

Faculty Profile



Name: **Dr Achintya Kumar Chatterjee**

Designation: **Associate Professor, Dept. of Physics, Malda College (Retd.)**

and

Professor (Honorary), Indian Centre for Space Physics, Kolkata.

Teaching Area: Physics

Research Interests: Astrophysics, Ionospheric Physics and Molecular Physics.

Education: M.Sc., B.Ed., PhD.

Professional Experience: 43 Years

1. 13.03.1987 - 31.01.2023 -: Malda College, Malda, WB
2. 1980 – 1987(12th March): School Teacher.

Research Organization: Indian Centre for Space Physics (Kolkata),
President – Indian Centre for Space Physics, Malda Branch

Member in different committees:

1. NBU UG Board of Studies Member – 1988 – 1996
2. NBU PG Board of Studies Member – 1997 – 2000
3. GBU UG Board of Studies Member – 2008 – 2012
4. GBU UG Board of Studies Chairman – 2012-14
5. GBU UG Board of Studies Member – 2014 - 28 February 2021
6. GBU UG Board of Studies (ENVS) Member – 2014- 2024

7. “Samgra Shiksha Abhiyan-2019”, Malda – Member, Educationist nominated by DM

Refresher Courses:-

1. Academic Staff College, University of Calcutta – 2002
2. Academic Staff College, University of Calcutta – 2004

University Subject Expert for Promotion (CAS):

1. Gahul Amin – Chanchal College
2. Swapan Sit – Balurghat College
3. Manik Sanyal – Gangarampur College
4. Subhas Basak – Balurghat College(SGLI)
5. Kamal Rai – St. Joseph College (SGLI)
6. Dr. Santu Chakraborty – Kaliyaganj College
7. Smt Dipanwita Das – Raiganj Surendranath Mahavidyalaya

M.Phil. Dissertation Supervisor:

1. M.Phil Dissertation of Dhritiman Majumder 2007 Madurai Kamaraj University.
“STUDY OF MOLECULAR BEHAVIOUR OF SOME DIELECTRIC LIQUIDS IN DIFFERENT ELECTRIC FIELDS”.
2. M.Phil. Dissertation of Sahabuddin 2009 Binayak Mission University.
“COMPARATIVE STUDY OF LIGHT CURVES OF DIFFERENT COMPACT OBJECTS”.

Research Publication:

1. Microwave conductivity and dipole moment of polar dielectrics - S Acharyya, **A K Chatterjee**, P Acharyya and I L Saha : Indian J. Phys, 56B, 291-299 (1982).
2. Microwave Conductivity & Dipole Moment of Substituted Benzenes - S Acharyya and **A K Chatterjee** : Indian Journal of Pure & Applied Physics, Vol. 23, September 1985, pp. 484-486.
3. Ultra High Frequency Conductivity of Polar-Nonpolar Liquid Mixtures - C R Acharyya, **A K Chatterjee**, P K Sanyal & S Acharyya : Indian Journal of Pure & Applied Physics, Vol. 24, May 1986, pp. 234-238.

