PAPPU PAUL

Graduate Research Assistant

Department of Atmospheric Sciences, University of Illinois Urbana-Champaign

E-mail: pappup2@illinois.edu

OBJECTIVE I wish to advance my career as a research scientist or professor. I believe, a genuine

enthusiasm in these sectors would push me to work hard and progress.

RESEARCH Climate Dynamics, Climate Modeling, Climate Variability, Extreme Weather, Cloud

INTERESTS Physics, Thunderstorms and Lightning.

PERSONAL DATA Place of birth: Dhaka, Bangladesh

Nationality: Bangladesh

EDUCATION Ph.D. in Atmospheric Sciences Aug 2022-Present

University of Illinois Urbana-Champaign

Thesis: Analysis of Climate Radiative Feedback Pattern using Community

Community Earth System Model (CESM)

Supervisor: Dr. Cristian Proistosescu, Department of Atmospheric Sciences,

University of Illinois Urbana-Champaign

Master of Science in Physics 2018-2020

University of Dhaka, Bangladesh

CGPA: **3.97** on a scale of 4.00 (**Position: 1**st)

Thesis: Study of Pre-Monsoon Thunderstorm and Lightning Events using WRF-ARW

Model in Bangladesh

Supervisor: Dr. Ishtiaque M. Syed, Department of Physics, University of Dhaka.

Bachelor of Science in Physics 2014-2018

University of Dhaka, Bangladesh

CGPA: **3.64** on a scale of 4.00 (**Position: 2nd**)

RESEARCH 1. Master's degree Thesis at Department of Physics, University of Dhaka,

Thesis title: "Study of Pre-Monsoon Thunderstorm Events using WRF-ARW Model

in Bangladesh."

EXPERIENCES

2. Calculation of vertical profile of the Electric Field and Lightning Potential Index

(LPI) in developing thundercloud by using WRF-ELEC.

WORK Graduate Research Assistant Aug 2022-Present

EXPERIENCE Department of Atmospheric Sciences, University of Illinois Urbana-Champaign.

Lecturer Jun 2021-Present

Department of Meteorology, University of Dhaka, Bangladesh. On leave

Lecturer Jan 2021-Jun 2021

Department of Science & Humanities (Physics Wing), Military Institute of Science and Technology

Lecturer Feb 2020-Jul 2020

Department of Computer Science and Engineering, United International University

PUBLICATIONS

- 1. **Paul, P.**, Imran, A., Islam, Md. J., Kabir, A., Jaman, S., & M. Syed, I. (2018). Study of Pre-Monsoon Thunderstorms and Associated Thermodynamic Features Over Bangladesh Using WRF-ARW Model. *Dhaka Univ. J. Sci.*, 67(2), 151–156. Retrieved November 15, 2021, from http://journal.library.du.ac.bd/index.php?journal=dujs&page=article&op=view&path%5B%5D=2232
- 2. **Paul, P.**, Imran, A., Mallik, M.A., Syed, I.M. (2022). Diagnostic Study of the Lightning Potential Index and Electric Field in Two Thunderstorm Cases over Bangladesh. Atmos Ocean Opt 35, 524–540. https://doi.org/10.1134/S1024856022050177
- 3. Rabbani, K. M. G., Islam, M. J., Fierro, A. O., Mansell, E. R., & **Paul, P.** (2022). Lightning forecasting in Bangladesh based on the lightning potential index and the electric potential. Atmospheric Research, 267, 105973. https://doi.org/10.1016/j.atmosres.2021.105973
- 4. Jaman, S., Islam, M. J., Imran, A., Kamruzzaman, M., Mallik, M. A. K., **Paul, P.,** & Syed, I. M. (2022). Sensitivity of Different Physics Schemes in the Simulation of Heat Wave Events over Bangladesh Using WRF-ARW Model. *Dhaka University Journal of Science*, 70(1), 70-78.

CONFERENCE PRESENTATIONS

- **1. Paul, P.,** Gosh R.C. (2021). *Justification of the Scaling Law of Dzugutov for Diffusion Coefficients of Liquid Cu_xAg*_(1-x) *Alloys.* International e-Conference on Physics 2021, Department of Physics, University of Dhaka, Bangladesh.
- 2. **Paul, P.**, Imran, A., Syed, I. M., Mallik, M. A. K., & Islam, Md. J. (2020). *Study of Pre-Monsoon Thunderstorm Events using WRF-ARW Model in Bangladesh*. International Conference on Physics-2020, Atomic Energy Centre, Dhaka.
- 3. **Paul, P.**, Imran, A., Syed, I. M., Mallik, M. A. K., Islam, Md. J., & Jaman, S. (2019). *Prediction of Pre-Monsoon Thunderstorms and Its Associated Thermodynamic Feature over Bangladesh Using WRF-ARW Model*. International Conference on Contemporary Research and Applications of Meteorology ICCRAM-2019, Bangladesh Meteorological Department, Dhaka, Bangladesh.

FELLOWSHIP & AWARD

- $1.\ National\ Science\ and\ Technology\ (NST)\ fellowship\ 2019-2020.$
- 2. Best presentation award at the International Conference on Physics by Bangladesh Physical Society 2020
- 3. Bangladesh Government Honours Scholarship based on Honors result-2017.

COMPUTER SKILLS

G-fortran, Python, c++ & R programing, Matlab, Gnuplot, NCAR Command Language (NCL), GrADS, Accuracy of using various operating system: Linux (Ubuntu, CentOS), Windows (7, 8, 10), Proficiency in Microsoft Office (Word, Excel, Power-point) documentation.

PERSONAL SKILLS

Fluent in English, multicultural teamwork skills, self-motivated and ability to take the initiative, capability to work under pressure.

Computational Atomic Astrophysics Workshop conducted by Dr. Sultana N. Nahar **SPECIAL** from University of Ohio, held in Department of Physics, University of Dhaka, **COURSE**

Bangladesh. (2017)

Technical Member at the International Conference on Physics by Bangladesh Physical **VOLUNTEER** Society (2019 & 2020). **EXPERIENCE**