) “A Durable Concrete Mix Design Approach using Combined Aggregate Gradation Bands and Rice Husk Ash Based Blended Cement.” *Journal of Building Engineering* 30, 101303. (Publisher: Elsevier)
24. Hossain, K. M. A., Hasib, S., and **Manzur, T.** (2019) “Shear Behavior of Novel Hybrid Composite Beams Made of Self-Consolidating Concrete and Engineered Cementitious Composites.” *Journal of Engineering Structures* 202, 109856. (Publisher: Elsevier)
25. **Manzur, T.**, Rahman\*, S., Torsha\*\*, T., Noor, M.A., and Hossain, K. M. A. (2019) “Burnt Clay Brick Aggregate for Internal Curing of Concrete under Adverse Curing Conditions.” *KSCE Journal of Civil Engineering* 23(2) 5143-5153. (Publisher: Springer)
26. Masum\*, A. T. M. and **Manzur, T.** (2019) “Delaying time to corrosion initiation in concrete using brick aggregate as internal curing medium under adverse curing conditions.” *Journal of Construction and Building Materials* 228, 116772. (Publisher: Elsevier)
27. **Manzur, T.**, Khomeni\*, A., Baten\*, B., and Hossain, K. M. A. (2019) “Investigating significance of various parameters affecting capacity of core drilled columns for safe core extraction.” *Engineering Structures* 200, 109722. (Publisher: Elsevier)
28. **Manzur, T.**, Huq\*\*, S. R., Efaz\*\*, I. H., Afroz\*\*, S., Rahman\*\*, F. and Hossain, K. M. A. (2019) “Performance Enhancement of Brick Aggregate Concrete using Microbiologically Induced Calcite Precipitation.” *Case Studies in Construction Materials* 11, e00248. (Publisher: Elsevier)
29. **Manzur, T.**, Baten\*\*, B., Hasan\*\*, J., Akter\*\*, H., Tahsin\*\*, A., and Hossain, K. M. A. (2018) “Corrosion Behavior of Concrete Mixes with Masonry Chips as Coarse Aggregate.” *Journal of Construction and Building Materials* 185, 20–29. (Publisher: Elsevier)

30. **Manzur, T.**, Sultana\*\*, S. L., Mahmud\*\*, S., Papry, S. A., Saha, S., and Choudhury, M. R. (2018) "Performance of Cement Mortars under Tannery Wastewater." KSCE Journal of Civil Engineering. (Publisher: Springer)
31. Emon, A. B\*, **Manzur, T.**, and Sharif\*\*, M. S. (2017) "Suitability of Locally Manufactured Galvanized Iron (GI) Wire Fiber as Reinforcing Fiber in Brick Chip Concrete." Case Studies in Construction Materials, Volume 7, 217–227. (Publisher: Elsevier)
32. Iffat, S\*, **Manzur, T.**, Rahman\*, S., Noor, M.A., and Yazdani, N. (2017) "Optimum Proportion of Masonry Chip Aggregate for Internally Cured Concrete." International Journal of Concrete Structures and Materials, 11: 196. (Publisher: Springer)
33. **Manzur, T.**, Rahman\*\*, F., Afroz\*\*, S., Huq\*\*, S. R. and Efaz\*\*, I. H. (2016) "Potential of Microbiologically Induced Calcite Precipitation Process for Durability Enhancement of Masonry Aggregate Concrete." Journal of Materials in Civil Engineering, ASCE, 04016290, 1 -12. (Publisher: American Society of Civil Engineers)
34. **Manzur, T.** and Yazdani, N. (2016) "Effect of Different Parameters on Properties of Multiwalled Carbon Nanotube Reinforced Cement Composites." Arabian Journal for Science and Engineering, 41(12), 4835-4845. (Publisher: Springer)
35. **Manzur, T.**, Ehsan, K. M., Sultana\*\*, S. L., and Mahmud\*\*, S. (2016) "Measurement of Surface Damage Through Boundary Detection: An Approach to Assess Durability of Cementitious Composites under Tannery Waste Water." Advances in Materials Science and Engineering, Volume 2016, Article ID 5368635, Hindawi Publishing Corporation. (Publisher: Hindawi Publishing Corporation)
36. Iffat\*, S., **Manzur, T.**, and Noor, M.A. (2016) "Durability of Internally Cured Concrete Using Locally Available Low Cost Light Weight Aggregate." KSCE Journal of Civil Engineering. (Publisher: Springer)
37. **Manzur, T.**, Yazdani, N. and Emon\*, A. B. (2016) "Potential of Carbon Nanotube Reinforced Cement Composites as Concrete Repair Material." Journal of Nanomaterials, Vol 2016, Article ID 1421959, Hindawi Publishing Corporation. (Publisher: Hindawi Publishing Corporation)
38. Emon\*, A. B., **Manzur, T.**, and Yazdani, N. (2016) "Improving Performance of Light Weight Concrete with Brick Chips Using Low Cost Steel Wire Fiber." Journal of Construction and Building Materials 106, 575–583. (Publisher: Elsevier)
39. **Manzur, T.**, Iffat\*, S., and Noor, M. A. (2015) "Efficiency of Sodium Polyacrylate to Improve Durability of Concrete under Adverse Curing Condition." Advances in Materials Science and Engineering, Vol 2015, Article ID 685785, Hindawi Publishing Corporation. (Publisher: Hindawi Publishing Corporation)
40. **Manzur, T.** and Yazdani, N. (2015) "Optimum Mix Ratio for Carbon Nanotubes in Cement Mortar." KSCE Journal of Civil Engineering, Volume 19, Issue 5, pp 1405-

