Md. Aminul Islam

Assistant Professor, BUET-Japan Institute of Disaster Prevention & Urban Safety, Bangladesh University of Engineering and Technology, Dhaka 1000, Bangladesh.

E-mail: aminul0804043@gmail.com, mdaminul@jidpus.buet.ac.bd

Site: https://jidpus.buet.ac.bd/personnel/faculty_details/md-aminul-isla

Google Scholar: https://scholar.google.com/citations?hl=en&user=F 9Y5pwAAAAI

Research gate: https://www.researchgate.net/profile/Aminul Islam40?

FIELDS of INTEREST

Structural Engineering, Earthquake Engineering, Structural Dynamics, Structural Health Monitoring, Nondestructive Testing, Vulnerability Assessment of Structure, Steel Structure, Laboratory Testing using Shake Table and Actuators, Repair and Retrofitting of existing Structures.

EDUCATION

M.Sc. in Civil Engineering (Structural), Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh 2018

Thesis: Dynamic Behaviour of Unreinforced Masonry Building

B.Sc. in Civil Engineering, Bangladesh University of Engineering and

Technology, Dhaka-1000, Bangladesh

Thesis: Effect of Fine Content on Shear Strength of Sand

July 2014

RESEARCH EXPERIENCE

Involvement in the following research projects:

- ➤ Pseudo-dynamic Behavior of Unreinforced Masonry Wall
- > Shake table test of structural frame using Buckling Restrained Brace (BRB)
- > Investigation of Dynamic Behavior of Unreinforced Masonry Building by Shaking Table
- Effect of Fine Content on Shear Strength Of Sand

PUBLICATIONS

Journal

Islam, M.A., Ahsan R., Aziz, I., "Experimental Investigation of Seismic Performance of Unreinforced Masonry (URM) Walls." Journal of Earthquake Engineering, Manuscript No.: UEQE-2019-3871, 19 August 2019. **(Submitted)**

Barua, U., Akther, M.S., Islam, I., **Islam, M.A.**, Akter, T., Ansary, M.A., Ahsan R. "Earthquake Contingency Planning at Local Level through Participatory Approach: An Experience from Ward No. 14, Mymensingh Municipality, Bangladesh." International Journal of Disaster Risk Reduction, Submission no: IJDRR_2019_1024. 6 August 2019. **(Submitted)**

Barua, U., Mannan, S., Islam, I., Akther, M.S., **Islam, M.A.,** Akter, T., Ahsan R. Ansary, M.A., "People's awareness, knowledge and perception influencing earthquake vulnerability of a community: A study on Ward No. 14, Mymensingh municipality, Bangladesh." Submission id: NHAZ-D-19-00857, 6 August 2019. **(Submitted)**

Uddin, M. A., **Islam, M.A.**, Hossain, M.D., "A Comparison Between Treatment Efficiency of Conventional Activated Sludge Process Followed by Chemical Treatment and Conventional Activated Sludge Process Followed by Membrane Bioreactor for the Wastewater of a Textile Industry." Desalination and Water Treatment, Manuscript ID: TDWT-2019-1160. **(Submitted)**

Ahsan, R., Aziz, I., Aziz S., Islam, M.A. and Sarker, M. S. K. "Reliability of Concrete Core Testing and Implications in Building Safety Assessment in Bangladesh", Journal of Civil Structural Health Monitoring, Manuscript Number: CSHM-D-19-00047 (Submitted)

