

Dr. Ataur Rahman Professor

Research Area Green technology and Ecofriendly building materials Interface crack modeling by VCCT and CZM using FEA and design Analytical and numerical modeling of structures using Finite Element Analysis (FEA) Seismic strengthening Techniques for RC, Steel and Masonry structures

Biography

Dr. Ataur Rahman is a Professor in Civil Engineering at KUET. After graduating from BUET, he received his Master's and PhD in Structural Engineering from Hokkaido University, Japan. He teaches structural engineering courses including Analysis and Design of Indeterminate Structures, Design of Tall Buildings for Wind and Earthquake Induced Loadings, Design of Bridges, Folded Plate Roofs and Shell Structures. In 2017 he published his first book on "Analysis of Indeterminate Structures†for the undergrad students. In 2019 he published his 2nd book on "Deflection of Determinate Structuresâ€. He is specialized in RC, Steel, Masonry and Composite structures. His research interests are focused on resilient, sustainability low-cost eco-friendly infrastructures for the developing countries. He has extensive research experience in Finite Element Modeling and Analysis (FEA). Retrofitting & strengthening of dilapidated structures, performance based analysis and design, seismic design and strengthening of RC, Steel, Masonry and Composite structures, Structural health monitoring and assessment Structural health monitoring and assessment of life-cycle cost, Green technology and Eco-friendly of life-cycle cost Performance based analysis building materials. Dr. Ataur Rahman has conducted extensive experimental and analytical research on structural strengthening and retrofitting. He has developed seismic retrofitting technologies for existing masonry and RC structures. His research extends into the use of Fiber Reinforced Polymers (FRPs) using both synthetic and natural fibers in the construction industry. Dr. Rahman has contributed many articles for reputed professional journals. He is a reviewer of ASCE journal of Composites for construction, ASCE Journal of Materials in Civil Engineering, and Bangladesh Energy and Power Research Council. Dr. Rahman has delivered numerous lectures on Eco-friendly construction materials, sustainable design, ductile design of tall buildings etc. as invited guest speakers in seminars, workshops and training programs. Dr. Rahman is a Fellow of the Institution of Engineers Bangladesh (IEB, F13387). He is also a professional member of the American Society of Civil Engineers (ASCE, M #:000012285405), American Concrete Institute (ACI,M #:2233950), the Japan Society of Civil Engineers (JSCE, M #:200600331), Earthquake Engineering Research Institute (EERI, M #:32640) and Council on Tall Buildings and Urban Habitat (CTBUH). Aside from his teaching, Dr. Rahman has worked with renowned int. consulting companies like SMEC, AECOM, DOHWA etc as a structural consultant for Govt. as well as private infrastructure projects here in Bangladesh. He is also designing some solar facilities and residential buildings in the United States as an overseas expert and has gained vast experiences on North American Building Codes and Specifications. Dr. Rahman's impressive blend of academic knowledge and professional experiences has seasoned him as a structural engineer of practical relevance with global mindset.

Education

Ph.D. on Structural Engineering

Hokkaido University, Japan ()

M. Sc. in Structural and Geotechnical Engineering

Hokkaido University, Japan()

B. Sc. in Civil Engineering

Bangladesh University of Eng. & Tech. (BUET) ,Bangladesh()

HSC

Notre Dame College, Bangladesh()

SSC

BAF Shaheen School, Jessore, Bangladesh()

Service Records

Associate Professor

Department/Section: Civil Engineering **KUET** From 01-01-1970 to 01-01-1970

Professor

Department/Section: Civil Engineering **KUET** From 01-01-1970 to 01-01-1970

Research Interest

Green technology and Eco-friendly building materials

Interface crack modeling by VCCT and CZM using FEA

Structural health monitoring and assessment of life-cycle cost

Performance based analysis and design

Analytical and numerical modeling of structures using Finite Element Analysis (FEA)

Publication

Books

- $1.~(2019)~, \textit{Deflection of Determinate Structures}~,~ ISBN: 978 \hat{a}^\prime 984 \hat{a}^\prime 34 \hat{a}^\prime 7154-3, Kakon~ Press,~ Khulna~, Label 1.~ (2019)~,~ Label 2.~ (2019)~,~ Label 3.~ (2019)~,~$
- $2.~(2017)~, \textbf{\textit{ANALYSIS OF INDETERMINATE STRUCTURES}}~,~ ISBN: 978 \^{a}^\prime 984 \^{a}^\prime 34 \^{a}^\prime 2764 \^{a}^\prime 6, Shirin~ Press~ Ltd.$

Iournals

Conference