4. The Role of Column Calibration Factor in the Study of Temperature Dependence of Thermal Diffusion Factor of Hydrogenic Trace Mixtures with Helium - S Acharyya, I L Saha A K Datta and **A K Chatterjee** : Journal of Physical Society of Japan. Vol. 56, No. 1, January 1987, pp. 105 - 114.
5. Composition Dependence and Inversion of α_T of N₂ – CO Gas Mixture - I L Saha A K Datta, **A K Chatterjee** and S Acharyya : Journal of Physical Society of Japan. Vol. 56, No. 7, July 1987, pp. 2381- 2386.
6. Energy of activation, dipole moment and correlation parameter of water - R Ghosh & **A K Chatterjee** : Indian Journal of Pure & Applied Physics, Vol. 29, September 1991, pp 650-652.
7. Electrical Conductivity Anomaly in Binary Liquid Mixtures near the Critical Point - **Achintya Kr. Chatterjee**, Dipen Lahiri and Robin Ghosh : Jpn. J. Appl. Phys. Vol. 31 (1992) pp. 2151-2154 Part 1, No. 7, July 1992.
8. Dipole moments of associated binary solutes in benzene from ultra high frequency conductivities of solutions - **A K Chatterjee**, U Saha, N Nandi, R C Basak And S Acharyya Indian J. Phys. 66B(3), 291-302 (1992).
9. Association of some polar liquids in non-polar solvent - **Chatterjee A K** :Proceedings of Tenth Mathematics Conference, November 25-27, 1995. Bangladesh Mathematical Society, University of Dhaka, Bangladesh. Page – 12.
10. Estimation of Column Calibration Factor and Force Parameters to Predict Temperature Dependence of Thermal Diffusion Factor of Some Simple Molecules - G Dasgupta, N Ghosh, N Nandi, **A K Chatterjee** and S Acharyya : Journal of Physical Society of Japan. Vol.65, No. 8, August, 1996, pp. 2506 –2513.
11. Monitoring of Sudden Ionospheric Disturbances(SID) from Kolkata(India) -Sandip K Chakrabarti, K Acharya, B Bose, S Mandal, **A Chatterjee**, N Nandi, S Pal and R Khan. Indian J. Phys, 77B (2), 173 – 175 (2003)
12. Class transitions and two component accretion flow in GRS 1915+105 - S K Chakrabarti, A Nandi, **A K Chatterjee**, A K Choudhury and U Chatterjee : A & A 431, 825 – 830 (2005).
13. Different types of class transitions of GRS 1915+105 using IXAE data - Asit K Chaudhury, **Achintya K Chatterjee**, Anuj Nandi : Bull. Astr. Soc. India(2007) 35, 41 – 52.

14. Class transitions of compact objects Cygnus X-1 and Cygnus X-3 - **Achintya K Chatterjee**, Md. Washimul Bari, Asit K Choudhury : Indian J. Phys. 82(11), 1429-1440 (2008).
15. Live Coverage of Class Transitions in the Nano Quasar GRS 1915+105 -A. K. Choudhury, **A. K. Chatterjee**, W. Bari and S. K. Chakrabarti : Proceedings of the 2nd Kolkata Conference on the “Observational Evidence for Black Holes in the Universe” 2008, organized by SNBNCBS Kolkata. American Institute of Physics (AIP) Conference Proceedings - 1053.P161.
16. ICSP VLF observation of GRB090424 from Four receivers - Sandip K Chakrabarti, Sushanta Mondal, Asit Choudhury, **Achintya Chatterjee**, Narendra N Patra and D Bhowmick : TITLE: GCN CIRCULAR NUMBER : 9316 DATE: 2009.05.01,13:25:GMT.
17. Anomalous Behavior of D-Layer Formation Time of the Ionosphere due to Earthquake : **Achintya K. Chatterjee**, Md. Washimul Bari, Asit K. Choudhury Indian Journal of Radio & Space Physics, 38, June 2009, 138-142.
18. Detection of Sudden Ionospheric Disturbances Due to Solar Flares by Monitoring the Very Low Frequency Signal at Malda - N Nandy, **Achintya K Chatterjee**, Md W Bari and A K Choudhury. Proceedings of the 1st International Conference on Science with Very Low Frequency Radio Waves: Theory and Observations (VELFRATO-10), 2010. American Institute of Physics (AIP) Conference Proceedings - 1286. Page No. 205.
19. Anomalous Behavior of D – Layer Preparation Time of the Ionosphere Due to Earthquakes as observed from Malda (India) - **Achintya K Chatterjee**, N Nandy, Md W Bari and A K Choudhury : Proceedings of the 1st International Conference on Science with Very Low Frequency Radio Waves: Theory and Observations (VELFRATO-10), 2010. American Institute of Physics(AIP) Conference Proceedings - 1286. Page No. 291.
20. Comparison of ICSP VLF observation of GRB 090424 with satellite observations. Sushanta K. Mondal (ICSP), Sandip K. Chakrabarti (S. N. Bose Centre and ICSP) : Asit Choudhury (ICSP, Malda branch), **Achintya Chatterjee** (ICSP, Malda Branch), and D. Bhowmick (ICSP) –TITLE: GCN CIRCULAR NUMBER: 11883 DATE: 2011/04/05 11:09:52 GMT.
21. Class transition during 2008 outburst of 4U 1630-47 - Md. Washimul Bari and **Achintya K Chatterjee** Indian Journal of Physics (April 2013)87:309-315.

