

CURRICULUM VITAE

Dr Rumajyoti Hazarika

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Academic Qualifications:

- **Post-Doctoral Research** in Ionospheric Scintillation, Newcastle University, United Kingdom
- **Ph.D in Physics** (Specialization in Space and Atmospheric sciences) Dibrugarh University
- Cleared **State level eligibility test (SLET)** for Lectureship, N E Region, 2014.
- **Master's Degree:** Physics, Dibrugarh University
- **Bachelor's Degree:** Physics, Dergaon Kamal Dowerah College, Dibrugarh University

Other courses:

- **Post Graduate course in Space and Atmospheric Science at Physical Research Laboratory (PRL), Ahmedabad** conducted by Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP) Affiliated to the United Nations.

Teaching experience:

1. Assistant professor (contractual for P.G course) in Sibsagar college, Joysagar (September 2017 - December 2017)
2. Guest faculty in Tezpur University, Tezpur (February 2020 - December 2020)
3. Assistant professor, Department of Physics, Jengraimukh College (December 2020- till date)

Research area and Interest: Aeronomy (Space and Atmospheric sciences)

Fellowships, Awards, Distinctions during University/academic career:

1. **ISRO Space Science Promotion (SSP) Fellowship** during M.Sc.
2. **First class with distinction in Post Graduate course in Space and Atmospheric Science at Physical Research Laboratory (PRL), Ahmedabad** conducted by Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP) Affiliated to the United Nations.
3. **Junior Research Fellow (JRF) in ISRO CAWSES-II:** (September 2010 - July 2012)
4. **Senior Research Fellow (SRF) in DST-SERB** (September 2014 - September 2016)
5. **Best paper (Oral presentation in 18th National Space Science Symposium 2014).**

Research Publications:

1. GPS TEC near the crest of the EIA at 95°E during the ascending half of solar cycle 24 and comparison with IRI simulations, P.K. Bhuyan and **R. Hazarika**, *Advances in Space Research* 52 (2013) 1247–1260, doi.org/10.1016/j.asr.2013.06.029.
2. Effects of prolonged southward IMF Bz on low latitude ionospheric electron density, Mala S. Bagiya, **R. Hazarika**, Fazlul I. Laskar, Surendra Sunda, S. Gurubaran, D.Chakrabarty, P. K. Bhuyan, R. Sridharan , B. Veenadhari, D. Pallamraju, *Journal of Geophysical Research, Space Physics*, 119, doi:10.1002/ 2014JA020156.
3. Spatial distribution of TEC across India in 2005: seasonal asymmetries and IRI prediction, **R. Hazarika** and P. K. Bhuyan, *Advances in Space Research* 54 (2014) 1751–1767.
4. Ionospheric response to X-class solar flares in the ascending half of the subdued solar cycle 24, **R. Hazarika**, P. K. Bhuyan and B. R. Kalita, *Journal of earth system science* (2016) doi: 10.1007/s12040-016-0726-6.
5. Seasonal and solar cycle effects on TEC at 95°E in the ascending half (2009-2014) of the subdued solar cycle 24: Consistent underestimation by IRI 2012, G. Kakoti, P. K. Bhuyan and **R. Hazarika**, *Advances in Space Research* (2016), doi: 10.1016/j.asr.2016.09.002.
6. Conjugate hemisphere ionospheric response to the St. Patrick's Day storms of 2013 and 2015 in the 100°E longitude sector, B.R.Kalita, **R. Hazarika**, G.Kakoti, P.K. Bhuyan, D.Chakrabarty, G.K. Seemala, K.Wang, S. Sharma, T. Yokoyama, P. Supnithi, T. Komolmis, C.Y. Yatini and M. L. Huy, *Journal of Geophysical Research: Space Physics* (2016), doi:10.1002/2016JA023119.
7. Temporal evolution of the EIA along 95°E as obtained from GNSS TEC measurements and SAMI3 model, G.Kakoti, B. R. Kalita, **R. Hazarika**, P. K. Bhuyan, S. Sharma, R. C. Tiwari, *Advances in Space Research* 61 (2018) 2837–2853.

Book Chapters and Proceedings:

1. Total electron content perturbation during solar eclipses as observed from measurements using GPS receiver over Dibrugarh (27.3° N, 94.6° E), K. Bhuyan, **R. Hazarika**, P. K. Bhuyan and B. R. Kalita, *Recent developments in natural sciences*, ISBN: 978-81-924389-0- 0 (Proceedings).
2. The Earth's Ionosphere, **R. Hazarika**, *Space weather and climate change drivers North-East Indiaperspective*, ISBN:978-81-939507-5-3.
3. Ionospheric irregularities assessment on GNSS and SBAS signals over Indian region, **R. Hazarika**, *Ionospheric variabilities-A view from South-East Asia*, ISBN:978-620-0-47756-9.