1412. (Publisher: Springer)

41. **Manzur, T.**, Yazdani, N. and Emon\*, A. B. (2014) “Effect of Carbon Nanotube Size on Compressive Strengths of Nanotube Reinforced Cementitious Composites.” Journal of Materials, Volume 2014, Hindawi Publishing Corporation. (Publisher: Hindawi Publishing Corporation)
42. **Manzur, T.** and Yazdani, N. (2013) “Importance of Flow Values in Qualitative Evaluation of Carbon Nanotube Reinforced Cementitious Matrix.” Malaysian Journal of Civil Engineering 25(1), pp. 71-80.
43. Yazdani, N., Reynolds, D., and **Manzur, T.** (2013) “STEM High School Teaching Enhancement Through Collaborative Engineering Research on Extreme Winds.” Journal of STEM Education: Innovations and Research, Volume 14, Issue 1, pp. 12-19.
44. **Manzur, T.** and Yazdani, N. (2010) “Strength Enhancement of Cement Mortar with Carbon Nanotubes: Early Results and Potential.” Journal of the Transportation Research Board, No. 2142, Volume 2, pp. 102-108.
45. Yazdani, N., Dowgul, R. W. and **Manzur, T.** (2010) “Deficiency Analysis of Coastal Buildings toward Storm Damage Reduction.” Journal of Performance of Constructed Facilities, ASCE, Volume 24, Number 2, pp. 128-137. (Publisher: American Society of Civil Engineers)
46. Yazdani, N., Filsaime, M. and **Manzur, T.** (2010) “Effect of Steam Curing on Concrete Piles with Silica Fume.” International Journal of Concrete Structures and Materials, KCI, Vol. 4, No. 1, pp. 17-24.
47. **Manzur, T.** and Habib, A. (2006) “Optimum Proportions for the Design of Suspension Bridge.” Journal of Civil Engineering (IEB), 34 (1), pp. 1-14.

**BOOK CHAPTER** (\* designates student author supervised by Dr. Manzur; \* and \*\* means graduate and undergraduate students, respectively)

1. **Manzur, T.**, Noor, M. A., and Torsha, T. and (2024) “Reducing Chloride Induced Corrosion Risk and Associated Life Cycle Cost of Marine RC Structure: Bangladesh Perspective.” Proceedings of the Canadian Society of Civil Engineering Annual Conference 2022. CSCE 2022. Lecture Notes in Civil Engineering 359. (Publisher: Springer)
2. Talukder, R., Siddique, F., Islam, S. R., and **Manzur, T.** (2024) “Thermal Analysis of Concrete Box Girder Bridge Exposed to Interior Fire Using SAFIR.” Proceedings of the 2<sup>nd</sup> International Conference on Advances in Civil Infrastructure and Construction Materials (CICM 2023), Volume 1. CICM 2023. Lecture Notes in Civil Engineering 511. (Publisher: Springer)
3. **Manzur, T.** (2024) “Performance-Based Concrete Mix and Cover Design in Saline Exposure: Why and How?.” Proceedings of the 2<sup>nd</sup> International Conference on

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**CONFERENCE PROCEEDINGS** (\* designates student author supervised by Dr. Manzur; \* and \*\* means graduate and undergraduate students, respectively)

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**PRESENTATIONS** (\* designates student author supervised by Dr. Manzur; \* and \*\* means graduate and undergraduate students, respectively)

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