



**Prof. Dr. Engr. Md. Rafizul Islam**  
Professor

**Research Area** CRTS (Civil), KUET Research Project Research Project Research Project Research/Study Project Research/Study Project Research/Study Project Geotechnical and Geoenvironmental Engineering

## Biography

Welcome to my personal webpage. This is Dr. Engr. Md. Rafizul Islam, Professor, Department of Civil Engineering, KUET. Since 2004, Dr. Rafizul has been involved in research related to organic soil characterization, solid waste management and landfill lysimeter technology. In his research he worked as a Research Associate (June 2008 to December 2009) in the "WasteSafe II" project. The European Commission (EC) under the Asia Pro Eco-II Programme was funding the project. The project was a collaborative research program lead by BUW, Germany; AIT, Thailand; LUT, Poland and BIREC, Germany. Moreover, He also worked as a Research Associate (April 2006 to January 2007) in the project of "SoilTech" funded by the EC Under Asia Pro Eco-II Programme. It was a collaborative program with ACLIMA (Cluster Association of Environment Industry of the Basque Country), Spain as well as VITO (Flemish Institute for Technological Research), Belgium. Dr. Rafizul also worked as a Research Assistant (May 2004 to November 2004) in the "WasteSafe" project co-financed by Asia Pro Eco Programme of the EC which was jointly conducted by the Dept. of Civil Engg., KUET, Tribhuban University (Nepal), AIT (Thailand), Karlsruhe University (Germany) and University of Leeds (UK). In his PhD, he was involved in research on design and construction of landfill lysimeter, leachate characterization and evaluation of landfill contamination potential. He is an author of more than 110 publications in peer-reviewed journals and national/international conferences.

## Education

### Doctor of Philosophy (Geoenvironmental Engineering)

Khulna University of Engineering & Technology (KUET), Bangladesh (2014)

**Thesis Title:** [Evaluation of Contamination Potential and Treatment Techniques of Leachate Generated from Landfill Lysimeter](#)

### M.Sc. Engineering (Geotechnical Engineering)

Khulna University of Engineering & Technology (KUET), Bangladesh (2006)

**Thesis Title:** [Geotechnical Properties of Reconstituted Organic Soils](#)

### B.Sc. Engineering (Civil Engineering)

Khulna University of Engineering & Technology (KUET), Bangladesh (2003) Group: Civil Engineering,

### Higher Secondary Certificate

Satkhira Govt. College, Bangladesh (1997) Group: Science,

### Secondary School Certificate

Fulbari High School, Bangladesh (1995) Group: Science,

## Service Records

- **Professor**

**Department/Section:** Civil Engineering

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970**

Responsibility: Teaching and Research in Geotechnical and Geoenvironmental Engineering

- **Associate Professor**

**Department/Section:** Civil Engineering

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970**

Responsibility: Teaching and research in Geotechnical and Geoenvironmental Engineering

- **Research Assistant**

**Department/Section:** Civil Engineering (WasteSafe project)

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970**

Working Area: Khulna

- **Research Associate**

**Department/Section:** Civil Engineering (SoilTech project)

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970**

Working Area: Dhaka

Responsibility: Field Survey and data Collection, Regular Programme setup with city authorities, DWASA, DoE, RAJUK, BAPA, Land owners and Dhaka Citizens, Industries and SMEs, Data Analysis, Report Preparation etc

- **Research Associate**

**Department/Section:** Civil Engineering (WasteSafe II project)

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970**

Responsibility: Arranged several meetings with foreign delegates and discussed about relevant aspects of WasteSafe II project, Design, construction and evaluation of landfill contamination potential, Drafting and report writing

- **Teaching Assistant**

**Department/Section:** Civil Engineering

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 12-12-2000**

Responsibility: Conducting several practical classes in the undergraduate level

- **Contact Lecturer**

**Department/Section:** Architecture Discipline

**Khulna University From 01-01-1970 to 01-01-1970**

Responsibility: Teaching several Civil Engineering subjects in the undergraduate level

- **Lecturer**

**Department/Section:** Civil Engineering

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970**

Responsibility: Teaching and research in Geotechnical and Geoenvironmental Engineering

- **Assistant Professor**

**Department/Section:** Civil Engineering

**Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970**

Responsibility: Teaching and research in Geotechnical and Geoenvironmental Engineering