Paper presented in Seminars and Conferences:

1. 'Temporal variation of GPS derived total electron content at the crest of the equatorial ionization anomaly along 95°E during solar minimum and comparison with the IRI' presented in **National Space Science Symposium, February 14-17, 2012 at S.V.University, Tirupati.**
2. 'Total electron content perturbation after two large CME events as observed from measurements using GPS receiver over Dibrugarh' presented in **Assam Science Society, 57th Annual technical session, 16 March, 2012.**

3. 'Total electron content perturbation during solar eclipses as observed from measurements using GPS receiver over Dibrugarh (27.3°N, 94.6°E)' presented in UGC Sponsored national seminar on **"Recent Development in Natural Sciences" at Dergaon Kamal Dowarh College, Dergaon, 20 and 21 Jan, 2012.**
4. 'Anomalous behavior of ionospheric total electron content over Dibrugarh before four major earthquakes (M>5) in North-east India' presented in **National Space Science Symposium, 29 January-1 February, 2014 at Dibrugarh University.**
5. 'Assessing the predictability of IRI 2012 over the Indian subcontinent in the low solar activity year 2005' presented in **National Space Science Symposium, 29 January-1 February, 2014 at Dibrugarh University.**
6. 'Ionospheric response to major X-class solar flares in the ascending half of the subdued solar cycle 24' presented in 60th Annual Technical Session: Assam Science Society, National Seminar on **Harnessing Science for Social Development, 21 March 2015 at Agriculture University, Jorhat.**
7. 'Ionospheric response to X-class solar flares in the ascending half of the subdued solar cycle 24' presented at 2nd URSI Regional Conference on Radio Science (URSI-RCRS 2015), **Jawaharlal Nehru University, New Delhi from 16-19 November 2015.**
8. 'Ionospheric response to the 17-18 March 2015 geomagnetic storm' presented at **National Space Science Symposium, Space Physics Laboratory, Trivandrum, 9-12 February 2016.**
9. 'Conjugate hemisphere ionospheric response to the St. Patrick's Day storms of 2013 and 2015 in the 100°E longitude sector' presented at **International Beacon Satellite Symposium 2016, ICTP, Trieste, Italy, 26 June-1 July 2016.**
10. 'Effect of geomagnetic storm on ionosphere', presented at **National conference on emerging trends in physics (NCETP 2021), Department of Physics, Tezpur University, Assam, 16 June, 2021.**
11. 'Ionospheric response to the 6 September 2017 extreme X-class solar flare', presented at **URSI - RCRS 2022, IIT (Indore), India, 1 - 4 December, 2022.**
12. 'Ionospheric response to solar activity' presented at **URSI - RCRS 2022, IIT (Indore), India, 1 - 4 December, 2022.**

Workshop attended:

1. 'Physics learning camp for under graduate students' organized by SSEAP, Nagaon, at Department of physics, Tezpur University, 27-31 January, 2007.
2. 'National workshop on Atmospheric and Space Sciences (NWASS), November, 2010' at Institute of Radio Physics and Electronics, University of Calcutta, 23-24 November, 2010.
3. 'Training programme on numerical and statistical computation using MATLAB Software' organized by Department of statistics, Dibrugarh University, 21-25 March, 2011.
4. 'National workshop on RF, microwave instrumentation for Atmospheric research' held in Department of Physics, Dibrugarh University in collaboration with SAMEER, Mumbai on 9-10 April 2015.
5. 'International Workshop on ICTP Regional Climate Model Applications Over South Asia CORDEX Domain' organized by Department of Physics, Dibrugarh University, during 22-28 February, 2021.
6. One day Workshop on 'Science Communication' organized by Department of Chemistry,

Dibrugarh University sponsored by DST-SERB under Scientific Social Responsibility Initiative (SSR). on 2 May 2022.

7. Workshop on 'Space and Atmospheric science's research tools' organized by Department of Physics, Dibrugarh University during 26-30 May, 2022.
8. Workshop on 'NAVIC Applications' organized by URSI, InRaSS and IIT, Indore, on 1 December, 2022.

Membership in professional body: Life member of Indian Radio Science Society (InRaSS) since 2022

Training Programs attended:

1. Orientation programme for 'Faculty in Universities/colleges/ Institutes of Higher Education' in Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from May 18-17 June, 2021 and obtained Grade A+.
2. FDP on "R" organized by Pragjyotish College with course material provided by Spoken Tutorial Project, IIT Bombay from 2021-07-05 to 2021-07-11.
3. FDP on "Moodle LMS" organized by IQAC, Majuli College in association with Spoken Tutorial, IIT Bombay from 17-05-2021 to 23-05-2021.
4. Refresher Course in Physics, at Teaching Learning Centre, Ramanujan College University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission from 28 July -11 August 2022 and obtained Grade A+.