Conference Proceeding

- **Islam, M.A.**, Ahsan, R., "Performance of Unreinforced Masonry Walls in Shaking Table Test" International Conference on Disaster Risk Management (ICDRM 2019), Paper ID: APM117, Page No.: 68-73, ISBN: 978-984-34-5794-3, 12-14 January 2019, Dhaka, Bangladesh.
- **Islam, M.A.**, Barua, U., Akter, T., Ahsan, R., Akther, M.S., Islam, I., Ansary M.A., "Structural Vulnerability and Social Readiness in Mymensingh, Bangladesh" International Conference on Disaster Risk Management (ICDRM 2019), Paper ID: APM118, Page No.: 74-79, ISBN: 978-984-34-5794-3, 12-14 January 2019, Dhaka, Bangladesh.
- Akter, T., Barua, U., **Islam, M.A.**, Islam, I., Akther, M.S., Ansary, M.A., Ahsan R. "Understanding Social Vulnerability of a Community for Earthquake: A Study on Ward no. 14, Mymensingh Municipality, Bangladesh" International Conference on Disaster Risk Management (ICDRM 2019), Paper ID: APM511, Page No.: 275-281, ISBN: 978-984-34-5794-3, 12-14 January 2019, Dhaka, Bangladesh.
- Barua, U., Akter, T., **Islam, M.A.**, Akther, M.S., Islam, I., Ahsan, R., Ansary, M.A., "Community participation in Earthquake Contingency Planning: An experience from Ward No. 14, Mymensingh Municipality, Bangladesh "International Conference on Disaster Risk Management (ICDRM 2019), Paper ID: EMR110, Page No.: 401-408, ISBN: 978-984-34-5794-3, 12-14 January 2019, Dhaka, Bangladesh.
- Billah, M., Tarannum, T., Islam, M.A., and Shahin, M., "Cyclone Shelters Need Development for Ensuring Sustainable Uses: A Case Study In Patuakhali And Borguna District" International Conference on Disaster Risk Management (ICDRM 2019), Paper ID: HVR233, Page No.: 568-577, ISBN: 978-984-34-5794-3, 12-14 January 2019, Dhaka, Bangladesh.
- **Islam, M.A.**, Isaba, T.T., Aziz, I., Aziz, S., Ahsan, R. "Structural Vulnerability of Buildings to Earthquake of Ward no. 14, Mymensingh Municipality, Bangladesh" International Conference on Planking, Architecture and Civil Engineering, RUET, Paper ID: C_48, 6-9 February 2019, Rajshahi, Bangladesh.
- **Islam M.A.**, Ansary M.A., Ahsan R., "Performance of Reinforced Concrete Frame Retrofitted With Buckling Restrained Brace (BRB)". International Conference on Disaster Risk Mitigation (ICDRM 2017), Paper ID-CDS123, September 23 24, 2017, Dhaka, Bangladesh.
- **Islam M.A.**, Badhon F.F., Abedin M.Z., "Influence of Effective Size on Shear Strength of Sand". International Conference on Planning, Architecture and Civil Engineering (ICPACE 2017), 09-11 February 2017, RUET, Rajshahi, Bangladesh.
- **Islam M.A.**, Badhon F.F., Anik M.K.A., Abedin M.Z., "Effect of Fine Content on Shear Strength of Sand". 3rd International Conference on Advances in Civil Engineering 2016 (ICACE-2016), Page No.: 191-196, 21-23 December 2016, CUET, Chittagong, Bangladesh.
- Badhon, F.F., **Islam, M.A.**, "Effect of Gradation on Shear Strength of Sand" International Conference on Engineering Research, Innovation and Education (ICERIE 2017), SUST, Paper ID: ICERIE 2017_039, Page No.: 757-761, 13-15 January 2017, Sylhet, Bangladesh.

PROJECT WORK

Development of Post-Graduate Research and Degree Programs in Disaster Risk Reduction at New Institute on Disaster Prevention and Urban Safety

August, 2016 – November 2017

Higher Education Quality Enhancement Project (HEQEP), Academic Innovation Fund, University Grants Commission (UGC)

Position: Member, Project Management Team

Assessment of Seismic Exposure, Building & Socio-economic Exposure Assessment and Contingency Planning for Ward 14 of Mymensingh Municipality

April, 2017 – December 2017

Funded by, United Nations Development Programme (UNDP)

Position: Team Leader, Survey Team; Member, Project Management Team

Assessment of Structural Vulnerability to Earthquake of Hospital and School Buildings

August 2018 – November 2018

Funded by, Population Services and Training Center (PSTC) and Community Participation and Development (CPD)

Position: Member, Project Management and Technical Team

ACADEMIC EMPLOYMENT

Assistant Professor, BUET-Japan Institute of Disaster Prevention & Urban July 2019- present Safety, BUET, Bangladesh

Assigned Work: Research, Teaching

Lecturer, BUET-Japan Institute of Disaster Prevention & Urban Safety, July 2015- June BUET, Bangladesh 2019