## Research Interest

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### **CRTS (Civil), KUET**

Worked as a member of the consultancy team as an expert of Geotechnical Engineering field in the following local projects: Directly engaged to field survey and conducting sub-soil exploration program, analysis of soil samples and prepare soil report, preparation of inception report, review report on the supporting design data/parameters regards to code conformation, final checking of the design review, final checking of inspection and progress reports as needed under the contract, collection of related materials for report from different groups, finalized the draft and final report, etc.. Project 1: Feasibility Study for the Construction of Mongla Container Terminal with two new Jetties at Mongla Port, Bagerhat. Project 2: Feasibility Study for the Construction of Container Delivery Yard at Mongla Port, Khulna. Project 3: Design of Several RCC Jetties and Renovation of Existing Jetty at the Bank of Rupsha River for Khulna Shipyard, Khulna. Project 4: Feasibility Study for the Construction of Multi-level Car Parking Yard at Mongla Port, Khulna. Project 5: Feasibility Study for the Construction of 4- layer Container Storage Yard at Mongla Port, Khulna. Project 6: Feasibility Study for the Construction of RCC Road Network at Mongla Port, Khulna. Project 7: Feasibility Study for the Up-gradation of Mongla Port, Mongla Project 8: The Feasibility Study on the Project of Construction of Mongla Custom House with Necessary Facilities at the Proposed Site of Mongla Port Area Project 9: Monitoring the Behavior of Instrumented Embankment for the Construction of Khulna-Mongla Port Rail Line Project 10: Consultancy Services on Development of Jashore Airport, Jashore Project 11: Dredging at the Inner Bar of Mongla Port Channel

### **Research Project**

Worked as Research Associate (June 2008 to December 2009) in a 36 months (2007 to 2009) partnership project entitled as "Safe and Sustainable Management of Municipal Solid Waste in Bangladesh through the Practical Application of WasteSafe Proposal" co-financed by European Union's Asia Pro Eco II Programme with the partners of Thailand, Germany and Poland. As a member of organizing committee arranged a National Seminar on Solid Waste Management in 9-10 February 2008 and Stakeholders' Dialogue on July 2007, November 2007 and July 2008. Also attended a day-long Awareness Campaign on MSW management in Khulna City in 05 January 2008 and 22 November 2008.

### **Research Project**

Worked as Research Associate (April 2006 to January 2007) of a 36 months demonstrate study project entitled as "Application of Innovative Technologies for the Reclamation and Environmental Improvement of Derelict Urban Areas in Dhaka City (Bangladesh)" - Funded by the European Commission Under Asia Pro Eco-II Programme. The project was leading by the Department of Civil Engineering, KUET, Bangladesh in close cooperation with the following European organizations: (i) ACLIMA (Cluster Association of Environment Industry of the Basque Country), Spain (ii) VITO (Flemish Institute for Technological Research), Belgium. Worked successfully in Dhaka City; Dhaka to identify the all-relevant aspects of the Hazaribagh and Tejgaon contaminated sites based on the potential environmental and soils pollution through the industrial wastes and in final report preparation.

### **Research Project**

Served as Research Assistant (May 2004 to November 2004) of a 12 month feasibility study project entitled as "Integrated management and safe disposal of municipal solid wastes in least developed Asian countries" co-financed by European Union's Asia Pro Eco Programme with the partners of Thailand, Nepal, Germany and UK. Visited two city corporation and different pourashava of Bangladesh, different NGOs and Private sectors working on MSW management to get field experiences on MSW management and ultimate disposal situation. Discussed the matter with the concerned stakeholders in Khulna city. Attended a day-long seminar "WasteSafe Stakeholders Dialogue on the MSW management and Safe Disposal" at Dhaka, in the month of March 2005.

### **Research/Study Project**

As a Project Director, a 12 months study project funded by University Grants Commission of Bangladesh is going to complete "Modelling of Desiccation Crack in Composite Clay Liners of Solid Waste Landfill". The project details was meeting No. CASR/19/37(25):51/3, 18.06.2019.

One of the post-graduate students will be completed his M.Sc. in Civil engineering degree based on the outcomes of this project

### **Research/Study Project**

As a Project Director successfully completed of a 12 months study project funded by University Grants Commission of Bangladesh "Prediction of California Bearing Ratio of Stabilized Soils using Soft Computing Systems". The project details was meeting no. 47th, Serial No.08, 14/03/2018

One post-graduate student has been completed his M.Sc. in Civil Engineering degree based on the outcomes of this project.

