



HIRAK JYOTI DEHINGIA

PROFILE HIGHLIGHTS

- ❖ **Assistant Professor in Mathematics**, Department of Basic Sciences and Humanities, Dibrugarh University Institute of Engineering and Technology (**DUIET**), Dibrugarh University, Assam, India.
- ❖ Former counsellor (Classes taken PG 2nd and 4th semester courses in Mathematics, 2nd semester classes of BCA) of Centre for Distance and Online Education (**CDOE**), Dibrugarh University, Assam, India.
- ❖ Former Guest Lecturer, Department of Mathematics, Sibsagar Polytechnic, Demow, Sivasagar, Assam, India.
- ❖ PhD ongoing, since 2021 in the Department of Mathematics, Dibrugarh University (**Thesis to be submitted soon**).
- ❖ Qualified SET (SLET-NE) 2023.
- ❖ M.Sc. in Mathematics (Pure and Applied Mathematics).

PERSONAL INFORMATION

- ❖ **PERMANENT ADDRESS:** 2 No. Madhakali Gaon, P.O. Khowang, District: Dibrugarh, Pin: 785675, Assam, India.
- ❖ **CORRESPONDING ADDRESS:**
C/O: Dr. Biju Moran, House No: 167, Joymoti Path, Godapani Tiniali, Near Dibrugarh University, P.O. Beheating Tiniali via Dibrugarh University, PIN: 786004, Dibrugarh, Assam, India.
- ❖ Date of birth: 11th January, 1996.
- ❖ Nationality: Indian.
- ❖ Email: hira^kjyoti^dehingia11^gmail.com
hira^kd^ehingia11^gmail.com
- ❖ Contact: 8486618366
: 6000326315

LANGUAGES

- ❖ Assamese
- ❖ English
- ❖ Hindi

SKILLS

Microsoft Office
Fast Learner
Communication Skills

EDUCATION

- ❖ **Moran Higher Secondary School, Charaideo, Assam, India.**
HSLC
January 2005 – May 2011
Passed HSLC with 1st division
- ❖ **Moran Higher Secondary School, Charaideo, Assam, India.**
HSSLC (10+2)
June 2011 – July 2013
Passed HSSLC with 1st division
- ❖ **Jorhat Institute of Science and Technology, Jorhat, Assam, India.**
BSc in Mathematics (Major)
August 2013 – July 2016
Graduated with 1st class.
- ❖ **Department of Mathematics, Dibrugarh University, Dibrugarh, Assam, India.**
MSc in Mathematics
August 2016 – July 2018
Post graduated with 1st class.

AWARDS AND ACHIEVEMENTS

- ❖ Anandaram Baruah Award, 2011.
- ❖ Oil India Limited Merit Scholarship, 2013.
- ❖ Qualified SET (SLETNE), 2023.

WORK EXPERIENCE

- ❖ **Institute: Sivasagar Polytechnic, Demow, India.**
Guest lecturer in Mathematics
September 2018 – May 2019.

PROFESSIONAL COURSES

- ❖ **Operation Sadbhavana Computer IT LAB.**
Basic Computer Education,
Block Development Office, Tiloi Nagar, Dibrugarh, Assam
March-May, 2011.
- ❖ **Digital Information Technology & Research for Professional, Moran**
PGDCA
February 2020 – February 2021.

RESEARCH WORK

A. ARTICLE PUBLICATIONS:

1. Dehingia, H. J., & Deka, P. N. (2023). Structural Variations of Dust Acoustic Solitary Waves (DASWs) Propagating in an Inhomogeneous Plasma. *East*

- European Journal of Physics*, (1), 19-27. (Scopus/Web of Science indexed/ESCI). (Impact Factor: 0.55).
- Dehingia, H. J., & Deka, P. N. (2023). Propagation of nonlinear dust-acoustic solitary waves under the effect of non-extensive electrons in inhomogeneous collisional magnetized dusty plasma. *Journal of the Korean Physical Society*, 83(5), 337-343. (Scopus/SCIE indexed). (Impact Factor: 0.67).
 - Dehingia, H. J., & Deka, P. N. (2024). On the propagation of dust-acoustic dressed solitons (DADS) influenced by dust concentration and hot isothermal electrons in an inhomogeneous plasma. *Indian Journal of Physics*, 1-10. (Scopus/ SCIE). (Impact Factor: 2.0).
 - Dehingia, H. J., & Deka, P. (2024). Characteristics of Nonlinear Dust Acoustic Waves (DAWs) Propagating in an Inhomogeneous Collisionless Magnetized Dusty Plasma. *East European Journal of Physics*, (1), 504-511. (Scopus/web of science). (Impact Factor: 0.55).