22. Monitoring of sudden ionospheric disturbances with very low frequency signal by ICSP Malda Branch: A.K. Choudhury and **A.K. Chatterjee**/Ind. J. Mul. Acad. Res. 1 (2014) 31 – 37
23. Direct evidence of class transition of GRO J1655-40 during the 2005 outburst : W Bari and **A K Chatterjee** - 22nd West Bengal State Science and Technology Congress (NBU)– 28.02.2015, Abstract Page No. – Phy – 20
24. Study of class transition of light curves of different compact objects: W Bari, **A K Chatterjee** – 1st Regional(Jalpaiguri) West Bengal State Science and Technology Congress – 7.11.2016, Abstract Page No. – Phy – 92
25. “Spectral Class Transition of GRO J1655-40 during 2005 outburst in the Light of TCAF Model” – Md Washimul Bari & **Achintya Kumar Chatterjee**: Indian Journal of Pure & Applied Physics, Vol. 62, August 2024, pp. 689-699.
26. “Direct Evidence of Class Transitions of the Microquasar GRS 1915+105 Using RXTE Data” – Wasimul Bari and **Achintya Kumar Chatterjee** - 7th Regional (Malda College) West Bengal State Science and Technology Congress – 7-8 January 2025 – Phy - 44

International Seminar and Work Shop attended:

1. “Tenth Mathematics Conference”,(Speaker) November 25-28, 1995 **Bangladesh Mathematical Society, University of Dhaka, Bangladesh.**
2. The International conference at Kolkata on “Observational evidence for Black hole in the Universe” from 10.02.2008 to 17.02.2008. S N Bose National Center for Basic Sciences, Kolkata. (Venue - Veidic Village & Raddisson Forte).
3. First International Conference on Very Low Frequency Waves: (Speaker) Theory and Observations (VELFRATO – 10) March 13-18, 2010, at SNBNCBS, Kolkata.
4. International Seminar on Environmental Crisis: 14th February, 2020. Invited Speaker, Manikchak College.

National/College level Seminar/ Work Shop attended:

1. “VISITORS PROGRAMME” June 14-17, 2000, CRYSTAL GROWTH CENTRE **Anna University, Chennai.**

2. ***“1st ASTROSAT WORKSHOP ON PULSAR ASTROPHYSICS”***
February 11-17, 2002. Tata Institute of Fundamental Research(TIFR), Mumbai – 400 005.
3. *Basic Workshop : SUN and STARS - St. Xavier’s College, Kolkata 21 – 23, November 2005.*
4. Raiganj University College – “Mysterious Black Hole” - 28.03.2008. Association with IUCAA Reference Centre, Physics Department NBU.
5. Advance workshop on Astronomy and Astrophysics – Organized by IUCAA at NBU – 5 to 9 April 2010.
6. Chairperson Gour Mahavidyalaya - “Biodiversity Seminar” (UGC Sponsored)
7. History of Science, Dept of History Malda College – ChairPerson (2011)
8. National Seminar on “ Current Trends in Computational Physics” - UGB 17.05.2015 (Member Organizing committee)
9. 22nd West Bengal State Science and Technology Congress – 28.02.2015 – 1.3.2015 – Poster Presentation – “Direct evidence of class transition of GRO J1655-40 during the 2005 outburst.”
10. One day State Level Seminar – Invited Speaker – Raiganj University – 3.3.2016. “ Black Hole – Source of Gravitational Wave”
11. One day State Level Seminar – Speaker – University of Gour Banga – 5.3.2016. “Gravitational Wave”
12. One day State Level Seminar – Invited Speaker – Kaliyaganj College – 21.09.2016. “Recent trends in Physics: “Astrophysics-Elementary Ideas”
13. West Bengal State Science and Technology Congress (Jalpaiguri Region)– 7- 8 November 2016
14. *National Seminar – Invited Speaker – Raiganj University – 14.03.2017. ‘Current Trend in Physics’ – “ Anomalous behavior of Ionosphere due to Solar Flare and EarthQuake”*
15. National Seminar – Invited Speaker – Dr Meghnad Saha College, Itahar – 18.03.2019. ‘Current Trend in Physical Science’
16. National Seminar – Invited Speaker – Gangarampur College – 19.03.2019. ‘Recent Trend in Science’
17. National Level Webinar- “Contemporary Trends in Physical Science” at Dr Meghnad Saha College, Itahar - Chair Person in Technical session.26.7.2020