### **Research/Study Project**

Successfully completed of a 12 months study project as a Project Director funded by University Grants Commission of Bangladesh "Environmental and Health Risk Assessments Related to the Disposal of Municipal Solid Waste in Landfill of Bangladesh" The Project details was Meeting no. 41th, Res. No. 41/05 no.-18, 23/08/2016

One post-graduate student obtained M.Sc. in Civil Engineering degree based on the outcomes of this project.

### **Geotechnical and Geoenvironmental Engineering**

Soil Mechanics Soil Improvement Stochastic System Modelling and Ecological Risk of Contaminated Soil Geostatistical Analysis and Interpolation of GIS Mapping Environmental Geotechnology Solid Waste Management Contamination and Sensitivity Analysis of Landfill Lysimeter Technology Environmental and Health Risk Analysis Multimedia Environmental Models (the Fugacity Approach) Uncertainty and Sensitivity in Risk Analysis Probabilistic Risk Assessment and Simulations

## Publication

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## Books

1. (2021) , "**Impact of Drying-Wetting Cycles and Geometrical Parameters on the Cracking and Shrinkage Behaviour of Composite Liners made of Fly Ash**" ,Accepted in the Springer Nature, (Lecture Notes in Civil Engineering as Book series).
2. (2019) , "**Assessment of Heavy Metal Contamination in Soil of Waste Disposal Site in Bangladesh: Implication of Spatial, Seasonal Variation and Indices**" , ISBN:978-981-10-8016-6 (eBook),Springer Nature (Lecture Notes in Civil Engineering as a Book Chapter), Singapore, vol9, pp.957-983
3. Alamgir,M. , Rafizul,I. M. , Islam,S. T. and Datta(Eds),M. H. H. a. P. D. (2019) , "**Proceedings of the 6th International Conference on Solid Waste Management in Developing Countries entitled 'WasteSafe 2019'**" , ISBN:978-984-34-6151-3,KUET, Khulna, Bangladesh
4. Alamgir,M. ,Rafizul,I. R. and (Eds),S. T. I. a. M. H. H. ). (2017) , "**Proceedings of the 5th International Conference on Solid Waste Management in Developing Countries entitled 'WasteSafe 2017'**" , ISBN:978-984-34-2306-1 ,KUET, Khulna, Bangladesh
5. Alamgir,M. , Rafizul,I. M. , Islam,S. T. and (Eds),M. I. N. a. S. R. S. ). (2013) , "**Proceedings of the 3rd International Conference on Solid Waste Management in Developing Countries entitled 'WasteSafe 2013'**" , ISBN:978-984-33-7045-7,KUET, Khulna, Bangladesh
6. Alamgir,M. , Bari,Q. H. , Rafizul,I. M. , Islam,S. T. and (Eds),G. S. a. M. K. H. ). (2011) , "**Proceedings of the 2nd International Conference on Solid Waste Management in Developing Countries entitled 'WasteSafe 2011'**" , ISBN:978-984-33-2705-5,KUET, Khulna, Bangladesh
7. Alamgir,M. , Hossain,Q. S. , Bari,Q. H. , Rafizul,I. M. , Hasan,K. M. and (Eds),G. S. a. M. K. H. ). (2009) , "**Proceedings of the International Conference on Solid Waste Management-Technical, Environmental and Socio-economical entitled 'WasteSafe 2009'**" , ISBN:978-984-33-0761-3,KUET, Khulna, Bangladesh
8. Alamgir,M. , Hossain,Q. S. , Rafizul,I. M. and (Eds),K. A. M. a. Q. H. B. ). (2008) , "**Proceedings of the National Seminar on Solid Waste Management entitled 'WasteSafe 2008'**" , ISBN:984-300-001500-8,KUET, Khulna, Bangladesh

