

**Dr. Dipanka Bhuyan**  
**Assistant Professor, Mechanical Engineering,**  
**Assam engineering College, Jalukbari-13.**

Date of Joining: 26<sup>th</sup> July 2024.



❖ **Experience:**

- 1. 3 Years Industrial Experience.**
- 2. 7.5 Years Previous Teaching and Research Experience.**

❖ **Publications**

1. [A study of mixed convection heat transfer with condensation from a parallel plate channel](#)  
A Giri, D Bhuyan, B Das. International Journal of Thermal Sciences 98, 165-178, 2015
2. [Heat transfer and second law analysis of turbulent flow mixed convection condensation inside a vertical channel](#)  
D Bhuyan, A Giri. International Journal of Heat and Mass Transfer 165, 120658, 2021
3. [Entropy analysis of mixed convective condensation by evaluating fan velocity with a new approach](#)  
D Bhuyan, A Giri, P Lingfa. ASME Journal of Thermal Science and Engineering Applications 10 (5), 051003, 2018
4. [Direct and indirect contact film-wise as well as dropwise condensation of water vapour with and without non-condensable gas-A review](#)  
D Bhuyan. Int. Res. J. Eng. Technol 7 (10), 2020
5. [A comparative numerical study of estimation of velocity components in mixed convection through vertical shrouded plate finned channel](#)  
KK Pathak, A Giri, D Bhuyan, K Roy. ASME Journal of Thermal Science and Engineering Applications 14 (12), 121013, 2022
6. [EFFECT OF RELATIVE HUMIDITY ON FILM WISE CONDENSATION-A NUMERICAL STUDY](#)  
D Bhuyan, A Giri, P Lingfa. International Journal of Mechanical and Production Engineering Research and Development, Special Issue, Pages 87-100, 2016
7. **A Descriptive study on Optimization of Tilt Angle in Photovoltaic Solar Panels: Enhancing Energy Efficiency through Seasonal Adjustments and Advanced Tracking System.**  
A Das, D Bhuyan. International Conference on Advances in Energy and Environmental Engineering, 2024.
8. **A Descriptive Study on Maximizing Energy Recovery in Urban Traffic: The Role of Regenerative Braking Systems**  
A Das, D Bhuyan. International Conference on Advances in Energy and Environmental Engineering, 2024
9. **Natural convection driven condensation inside a vertical channel-A numerical study.**  
D Bhuyan, A Giri, P Lingfa. Proceedings of the National Conference on Sustainable Mechanical Engineering: Today and Beyond (SMETB), March 24–25, 2017 at Tezpur University, India, Pages 169-175, 2017.
10. **Effect of relative humidity on filmwise condensation-A numerical study.**

D Bhuyan, A Giri, P Lingfa. International conference on recent innovations in engineering and Technology (ICRIET) 2016.

**11. Mixed Convective Vertical Filmwise Condensation: A Review**

D Bhuyan, K.K. Pathak, International Symposium on Aspect of Mechanical Engineering and Technology for Industry, 2014.

**12. A Survey of Pertinent Literature on Extended Surfaces under combined heat and mass transfer**

D Bhuyan, K.K. Pathak, International Symposium on Aspect of Mechanical Engineering and Technology for Industry, 2014.

**13. A review on LASER Beam Welding and Friction Stir Welding**

J. Shing, M.R. Shing, K.K.Pathak, D. Bhuyan. Proceeding of National conference on 'Advances in Welding Technology'. 2013.

❖ **Faculty Development Programme Attended**

1. One week FDP on Outcome Based Education and Teaching Pedagogy by NITTTR Chandigarh at Assam Engineering College from 20<sup>th</sup> to 24<sup>th</sup> January, 2025.
2. One week FDP on Outcome Based Education For Technical Institution by ETE department AEC and ASTU from 4<sup>th</sup> to 9<sup>th</sup> Nov, 2024.
3. One week FDP on Data Science and Python Programming for Science, Engineering and Social science Organized by E&ICT Academy IIT Guwahati held at Gauhati university from 06<sup>th</sup> to 10<sup>th</sup> January 2025