Popular Talks :

1. Maheshmati D.N. Saha Vidyabhaban – “Stars and Compact Objects”, 28.2.2000.
2. Malda College Auditorium – “Birth of Planets” – 2.7.2000. Organized by Centre for Space Physics, Malda Branch.
3. Serampore College - “Birth of Planets” – 17.11.2000. Organized by Centre for Space Physics, Kolkata. Sponsored by ISRO & DST.
4. Raiganj Coronation High School – “Different types of Stars” – 2002 Organized by Centre for Space Physics, Kolkata. Sponsored by ISRO & DST.
5. Siliguri Girls’ High School – “ X-ray Universe” – 21.2.2006. Organized by Centre for Space Physics, Kolkata. Sponsored by ISRO & DST.
6. Malda District Book Fair – “ Life Cycle of Stars” – 2006
7. Malda District Book Fair – “Solar Family and Pluto Controversy” – 2007.
8. Baharampur Rabindra Bhavan – “Classification of Stars” – 2008. Organized by Indian Centre for Space Physics, Kolkata. Sponsored by ISRO & DST.
9. Bansbari U.C.B (H.S) Vidyalay, Malda – “International Year of Astronomy 2009 – Mahakash Parichay”
10. Nagharia High School, Malda - “International Year of Astronomy 2009 – Mahakash Katha”
11. 150th Birth anniversary of Prafulla Chandra Ray, Birth Centenary of S. Chandra Sekhar Lalit Mohon School(2011)
12. 150th Birth anniversary of Prafulla Chandra Ray – Umesh Ch. Bastuhara H.S. School (3.3.2011)
13. 150th Birth anniversary of Prafulla Chandra Ray – R.K.M.V.V.M Malda (4.2.2011)
14. 75th anniversary of Sukiya High school – Mahakash Parichay – 2.1.2012
15. Baishnabnagar Utsab – 4.1.2012
16. Bignan o Ishwar – Malda Book Fair – 11.1.2012 - Anchorperson.
17. 150th Birth anniversary of Swami Vivekananda, Ganguria Sarada Siksha Niketan – 15.01.2012
18. Gazole Utsab – 20.01.2012.
19. Uttar Lakshmipur High School “Mahakash”– 2.02.2012
20. Manicura High School “ The Universe” – 2012
21. Bigyan Mancha, Shishu Bigyan Utsab – Ram Kinkar school- “Planet Jupiter” - 2012
22. Doulatpur High School – “ Mahakash” – 22.1.2013

23. Malda Book Fair – 23.01.2013 Anchoring = (Seminar on Ramanujam)
24. Popular talk on Einstein = Year of Physics = 2005 – A C Institution Malda
25. Popular talk on Einstein = Year of Physics = 2005 - Malda Academy.
26. Golden Jubilee Govt T T College – Science Seminar “Big Science and Why Science”– Anchorperson 8.2.2014.
27. Live Telecast on local TV Channel – Venus Transit – 2004 and 2012.
28. Earthquake and Precautions – RKMVVM, MALDA, “ W B Jnan o Bijnan Utsav “ 25.05.2015.
29. BITM Workshop on Model Preparation - Resource Person – Balurghat 17.08.2015
30. BITM Workshop on Model Preparation - Resource Person – Malda 18.08.2015
31. Inter National Year of Light – Govt Teachers’ Training College- 15.10.2015
32. Malda Book Fair – 16.01.2016 Anchoring = (Seminar on After Higgs Boson)
33. “Global Warming – What to do ? Malda Co Operative Society - 2.7.2016
34. Seminar on ‘ Plastic Barjon’ – Malda College – 2016
35. Malda Book Fair – 13.01.2017 Seminar on – ‘ ki bhabe shikhbo, kibhabe janbo’
36. Rajya Shishu Vigyan Utsab – Pakuahat H S – ‘Meet the Scientist’ – 23.1.2017
37. Popular talk on Astronomy- Sarba Shiksha Mission & UNESCO – Sujapur Girls’ High School – 5.3.2018.
38. Popular talk on Astronomy- Sarba Shiksha Mission & UNESCO – Baishnabnagar High School – 5.3.2018.
39. Black Hole and Hawking Radiation – Malda College Seminar on Stephen Hawking and his works. – 31.3.2018.
40. Black Hole and Hawking Radiation – RKMVVM Malda & ICSP – 29.4.2018.
41. Chalo Pori Physics (Let’s read Physics) – SSM & RMSA Seminar at Malda Zilla School – 16.08.2018.
42. “Rahasyamoy Biswabrahmanda” – RKMVVM 75 years celebration – 4.1.2019.
43. “ Solar System “ – 50 years of Naya Bazar H S , - 22.1.2019.