## Journals

48. (2021) , " Zero waste approach towards a sustainable waste management," **Paper accepted in the Journal of Resources, Environment and Sustainability, ScienceDirect, ELSEVIER**
47. (2021) , " Experimental Analysis of Desiccation Cracks in Composite Landfill Liners with Fly ash and Brick Dust.," **Accepted for the International Journal of Advances in Mechanical and Civil Engineering**, vol7, no.5
46. (2021) , " Selection of Best Soft Computing Systems for the Analysis of Heavy Metal Concentration in Soils of a Waste Disposal Site in Khulna," **Paper accepted in the International Journal on Solid Waste Technology and Management**, USA
45. (2020) , " Application of Image Processing Technique for the Analysis of Cracking Behaviour of Composite Landfill Liners with Brick Dust," **International Journal of Electrical, Electronics and Data Communication** , vol8, no.9, pp.24-29
44. Rafi,M. N. F. and Rahman,I. M. R. a. S. A. (2020) , " Evaluating Fugacity Model for Organic Contaminants in Waste Deposited in Khulna Landfill," **International Journal of Engineering Science (JES)**, vol11, no.1, pp.67-82
43. (2019) , " Spatiality, Seasonality and Index Analysis of Heavy Metals in Soil of Waste Disposal Site in Khulna of Bangladesh," **Journal of Solid Waste Technology and Management**, vol45, no.2, pp.234-256
42. (2020) , " Prediction of California Bearing Ratio of Fine Grained Soil Stabilized with Admixtures using Soft Computing Systems," **Journal of Civil Engineering, Science and Technology; DOI: 10.33736/jcest.2035.2020** , UNIMAS, vol11, no.1, pp.28-44
40. (2019) , " Human Health Risk Assessment due to the Presence of Heavy Metals in Soil of Waste Disposal Site at Khulna in Bangladesh," **International Journal of Engineering Science (JES)**, vol10, no.1, pp.1-12
39. (2018) , " Quantification of Geometrical and Morphological Characteristics of Desiccation Crack and Shrinkage Behavior of Composite Clay Liner ," **Iranian Journal of Energy and Environment**, vol9, no.4, pp.284-294
38. (2018) , " Assessment on Metal Elements in Soil of Waste Landfill at Khulna: A Study based on Multivariate Statistics, GIS and BP-ANN," **International Journal of Engineering Science (JES)**, vol09, no.1, pp.59-69
37. (2018) , " Application of Multivariate Statistics for the Identification of Possible Sources of Metal Elements in Soil of Waste Disposal Site in Khulna," **Iranian Journal of Energy & Environment**, vol9, no.1, pp.64-70
34. Rafizul,I. M. and Alamgir,S. S. a. M. (2017) , " Appropriate Aggregation Function for Estimating of Pollution Index of a Selected River in Bangladesh," **International Journal of Engineering Science (JES)**, vol8, no.1, pp.1-10
33. Fahmida,F. and Rafizul,K. a. I. M. (2017) , " An Investigation on Soil Quality and Heavy Metal Levels in Soil of Rajbandh Waste Disposal Site at Khulna, Bangladesh," **Iranica Journal of Energy & Environment**, vol8, no.2, pp.102-112
31. (2017) , " Leachate Characteristics of Waste Disposal Sites in Bangladesh and Their Treatment: Temporal Variation and Leachate Pollution Index," **International Journal on Solid Waste Technology and Management**, USA, vol43, no.3, pp.177-194
30. Hasan,M. H. and Alamgir,I. M. R. a. M. (2015) , " Application of Software for Assessing Cracking Behavior of Composite Clay used as Cap Liner in Waste Disposal Sites," **International Journal of Engineering Science (JES)**, vol6, no.1, pp.39-48
29. (2016) , " Assessment of Treatment Efficiency of Lysimeter Leachate using Leachate Pollution Index," **Iranica Journal of Energy & Environment** , vol7, pp.72-83
28. Rafizul,I. M. and Alamgir,M. K. H. a. M. (2012) , " Construction and Evaluation of Simulated Pilot Scale Landfill Lysimeter in Bangladesh," **Waste Management, ScienceDirect, ELSEVIER**, vol32, no.11, pp.2068-2079
27. (2012) , " Characterization and Tropical Seasonal Variation of Leachate: Results from Landfill Lysimeter Studied," **Waste Management, ScienceDirect, ELSEVIER**, vol32, no.11, pp.2080-2095
26. (2013) , " Assessment of an Urban Contaminated Site from Tannery Industries in Dhaka City, Bangladesh," **Journal of Hazardous, Toxic and Radioactive Waste, ASCE**, vol17, no.1, pp.52-61
25. (2013) , " Assessment of Parameters Involved in Leachate Pollution Index and Evaluation of Contamination Potential of Pilot Scale Landfill Lysimeter using LPI," **Journal of Solid Waste Technology and Management**, vol39, no.1, pp.51-70
24. Rafizul,I. M. and Alamgir,Y. S. a. M. (2013) , " Lysimeter Studies for Leachate Characterization Generated from MSW in Pilot Scale Landfill of Bangladesh," **Journal of Solid Waste Technology and Management**, vol40, no.4, pp.311-326
23. Rafizul,I. M. ,Minhaz,M. and Alamgir,M. a. M. (2012) , " Analysis of Errors Involved in the Estimation of Leachate Pollution Index Due to Nonavailability of Leachate Parameter," **Iranica Journal of Energy & Environment** , vol3, no.3, pp.270-279
22. Rafizul,I. M. and Alamgir,N. H. C. a. M. (2012) , " Evaluating Contamination Potential of Selected Solid Waste Disposal Site in Bangladesh using LPI," **International Journal of Engineering Science (JES)**, vol3, no.1, pp.180-192
20. Rafizul,I. M. and Sharif,M. A. a. S. S. (2012) , " Analysis and Selection of Appropriate Function for Calculating of Leachate Pollution Index of Landfill Lysimeter," **Iranica Journal of Energy & Environment** , vol3, no.4, pp.370-379
19. (2012) , " Influence of Landfill Operation and Tropical Seasonal Variation on Leachate Characteristics: Results from Lysimeter Experiment," **Iranica Journal of Energy & Environment** , vol3, no.special , pp.50-59
17. (2013) , " Evaluating Cracking Behavior of Composite Clay as Liner in Landfill using Extensive Software," **International Journal of**

