



Biography

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Dr. Md. Mahbub Alam

Professor

Research Area Climatology of Bangladesh;
Numerical Weather Prediction, Tornado,
Heavy Rainfall

Education

Doctor of Philosophy

Dhaka University, Bangladesh (1999)

Service Records

- **Dean**
Department/Section: Faculty of Civil Engineering
Khulna University of Engineering & technology (KUET) From 01-01-1970 to 01-01-1970
Responsibility: Head of the Departments under the Faculty of Civil Engineering
- **Professor**
Department/Section: Physics
Khulna University of Engineering & technology (KUET) From 01-01-1970 to 01-01-1970
- **Head**
Department/Section: Theoretical Divisio
SAARC Meteorological Research Centre (SMRC) From 01-01-1970 to 01-01-1970
Working Area: Numerical Weather Prediction
Responsibility: To Communicate with SAARC Countries, Meteorological Conduct Research
- **Professor**
Department/Section: Physics
Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 01-01-1970
Working Area: Undergraduate and Postgraduate Physics
Responsibility: Conduct Undergraduate and Post graduate Courses Post graduate student supervision
- **Associate Professor**
Department/Section: Physics
Khulna University of Engineering & Technology (KUET) From 01-01-1970 to 02-11-2000
Working Area: Undergraduate & Post graduate Physics
Responsibility: Conduct 1) Postgraduate Courses in Meteorology 2) Undergraduate Courses
- **Associate Professor**
Department/Section: Physics
Bangladesh Institute of Technology (BIT), Khulna From 01-01-1970 to 01-01-1970
Working Area: Undergraduate Physics
Responsibility: Conduct 1) Post graduate Courses 2) Undergraduate Theory and Sessional Courses
- **Assistant Professor**
Department/Section: Physics
Bangladesh Institute of Technology (BIT), Khulna From 01-01-1970 to 01-01-1970
Working Area: Undergraduate Physics
Responsibility: Conduct Undergraduate Theory and Sessional Courses
- **Lecturer**
Department/Section: Physics
Bangladesh Institute of Technology (BIT), Khulna From 01-01-1970 to 01-01-1970
Working Area: Undergraduate Physics
Responsibility: Conduct Undergraduate Theory and Sessional Courses