44. “Mysterious Universe” - 100 years of Malda Model Madrasah- 13.01.2020.
45. “Mahakash” - Balurghat Vigyan Mancha- 13.02.2020.
46. "Mahabishwa o amader obasthan"- 13.03.2020.
Mohonpara Nibedita Balika Bidyalaya, Amriti, Malda.
47. “Universe and where we are?” - 16.01.2021 Gazole Utasov
48. “Pollution - Global Warming and Awareness” -
12.06.2021 History Dept. Malda College
49. "Our location in the Universe and anxiety" 23.06.2021
Bengali Dept. Malda College

Other activities :

1. Gani Khan Choudhuri Institute of Engineering & Technology (Govt of India) : Member of selection committee for faculty.(Date of interview- 14.08.2014, 6.09.2012 and 10.09.2012).
2. Gani Khan Choudhuri Institute of Engineering & Technology(Govt of India) : Expert member – Workshop on curriculum for Degree Programme (B.Tech) of GKCIET 09.12.2013.
3. Delhi Public School, NTPC, Farakka : Interview board as subject expert on 30.04.2012 and 06.05.2012
4. Sikkim Manipal Institute of Technology : Examiner for the M.Sc. (Physics) project viva.
5. Malda College Governing Body Member – 1996 (one term).
6. Convener, Development committee, Malda College (2012,2013).
7. Convener, Games and Sports, Malda College (2000).
8. Technical Expert of West Bengal Inter College Athletic Meet and Football Championship : South Malda College 2012 ,2013, Malda College 2014,2017 and conducted sports at Malda College every year.
9. Hon’ble Vice Chancellor nominee (Subject expert) for selection of Assistant Professor in different B.Ed Colleges and Guest / Part time Lecturer for different Degree Colleges.
10. Gour Banga University : Chairman of Practical Examinations, Head Examiner, Examiner (Theory and Practical), Moderator, Paper Setter, Scrutinizer, Re assessor.
11. Examiner and interview board member of School Service Commission, Malda.
12. West Bengal Govt. Science Seminar, Exhibition, Inspired aware Programme : Judge

13. Students of Gour Mahavidyalaya are attending Electronics classes in our College 2011-2016.
14. Member of Managing Committee – Rama Krishna Vivekananda Vidya Mandir 2003-2008 and took H.S. level classes (as honorary teacher) for about five years.
15. Inter Departmental Class – Geography Dept. – Big bang
16. Interview Farakka Barrage Project School for Teachers - 3.12.2020.
17. Observer IGNOU examination December 2016 – Govt T T college, Malda
18. Observer B Ed examination under W B Education University - December -2017.
19. Observer IGNOU examination June 2018 – Govt T T college, Malda
20. Observer B Ed examination under W B Education University - December -2018.
21. Walk in Interview – Physics Guest Lecturer – Gour Mahavidyalaya -30.08.2018.
22. Visited Chanchal College Physics Laboratory for Renovation work – 2018
23. Visited St Xavier's School Physics Laboratory Renovation – 10.12.2018
24. Farakka Project School - Interview 2020

Interdisciplinary classes:

History Dept. – History of Eclipse

BCA Dept. – Basic Physics 2016,2017

Political Science Dept – ‘ Is Political Science a Science’ 2016