



## Upakul Mahanta, Ph.D.

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## Employment History

- 2011 – 2022    📌 **Assistant Professor**, Dept. of Physics, Bhattadev University (former Bajali College).  
2022 – onwards    📌 **Associate Professor**, Dept. of Physics, Bhattadev University.

## Education

- 2018    📌 **Ph.D., Gauhati University**, Guwahati Nuclear Astrophysics.  
Thesis title: *Studies on the Distribution of Elements in Metal Poor Stars in Globular Cluster.*
- 2009    📌 **M.Sc. Physics, Delhi University**, Delhi
- 2006    📌 **B.Sc. Physics (H), Rajdhani College**, Delhi
- 2003    📌 **12<sup>th</sup>. Bajali College**, Pathsala
- 2001    📌 **10<sup>th</sup>. Bajali Higher Secondary School**, Pathsala

## Publications

### Journal Articles

- 1 D. P. Mahanta, M. Medhi, and U. Mahanta, "Isotopic abundance estimation of  $^{22}\text{Ne}$  and  $^{24}\text{Mg}$  using proton capture reaction network in the extended Ne–Al chain," *J. Astrophys. Astr.*, vol. 44:95, 2023.
- 2 M. Medhi, D. P. Mahanta, and U. Mahanta, "Contribution of proton capture reactions to the abundances of phosphorus and sulfur in FGK stars," *J. Astrophys. Astr.*, vol. 44, 2023.
- 3 U. Mahanta, A. Goswami, H. L. Duorah, and K. Duorah, "Contribution of proton capture reactions to the ascertained abundance of fluorine in the evolved stars of globular cluster M4, M22, 47 Tuc and NGC 6397," *J. Astrophys. Astr.*, vol. 38, 2017.
- 4 U. Mahanta, A. Goswami, H. L. Duorah, and K. Duorah, "P-capture reaction cycles in rotating massive stars and their impact on elemental abundances in Globular Cluster stars: A case study of O, Na and Al," *Research in Astron. Astrophys.*, vol. 17, 2017.
- 5 U. Mahanta, D. Karinkuzhi, A. Goswami, and K. Duorah, "Abundance analysis of s-process enhanced barium stars," *MNRAS*, vol. 463, 2016.

### Books and Chapters

- 1 U. Mahanta, *Emerging Trends in Physical Science : Extreme Helium (EHe) stars*, B. Choudhury, S. K. Sarma, and D. P. Mahanta, Eds. Research and Innovation Cell, ARBA, Pathsala, PIN-781325, 2024, ISBN: 978-93-90706-80-8.
- 2 B. Choudhury and U. Mahanta, *Spectrum : An approach for identification of cloud type from Lidar echogram*, K. K. Sarmah, Ed. Research and Innovation Cell, BBK College, Nagaon, Barpeta, PIN-781311, 2023, ISBN: 978-81-954457-2-1.
- 3 M. K. Mishra and U. Mahanta, *Plasma : Role in Sterilization and Medical Waste management, Climate change and Sustainable Management of Natural resourcess*, M. Rabha and P. Barman, Eds. Purbayan Publisher, Satmile, Guwahati-14, 2018, ISBN: 978-93-87263-90-1.

## Refresher

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- 03/07/2015–30/07/2015 ■ UGC sponsored **100th orientation program**, ASC, University of Burdwan, Burdwan
- 24/09/2018–14/10/2018 ■ UGC sponsored **Inter Disciplinary Refresher Course on Environmental Studies -IDC**, HRDC, Gauhati University, Guwahati
- 27/12/2022–03/01/2023 ■ UGC sponsored **Online FDP on Open Source for Research**, Rmanujan College, Delhi University, Delhi

## Skills

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- Academic advisement
- Curriculum design
- Online teaching
- Class organisation
- Educational leadership
- Faculty communication
- Institutional Management
- Examination works

## Miscellaneous Experience

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### Institutional Managements

- **Coordinator**, IQAC, Bhattadev University.
- **Coordinator**, Ph.D. Coursework
- **Coordinator**, National Knowledge Network (NKN).
- **Convenor**, Committee for Institutional Development Plan.
- **Convenor**, Amateur Astronomical Society, Bhattadev University (formerly Bajali College).
- **Convenor**, Ph.D. Admission Entrance Committee.
- **Nodal Officer** of PFMS training DBT Mode
- **Nodal Officer, Checker**, SFMP
- **Assistant Returning Officer, Checker**, Bhattadev UNiversity Studets' Union election, 2024
- **Member**, RUSA Project Monitoring Unit