Research Interest

Climatology of Bangladesh; Numerical Weather Prediction, Tornado, Heavy Rainfall

Tropical Cyclone
Tornado
Climate Change
Heavy Rainfall

Publication

Books

Journals

44. Akhter, M. A. E. and Mallik, M. M. A. a. M. A. K. (2016) , " Simulation of the Structure and Track of the Tropical Cyclone Sidr using Numerical Models," **Journal of Scientific Research**, Rajshahi University, vol8, no.2, pp.129-147
43. Akhter, M. A. E. and Mallik, M. M. A. a. M. A. K. (2016) , " Simulation of the structure and track of the tropical cyclone Rashmi using numerical models," **DEW-DROP**, BMD, vol2, no.1, pp.60-74
40. Reza, M. K. H. and Rahman, M. M. A. a. M. M. (2015) , " Spatio-temporal variation of rainfall during post-monsoon season over Bangladesh," **Journal of Engineering Science**, KUET, vol6, no.1&2, pp.99-104
39. Reza, M. K. H. and Hossain, M. M. A. a. M. A. (2015) , " Climatic condition of the northwestern part of Bangladesh," **Journal of Engineering Science**, KUET, vol6, no.1&2, pp.49-56
38. (2015) , " A comparative study on performance of MM5 and WRF models in simulation of tropical cyclone Rashmi," **Journal of Engineering Science**, KUET, vol6, no.1&2, pp.19-26
37. E., A. M. A. , M., a. A. and M., M. (2015) , " Simulation of Tropical Cyclone Aila using Numerical Models," **International J. of Integrated Science & Technology**, CUET, vol1, pp.1-8
36. (2014) , " Impact of cloud microphysics and cumulus parameterization on mesoscale simulation of Tropical Cyclone Sidr over the Bay of Bengal using WRF Model, Part of a book High Impact Weather Events over the SAARC Region, Part II: Tropical Cyclone," **Capital Publishing Company**, pp.147-163
35. Mannan, M. A. and Alam, M. M. (2014) , " Diagnostic Study of heavy rainfall event in Monsoon Season over Northern Part of Bangladesh using NWP Technique, Part of a book High Impact Weather Events over the SAARC Region, Part III: Heavy Rains," **Capital Publishing Company**, pp.234-249
34. (2014) , " Impact of cloud microphysics and cumulus parameterization on simulation of heavy rainfall event during 7th–9 October 2007 over Bangladesh," **Journal of Earth System Science**, vol123, no.2, pp.259-279
33. Rahman, M. M. and Alam, M. R. a. M. M. (2013) , " Seasonal Forecasting of Bangladesh Summer Rainfall using simple multiple Regression Model," **Journal of Earth System Science**, DOI: 10.1007/s12040-013-0287-x, vol122, no.2, pp.551-558
32. Rahman, M. M. , Rafiuddin, M. , Alam, M. M. , Kusunoki, S. and Giorgi, A. K. a. F. (2013) , " Summer Monsoon Rainfall Scenario over Bangladesh using a high resolution AGCM, Natural Hazards," **DOI: 10.1007/s11069-013-0734-7**
31. Rahman, M. and Alam, M. R. a. M. M. (2013) , " Teleconnections between Bangladesh Summer Monsoon Rainfall and Sea Surface Temperature in the Indian Ocean," **International Journal of Ocean System Science**, vol4, no.4, pp.231-237
30. (2013) , " Impact of cloud microphysics and cumulus parameterization on simulation of heavy rainfall event during 15th–16 October 2007 over Bangladesh," **Journal of Engineering Science**, KUET, vol4, no.1, pp.95-109
29. (2013) , " Prediction of track and intensity of the very severe cyclonic storm Thane using different initial conditions in WRF-ARW model," **Journal of Engineering Science**, KUET, vol4, no.1, pp.53-59
28. Akhter, M. A. E. and Hossain, M. M. A. a. M. A. (2011) , " Viewing of severe cyclonic storm Aila through MM5 with different parameterization Schemes," **Journal of Engineering Science**, KUET, vol2, no.1&2, pp.97-107
27. (2011) , " Developments of Statistical Techniques for the forecasting of Northwesters and associated maximum gusty wind and rainfall over Bangladesh," **Journal of Bangladesh Academy of Sciences**, Bangladesh Academy of Sciences, vol35, no.2, pp.125-140
26. (2011) , " Modified instability index of the troposphere associated with thunderstorms/northwesters over Bangladesh during the pre-monsoon season," **MAUSAM**, IMD, vol62, no.2, pp.205-214
25. Akhter, M. A. E. and Hossain, M. M. A. a. M. A. (2011) , " Impact of Radiation Parameterization Schemes on Tropical Cyclone Prediction: A Case Study ," **Sylhet International University (SIU) Studies**, vol5, no.2
24. Akhter, M. A. E. and Hossain, M. M. A. a. M. A. (2011) , " Sensitivity study of the cumulus parameterization schemes with planetary boundary layer options in estimating rainfall in Bangladesh using MM5," **Prime University Journal of Multidisciplinary Quest**, vol5, no.1
23. (2010) , " Correlation between Pre monsoon minimum Temperature and rainfall of monsoon season over Bangladesh," **Journal of Engineering Science**, KUET, vol1, no.2, pp.93-103
22. Akhter, M. A. E. and Alam, M. A. H. a. M. M. (2010) , " Impact of chosen Microphysics on Tropical Cyclone Prediction – A case study ," **Journal of Engineering Science**, KUET, vol1, no.2, pp.75-81
21. Alam, M. M. and Ara, M. A. H. a. M. (2010) , " : Long Term Variations of Climate over Different Stations of Khulna and Barisal Divisions of Bangladesh," **Journal of Engineering Science**, KUET, vol1, no.1, pp.1-7
20. (2007) , " Tropospheric moisture and its relation with rainfall due to northwesters in Bangladesh," **MAUSAM**, IMD, vol58, no.2, pp.153-160
19. (2007) , " On the tropospheric zonal and meridional fluxes of moisture in relation to northwesters in Bangladesh during the pre-monsoon season," **MAUSAM**, IMD, vol58, no.1, pp.67-74
18. Hossain, M. A. and Pervin, M. M. A. a. S. (2007) , " Post monsoon rainfall – Its relation between rainfall and wet bulb temperature of monsoon over Bangladesh," **Bangladesh J. of Physics**, Bangladesh Physical Society, vol3, no.1, pp.35-46
17. (2006) , " Instability of the troposphere associated with thunderstorms/northwesters over Bangladesh during the pre-monsoon season," **MAUSAM**, IMD, vol57, no.4, pp.629-638
16. (2006) , " Study of instability criteria on the troposphere prior to the occurrence of northwesters in Bangladesh," **J. of Bangladesh Physical Society**, Bangladesh Physical Society, vol2, no.1, pp.99-106
15. (2006) , " Tropospheric moisture in the forecasting of northwesters and associated rainfall in Bangladesh," **J. of Bangladesh Physical Society**, vol2, no.1, pp.47-56
14. (2005) , " On the Sensible heat energy, latent heat energy and potential energy of the troposphere over Dhaka before the occurrence of northwesters in Bangladesh during the pre monsoon season," **MAUSAM**, IMD, vol56, pp.671-680
13. (2005) , " On the probabilistic extremes of thunderstorm frequency over Bangladesh during the pre monsoon season," **Journal of Hydrology & Meteorology**, vol2, no.1, pp.41-47
12. Ara, A. , M., M. and Alam, M. H. a. M. M. (2005) , " Surface Dry Bulb Temperature and its Trend over Bangladesh," **Journal of Bangladesh Academy of Sciences**, Bangladesh Academy of Sciences, vol29, no.1, pp.29-40
11. (2004) , " Correlation between Winter Pressure and Pre-monsoon Rainfall all over Bangladesh," **Journal of Bangladesh Academy of Sciences**, Bangladesh Academy of Sciences, vol28, no.1, pp.101-108
10. Alam, M. M. and Shafee, M. A. H. a. S. (2003) , " Frequency of Bay of Bengal Cyclonic Storms and Depressions crossing different coastal zones," **International Journal of Climatology**, vol23, pp.1119-1125
9. Alam, M. M. and Shafee, M. A. H. a. S. (2002) , " Statistical Analysis of Cyclones and Depressions in the Bay of Bengal during 1974 – 1999," **Journal of Bangladesh Academy of Sciences**, Bangladesh Academy of Sciences, vol26, no.2, pp.207-218
8. Alam, M. M. and Shafee, S. S. a. A. (2001) , " Study of some meteorological aspects of November 1992 cyclone – a case study," **MAUSAM**, IMD, vol52, no.3, pp.602-606
7. (2001) , " Analysis of Moist Static Energy Fluxes in the surroundings of the Bay of Bengal during different Tropical Cyclones," **Dhaka**