B. INTERNATIONAL CONFERENCE:

- Dehingia, H. J., & Deka, P. N. (2022). Structural Variations of Ion-Acoustic Solitons. In *Nonlinear Dynamics and Applications: Proceedings of the ICNDA 2022* (pp. 97-104). Cham: Springer International Publishing. (Scopus). (Presented and published).
Conference held in: SMIT, Sikkim, India.
- Dehingia, H. J., & Deka, P. N. (2022). Effects of Dust Particles on Dust Acoustic Solitary Waves (DASWs) Propagating in Inhomogeneous Magnetized Dusty Plasmas (MDPs) With Dust Charge Fluctuations, *International Conference on Advances in Transport Phenomena: Proceedings of the ICATP 2022* (pp. 56-158). Open Book Publishers. (Presented and published).
Conference held in: VIT, Andhra Pradesh, India.

C. BOOK CHAPTER:

- Title of the Chapter: Investigation on Some Properties of Dusty Plasma, Applications and the Dust Effects on Nonlinear Wave Structures in Inhomogeneous Plasma.
Name of the Book: Research Trends in MULTIDISCIPLINARY RESEARCH.
Publisher: AkiNik Publication, New Delhi, India.
- Title of the Chapter: Various Aspects of Dust-Acoustic Solitary Waves (DAWs) in Inhomogeneous Plasmas.
Name of the Book: Plasma Science - Recent Advances, New Perspectives and Applications.
Publisher: Intech Open, London, UK.

D. NATIONAL CONFERENCE:

- Title of the presented paper: Propagation of Nonlinear Dust Acoustic Waves in an Inhomogeneous Collisionless Magnetized Dusty Plasma.
Name of the conference: National Conference on Current Trends in Basic Sciences and its Applications.
Conference held in: Tinsukia College, Assam, India.
Date: 22-01-2024.

E. DEPARTMENTAL SEMINAR:

1. Title of the presented paper: A study on structures of dust-acoustic solitary waves (DASWs) propagating in an inhomogeneous plasma.
Seminar held in: Department of Mathematics, Dibrugarh University, India.
Date: 16-05-2023.
2. Title of the presented paper: A study on the propagation of nonlinear waves in the presence nonextensive electrons in an inhomogeneous magnetized dusty plasma.
Seminar held in: Department of Mathematics, Dibrugarh University, India.
Date: 01-12-2023.

F. WOESHOP ATTENDED:

1. Name of the workshop: Teacher's Enrichment Workshop (TEW) on Real Analysis, Algebra, and Linear Algebra (RAALA) 2019.
Workshop held in: Department of Mathematics, Dibrugarh University, India.
Date: 30th September to 5th October, 2019.
2. Name of the workshop: One Day Workshop on Popularization of Plasma Physics
Workshop held in: Department of Physics, Dibrugarh University, India.
Date: 22nd June, 2022.

EXTRA CURRICULAR ACTIVITIES

- ❖ Summer Camp, Teaching Mathematics to high school students.
Organized by: Margherita Public Higher Secondary School, Tinsukia, Assam, India.
Dates: From 11th July to 19th July, 2017.
- ❖ Served as Assistant General Secretary (Finance and Budget).
Dibrugarh University Research Scholars' Association (DURSA).
Session: 2022-2023.

HOBBIES AND INTERESTS

- ❖ Photography
- ❖ Travelling
- ❖ Cooking

STRENGTHS

- ❖ Positive attitude
- ❖ Good management skills
- ❖ **Ambitious**