**Engineering Research**, vol1, no.1, pp.35-43

16. Rafizul, I. M. and Bashar, M. A. a. M. A. (2013), "Assessment and Verification of Geotechnical Parameters of Reconstituted Organic Soil at South Western Region in Bangladesh," **International Journal of Engineering Science (JES)**, vol4, no.1, pp.67-83
13. Rabbee, T., Rafizul, I. M. and Alamgir, M. A. a. M. (2012), "Strength and Compressibility Characteristics of Reconstituted Organic Soil at Khulna Region of Bangladesh," **Int. Journal of Engineering & Technology**, vol2, no.10, pp.1672-1680
12. Ahsan, M. K., Shaikh, M. and Alamgir, I. M. R. a. M. (2014), "Statistical Analysis of Leachate Characteristics in Pilot Scale Landfill Lysimeter," **International Journal of Advanced Structures and Geotechnical Engineering**, vol3, no.3, pp.283-292
11. Hasan, M. H. and Moin, I. M. R. a. K. E. (2013), "Selection of Suitable Composite Clay as Cap Liner in Landfill: Extensive Software," **International Journal of Scientific & Engineering Research**, vol4, no.10, pp.1365-1376
10. Rafizul, I. M. and Islam, M. A. R. a. M. S. (2013), "Enhancement of Clinical Waste Management in Khulna city using GIS," **International Journal of Engineering Research**, vol1, no.1, pp.116124
9. Rafizul, I. M. and Alamgir, M. A. a. M. (2012), "The Effect of Chemical Admixtures on the Geotechnical Parameters of Organic Soil: A New Statistical Model," **International Journal of Applied Science and Engineering Research**, vol1, no.4, pp.623-634
8. Rafizul, I. M. and Rahman, R. K. a. M. A. (2013), "Secondary Disposal Sites for Solid Waste Management in Khulna City and Optimizing Routes for Final Disposal using GIS," **International Journal of Engineering Research**, vol1, no.1, pp.102-115
7. Riyad, A. M., Rafizul, I. M., Kabir, M., Chowdhury, M. and Uddin, M. S. a. M. (2013), "Conventional Open Truck and Hauled Container Systems of Waste Collection in Khulna City: A Comparative Analysis," **International Journal of Scientific & Engineering Research**, vol4, no.11, pp.12-17
6. (2013), "GIS Application for Suitable Location of Waste Bin for Solid Waste Management in Khulna City," **International Journal of Engineering Research**, vol1, no.1, pp.26-34
5. (2013), "Engineering Behavior of Cement Stabilized Soil: New Statistical Model," **International Journal of Engineering Research**, vol1, no.1, pp.69-79

