



Dr. Md. Rokonzaman

Professor

Research Area Geotechnical Engineering

Biography

Completing the B.Sc. degree in Civil Engineering in 2000, I joined the Department of Civil Engineering, Khulna University of Engineering & Technology (KUET), a top-tier public university in Bangladesh, at the teaching position in the same year. After four years of continuous teaching, I went to Japan getting the Japan Government Scholarship for higher studies at Mie University and there, completed the Masters and Ph.D. courses in 2007 and 2010, respectively. In 2010, I came back to my university and continued the teaching profession. However, the primary research interest is the understanding of geotechnical problems by the study of failure mechanisms through the physical and numerical modeling. Main research interests presently concentrate on the constitutive modeling and FEM simulations of elasto-visco (creep, relaxation, and strain rate effects)-cyclic-plastic behavior of soils. Other works also include model tests and FEM simulations related to soil-structure interaction phenomena in earthquake fault, excavation, ground improvement problems. In addition, the application of Artificial Intelligences (GAs and ANNs) in the geotechnical problems is also another research interest. Also, I am involved in many mega projects (e.g. Padma Multipurpose Bridge, Khulna-Mongla Port Railway Line, Khulna Water Supply Project of WASA) as a geotechnical expert, and I am playing the vital role as a technical member in many feasibility study and design projects of Port, Airport and other Civil Infrastructures.

Education

Doctor of Philosophy

Mie University, Japan (2007-2010)

Master of Science

Mie University, Japan (2005-2007)

B.Sc. in Civil Engineering

Khulna University of Engineering & Technology, Bangladesh (1995-2000)

Service Records

- **Professor**

Department/Section: Department of Civil Engineering,
Khulna University of Engineering & Technology From to

Responsibility: i, § Conducted various civil engineering courses of under/post-graduate program through lectures, tutorials, demonstrations, laboratory works as well as field works. i, § Advised students on course and academic matters and career decisions. i, § Served on faculty committees dealing with such matters as curriculum planning and degree requirements. i, § Worked as a question setter, examiner, Scrutinizer, tabulator of several Civil engineering subjects. Supervised under and post graduate theses and research works.

- **Associate Professor**

Department/Section: Department of Civil Engineering,
Khulna University of Engineering & Technology From to

Responsibility: i, § Conducted various civil engineering courses of under/post-graduate program through lectures, tutorials, demonstrations, laboratory works as well as field works. i, § Advised students on course and academic matters and career decisions. i, § Served on faculty committees dealing with such matters as curriculum planning and degree requirements. i, § Worked as a question setter, examiner, Scrutinizer, tabulator of several Civil engineering subjects. Supervised under and post graduate theses and research works.

- **Assistant Professor**

Department/Section: Department of Civil Engineering,
Khulna University of Engineering & Technology From to

Responsibility: i, § Conducted various civil engineering courses of undergraduate program through lectures, tutorials, demonstrations, laboratory works as well as field works. i, § Advised students on course and academic matters and career decisions. i, § Served on faculty committees dealing with such matters as curriculum planning and degree requirements. i, § Worked as a question setter, examiner, Scrutinizer, tabulator of several Civil engineering subjects. Supervised undergraduate theses and research works.

- **Lecturer**

Department/Section: Department of Civil Engineering,
Khulna University of Engineering & Technology From to

Responsibility: i, § Conducted various civil engineering courses of undergraduate program through lectures, tutorials, demonstrations, laboratory works as well as field works. i, § Advised students on course and academic matters and career decisions.

Research Interest

Geotechnical Engineering

a) Modeling of soils: elasto-visco (creep, relaxation, rate effect)-cyclic-plastic behavior of soils. b) FEM simulations of geotechnical problems: interaction of earthquake fault rupture-sand deposit-structure, soil-structure interaction, seepage, excavation, anchor foundations, etc, in relation to progressive failure, scale effect and parametric study. c) Soil stabilization (RAPs, Gravel Column, Admixtures) d) Genetic Algorithms in optimizations and Artificial Neural Network in predictions of geotechnical problems. e) Cement based composites.

Publication

Books

1Rokonzaman, R., M., M. and al., e. (2018), **Proc. of the 4th International Conference on Civil Engineering for Sustainable**

Publication

Books

2Rokonuzzaman,R. ,M.,M. and al.,e. (2016) , **Proc. of the 3rd International Conference on Civil Engineering for Sustainable Development, Khulna, Bangladesh** ,CE Dept., KUET

Publication

Books

3Rokonuzzaman,R. and al.,M. e. (2014) , **Proc. of the 2nd International Conference on Civil Engineering for Sustainable Development, Khulna, Bangladesh** ,CE Dept., KUET