### Memberships

- **Life Member**, Indian Association of Physics Teachers.
- **Life Member**, Assam Physical Society.
- **Life Member**, Assam Science Society.
- **Member**, Editorial Board of the Book 'Plasma: Role in Sterilization and Medical Waste Management.
- **Member**, Board of Studies, Department of Physics, Bhattadev University.
- **Member**, Extension Education Cell, Bhattadev University (formerly Bajali College).
- **Member**, e-waste management committee, Bhattadev University (formerly Bajali College).
- **Member**, Research Promotional Committee, Bhattadev University (formerly Bajali College).
- **Member**, School Management and Development Committee, Bajali Higher Secondary School.
- **Member**, Registration Committee 62nd Annual Conference of ACTA

## Miscellaneous Experience (continued)

- Member, Venue Arrangement Committee “Principals’ meet”, Bhattadev University (formerly Bajali College).
- Member, Environmental Conservation & Green Audit Committee, Bhattadev University (formerly Bajali College).
- Assistant General Secretary, Assam Physical Society.
- Joint Secretary Volunteer Committee Inter College Kabaddi Tounament

### Academic Presentations

- 39th COSPAR Scientific Asseembly 2012, 07/14/12 - 07/22/12, Mysore
- NC-HEPC 2013, 02/12/13 - 02/14/13, Gauhati University
- UGC sponsored National seminar on Plasma Science & Technology, 11/06/13 - 11/07/13, Nabajyoti College, Kalgachia
- 67th annual technical session of Assam Science Society cun National seminar on Current developments in science and technology, 06/04/23, Bhattadev University, Pathsala

### Invited Speakers/Resource Person

- Resource Person at Orientation programme on Transit of Venus, 06/06/12
- Resource Person at High School Teachers’ Training Camp on Science and Mathematics, 11/16/15 - 11/18/15
- Resource Person at Departmental seminar at B.B.K. college, Nagaon, 02/25/16
- Resource Person of NET/SET coaching programme, 22-23 Nov. 2016
- Resource Person at National Science Day at BH College, Howly, 2023
- Resource Person at National Science Day at GLC College, Barpeta road, 2023
- Resource Person at National Science Day at Bajali Teachers’ Training Center, Patacharkuchi, 2023
- Resource Person at National Science Day at Nalbari Science Center and Planetarium, Nalbari, 2023
- Resource Person at National Space Day at Bhattadev University, Pathsala, 2024
- Invited speaker in Science Seminar at Anundoram Borooah Academy Degree College, 2022

### Academic Participations

- Introductory **workshop** on Astronomy and Astrophysics, 12/15/10 - 12/17/10
- Advanced **workshop** on X-ray Astronomy, 03/03/11 - 03/07/11, Tezpur University
- RwoFoT-11, 12/23/11 - 12/24/11, Nalbari College
- National Orientation **workshop**, 05/07/12 - 05/09/12, Guwahati Planetarium
- National Level **workshop** on Rashtriya Uchchar Shiksha Abhiyan, 06/30/14
- Workshop** on ISON, Comet of the Century!, 11/10/13 - 11/11/13
- Workshop** on Remote Sensing Techniques in the Exploration of Atmosphere and near Earth Environment, 11/14/13 - 11/15/13
- UGC-SAP sponsored **national seminar**, 05/11/12, Gauhati University
- National seminar** on Emerging Trends in Chemistry & Technology, 06/27/13 - 06/28/13
- national seminar** on Advances in Electronics and Allied Science & Technology, 08/01/13 - 08/03/13
- national seminar** on Advances in Electronics and Allied Sciences & technology, 12/27/14 - 12/30/14
- CPP-IPR Silver Jubilee **symposium**, 04/21/16 - 04/22/16
- National **Conference** on Plasma Science and Technology, 11/06/13 - 11/07/13

### Organisations

- Joint Secretary, Inter College Youth Festival, Zonal 2015-16, 09/08/16 - 09/09/16, Bajali College

## Miscellaneous Experience (continued)

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- **Joint Secretary**, 67th Annual Technical session of Assam Science Society cum National Seminar on Current Developments in Science and Technology, 2023
- **Organiser**, Celebration of centennial year of Einstein's General theory of Relativity, 03/14/16
- **Organiser**, One day workshop on Comet ISON, 11/19/13
- **Organiser**, Annual PANE Lecture, 31/03/2018
- **Coordinator**, first round venue on workshop cum championship at Shaastra event IIT-Madras, Bhattadev University, 25-26 Oct. 2019

### Languages

- **Assamese** (Proficient)
- **Hindi** (Proficient)
- **English** (Proficient)

### Hobbies

- Playing **Cricket, Badminton, Table Tennis**

## Summary

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- With a robust background at Bhattadev University, I excel in curriculum design and educational leadership, evidenced by my roles in institutional management and academic advisement. My proactive involvement in faculty communication and dedication to advancing educational standards showcases a unique blend of hard and soft skills vital for academic excellence.

## References

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Available on Request

Date :

Signature