## Conference

87. Anowara, A., Rafizul, I. a. and I.M., I., "The Effect of Stone Dust and Polypropylene Fiber in the Geotechnical Properties of Fine-grained Soil," **Paper accepted in the 5th International Conference on Advances in Civil Engineering 2020 (ICACE 2020), March 2021, CUET, Chittagong, Bangladesh**
86. Rafizul, H. N. a. and I.M., I., "Spatial Variability of Metal Elements in Soils of a Waste Disposal Site in Khulna: A Geostatistical Study," **Paper accepted in the 5th International Conference on Advances in Civil Engineering 2020 (ICACE 2020), March 2021, CUET, Chittagong**
85. Ahnaf, M. M. and Shuvo, I. M. R. a. M. B. (2020), "Weighted Arithmetic Index Method-A Complementary Tool for Generating Water Quality Indices," **10th International Conference on Sustainable Waste Management towards Circular Economy**, Jadavpur University, India, pp.188
- 84., "Prediction of Solid Waste Generation with ANFIS and Its Comparison with System Dynamic Modeling: A Case Study of Khulna City," **5th International Conference on Civil Engineering for Sustainable Development (ICCESD 2020), 7~9 February 2020**, KUET, Khulna, Bangladesh, pp.133
- 83., "Modelling of ANFIS for Predicting Water Quality Index of Surface Water Adjacent to the Waste Disposal Site in Khulna," **5th International Conference on Civil Engineering for Sustainable Development (ICCESD 2020), 7~9 February 2020**, KUET, Khulna, Bangladesh, pp.124
82. Rafi, M. N. F. and Rafizul, S. A. R. a. I. M., "Assessment of the Behaviour of Contaminants of a Waste Disposal Site at Khulna in Bangladesh using Fugacity Model," **5th International Conference on Civil Engineering for Sustainable Development (ICCESD 2020), 7~9 February 2020**, KUET, Khulna, Bangladesh, pp.96
- 81., "Analysis of Surface Water Quality Adjacent to the Waste Disposal Site in Khulna," **5th International Conference on Civil Engineering for Sustainable Development (ICCESD 2020), 7~9 February 2020**, KUET, Khulna, Bangladesh, pp.88
- 80., "Analysis of Heavy Metal Concentration in Soils of a Waste Disposal Site in Khulna Using Artificial Intelligence Technique," **5th International Conference on Civil Engineering for Sustainable Development (ICCESD 2020), 7~9 February 2020**, KUET, Khulna, Bangladesh, pp.87
- 79., "Quantification of Ckacking Behavior of Composite Clay liners," **5th International Conference on Civil Engineering for Sustainable Development (ICCESD 2020)**, KUET, Khulna, Bangladesh, pp.50
- 78., "Assessment of the Potential Health Risk of a Waste Disposal Site in Khulna of Bangladesh," **Sardinia Symposium 2019** "Seventeenth International Waste Management and Landfill Symposium", CISA Publisher, pp.1-13
- 77., "Application of Adaptive Neuro-Fuzzy Inference System for the Prediction of Heavy Metals in Soil of a Waste Disposal Site in Khulna," **6th International Conference on Integrated Solid Waste & Faecal Sludge Management in South-Asian Countries (WasteSafe 2019), KUET, (ISBN: 978-984-34-6151-3), pp.99-100**
76. Animesh, A. and Rafizul, C. a. I. M. (2019), "Modelling of Support Vector Machine for the Prediction of California Bearing Ratio of Stabilized Soil," **2nd International Conference on Planning, Architecture and Civil Engineering, (ICPACE 2019)**, RUET, pp.81
75. Shyamol, S. and Rafizul, K. a. I. M. (2019), "Analysis of Heavy Metal Concentrations in Soil of Waste Disposal Site in Khulna using Soft Computing Systems," **2nd International Conference on Planning, Architecture and Civil Engineering, (ICPACE 2019)**, RUET, pp.78
74. Afrin, A., Islam, S. a. and Rafizul, M. (2019), "Study on Compressibility and Strength Behavior of Cement Stabilized Soil at High Water Content," **2nd International Conference on Planning, Architecture and Civil Engineering, (ICPACE 2019)**, RUET, pp.77
73. Kamal, M. M., Rafizul, I. M. and Mondol, P. K. M. a. M. S., "Evaluation and Spatial Distribution of Human Health Risk Associated with Heavy Metals in Surface and Ground Water from Waste Disposal Site at Khulna," **4th International Conference on Civil Engineering for Sustainable Development (ICCESD 2018), 9~11 February 2018, KUET, Khulna, Bangladesh**, (ISBN:978-984-34-3501-9), pp. 157-158
72. Abid, K. M. M., Rafizul, I. M. and Jahin, D. B. P. a. T., "Assessment of Contamination Potential of Groundwater Adjacent to the Waste Disposal Site at Khulna: Contamination Indices, Multivariate Statistics and Geostatistical Approach," **4th International Conference on Civil Engineering for Sustainable Development (ICCESD 2018), 9~11 February 2018, KUET, Khulna, Bangladesh**, (ISBN:978-984-34-3501-9), pp. 159-160.
- 71., "Application of Multivariate and Geostatistical Approaches in Analysis and Assessment on Heavy Metal Sources in Soil of Waste Disposal Site at Khulna," **4th International Conference on Civil Engineering for Sustainable Development (ICCESD 2018), 9~11 February 2018, KUET, Khulna, Bangladesh**
70. Pangkaj, P. and Rafizul, K. a. I. M., "Risk-based Assessment of Heavy Metal Contaminated Site at Khulna Region of Bangladesh," **4th International Conference on Civil Engineering for Sustainable Development (ICCESD 2018), 9~11 February 2018, KUET, Khulna, Bangladesh**, (ISBN:978-984-34-3501-9), pp. 153-154
69. Sanjida, S. and Rafizul, K. a. I. M. (March 2018), "Multivariate Statistics and Spatial Distribution of Heavy Metals in Soil of Waste Disposal Site in South Western Region of Bangladesh," **The 33rd International Conference on Solid Waste Technology and Management (ICSW 2018)**, (ISSN: 1091-8043), pp.716-728
68. Pangkaj, P. and Rafizul, K. a. I. M. (2017), "Probable Risk Assessment of Surface and Groundwater in the Surrounding Areas of Waste