University Journal of Science, Dhaka University, vol49, no.1, pp.155-162

5. (1997) , " Analysis of different tropospheric energies in the surroundings of the Bay of Bengal during different cyclonic periods," **MAUSAM**, IMD, vol48, no.3, pp.367-374
4. (1997) , " Analysis of some meteorological parameters in the surroundings of the Bay of Bengal during different cyclonic periods," **Journal of Bangladesh Academy of Sciences**, Bangladesh Academy of Sciences, vol21, no.1, pp.89-98
3. (1996) , " Analysis of tropospheric energy fluxes in the surroundings of the Bay of Bengal for different tropical cyclones," **Dhaka University Journal of Science**, Dhaka University, vol44, no.2, pp.275-284
2. (1988) , " Temperature Lapse Rates and Annual Oscillation in Tropospheric Temperature over Bangladesh," **Dhaka University Studies, Part B (Science)**, vol36, no.2, pp.147-155

Conference

4. (22-24 February 2004) , "Correlation between Winter Temperature and Pre-monsoon rainfall over Bangladesh," **International Conference on Physics for Understanding and Applications** , Bangladesh Physical Society
3. (22-24 February 2004) , "Correlation between Winter Temperature and Post-monsoon rainfall over Bangladesh," **International Conference on Physics for Understanding and Applications** , Bangladesh Physical Society
2. Jahanara,J. , M.,M. , Paul,S. K. , Palash,M. N. A. and Hossain,M. M. A. a. M. A. (27-29 December, 2003) , "Study on the surface Dry Bulb Temperature and its Prediction in Bangladesh," **14th Mathematical Conference** , Bangladesh Mathematical Association
1. (30-31 March 2002) , "Correlation between Winter Temperature and Monsoon rainfall over Bangladesh," **Biennial Symposium on Physics and Modern Development** , Bangladesh Physical Society