Assigned Work: Research, Teaching

Part-time faculty (Lecturer), Department of Civil Engineering, Sonargaon August 2017-University, Bangladesh December 2018

Assigned Work: Prepare Lecture slide, conducting lecture

Lecturer, Department of Civil Engineering, Ahsanullah University of Science June, 2015 – July, and Technology, Dhaka 2015

Assigned Work: Prepare Lecture slide, conducting lecture

TEACHING EXPERIENCES

Assistant Professor, BUET-Japan Institute of Disaster Prevention & Urban July 2019- present Safety, BUET, Bangladesh

Lecturer, BUET-Japan Institute of Disaster Prevention & Urban Safety, July 2015- June BUET, Bangladesh 2019

- Cone Penetration Test (Lecture, Field Test and Analysis)
- Down-hole Seismic Test (Lecture, Field Test and Analysis)
- Microtremor Test (Field Test and Analysis)
- Seismic Refraction (Lecture and Field Test)
- Ground Penetration Radar (Lecture, Field Test and Analysis)

Part-time faculty (Lecturer), Department of Civil Engineering, Sonargaon August 2017-University, Bangladesh December 2018

Concrete Structure Design Sessional I

- Concrete Lab
- Structural Mechanics and Material Lab
- Numerical Analysis

Lecturer, Department of Civil Engineering, Ahsanullah University of Science June, 2015 – July, and Technology, Dhaka 2015

- Geotechnical Engineering Sessional I
- Environmental Engineering Sessional I
- Civil Engineering Drawing

PROFESSIONAL EXPERIENCE

Performed different tests/project/managerial work e.g.

- Assessment on Structural Vulnerability to Earthquake of Hospitals, Schools Buildings and Office Buildings in Dhaka City and Narayanganj City, Bangladesh. (2017-2018)
- Site supervision of retrofitting work at Department of Telecommunication (DoT)
- Report writing on seismic exposure assessment and structural vulnerability assessment of Mymensingh, Bangladesh. 2017
- Provide lecture on various **Non-destructive testing** methods e.g. Microtremor Test, Ground-Penetrating Radar, Seismic Refraction- as a part of assigned office work. (2017-2018)
- Performed various kinds of testing e.g. Shake Table Test, Eccentric Mass Vibrator, Static Actuator Test, Microtremor Test, Ground-Penetrating Radar, Cone Penetration Test, PS- Logging Test. (2015-2018)
- Organizing Committee Member of "International Conference on Disaster Risk Mitigation (ICDRM) 2017"; Organized by- BUET-JIDPUS, BUET, Bangladesh. September, 2017
- Training Course Coordinator of various training. (2015-2017)
- Organizing Committee Member of symposium on "Safety in the Garment Industry, Five Years after Rana Plaza"; Organized by- BUET-JIDPUS, BUET, Bangladesh. April, 2018
- Visit to Reconstruction Area at Dolakha, Nepal after 2015 Gorkha Earthquake, Collaborative Research on Disaster Risk Reduction jointly implemented by Beijing Normal University, China and National Society for Earthquake Technology -Nepal (NSET) with the funding support from DFID. August, 2017

HONORS and **AWARDS**

- Dean's Scholarship: in every academic session of undergraduate study for obtaining a CGPA higher than 3.75
- University Merit Scholarship: in five academic term of undergraduate study for excellent results in each term
- Dhaka Board Scholarship: For outstanding result in the Higher Secondary Certificate Examination
- American Association of Bangladeshi Engineers and Architect (AABEA), Inc. Scholarship

COMPUTER SKILL

Typesetting Languages: LaTeX Computing Tools: MATLAB

Programming Languages: C/C++ Modeling Software: ETABS, GRASP, SAP 2000

Graphics Software: AutoCAD

REFERENCES

Raquib Ahsan, Ph.D.

Director, BUET-Japan Institute of Disaster Prevention & Urban Safety & Professor, Department of Civil Engineering,

Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh Email: raquibahsan@gmail.com

Md. Zoynul Abedin, Ph.D.

Professor, Department of Civil Engineering Military Institute of Science and Technology (MIST), Dhaka-1216, Bangladesh Email: zabedin@ce.buet.ac.bd

Tahmeed M. Al-Hussaini

Professor, Department of Civil Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh

Email: htahmeed@yahoo.com