- Landfill," **International Conference on Planning, Architecture and Civil Engineering, ICPACE 2017** , pp.24
67. Fahmida,F. and Rafizul,K. a. I. M. (2017) , "Geo-accumulation Index and Enrichment Factor of Trace Metals in Soils of Waste Disposal Site in Bangladesh," **International Conference on Planning, Architecture and Civil Engineering, ICPACE 2017** , RUET, pp.37
66. Fahmida,F. and Rafizul,K. a. I. M. (2017) , "Assessment of Heavy Metal Contamination in Soil of Waste Disposal Site in Bangladesh: Implication of Spatial, Seasonal Variation and Indices," **International Conference on Global Civil Engineering Conference, GCEC 2017** , pp.957-983
65. Ujjwal,U. , M.,M. , Bari,B. and Rafizul,Q. a. I. M. , "Simultaneous Chemical Coagulation and Physical Treatments of Leachate Generated from Waste Landfill in Bangladesh ," **5th International Conference on Solid Waste Management in South Asian Countries â€“ WasteSafe 2017, pp. 137-138, 2017**
64. Sanjida,S. and Rafizul,K. a. I. M. , "Spatial Distribution of Heavy Metals in Soil of Waste Landfill: Application of GIS and Multivariate Statistics," **5th International Conference on Solid Waste Management in South Asian Countries â€“ WasteSafe 2017, pp. 132-134, 2017**
63. Datta,D. , D.,D. , Samiul,S. and Hasan,M. I. M. R. a. M. H. , "Application of Software for Investigating Desiccation Crack and Shrinkage Behavior of Composite Clay used in Waste Landfill," **5th International Conference on Solid Waste Management in South Asian Countries â€“ WasteSafe 2017, pp.122-123, 2017**
62. , "Enrichment and Ecological Risk Assessment of Soil from Waste Disposal Site in Bangladesh: A Spatial Appraisal using GIS," **5th International Conference on Solid Waste Management in South Asian Countries â€“ WasteSafe 2017, pp.27-28, 2017**
61. Ahmed,M. A. and Hasan,I. M. R. a. M. N. , "Prediction of Solid Waste Generation Rate and Determination of Future Waste Characteristics of South-western Region using Artificial Neural Network," **5th International Conference on Solid Waste Management in South Asian Countries â€“ WasteSafe 2017, pp.24-25, 2017**
60. Islam,M. R. and Assaduzzaman,S. S. a. M. (2015) , " Developed Strength and Engineering Properties of Stabilized Organic Soil Using Chemical Admixture: A Linear Regression Model ," **68th Canadian Geotechnical Conference and 7th Canadian Permafrost Conference (Geoquebec2015), Quebec, Canada** , pp.238
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