# Dr. Ajeet K Maurya

UGC-Assistant Professor Department of Physics, School of Physical Science, Doon University Dehradun-248001, Uttarakhand, India Email <u>ajeet.iig@gmail.com, akmaurya.ph@doonuniversity.ac.in</u> Contact: +91-9454932852 Research Group: Sun-Earth Connections Research Laboratory (SECRL)



#### **Research Interests**

Space Weather, Sun-Earth Connections, Radio Remote sensing of the Ionosphere, Seismic-Electromagnetic, Atmospheric Gravity Waves, Ionospheric Monitoring of Extreme Weather events, Climate Change and Transient Luminous Events

## **Current Position and Past Research Experience**

Institute	Position	Duration
Doon University	UGC-Assistant Professor	March 2018-Present
Banaras Hindu	Ramanujan Fellow	June 2017- March 2018
University (BHU)		
Varanasi		
Dr. K S K	Research Associate	October 2016- May 2017
Geomagnetic Research		
Lab, IIG, Prayagraj		
Georgia Institute of	Fulbright	October 2015- October 2016
Technology, Atlanta, Georgia,	Postdoctoral	
USA	Fellow	
Dr. K S K	Research Associate	March 2013 - September
Geomagnetic		2015
Research Lab, IIG,		
Prayagraj		

# Scientific Accomplishments

- Research Publications **31** (international journals), **30** (conference presentations)
- Book -1
- Citations- 384, H-index -12 I-index-17
- Ph D supervision (On-going)- Supervisor-1,
- Supervised 15 MSc students

#### **Project Grants**

- 1. SERB DST under Ramanujan fellowship scheme Development of cost-effective tool to study Atmospheric gravity waves using radio remote sensing technique. (India), (35 Lakhs, Ongoing)
- 2. UGC Start up grant Remote sensing of D-region using VLF waves (India) (10 Lakhs, Ongoing)
- 3. **Fulbright fellowship research project** Climate Change and Severe Weather events: The role of lightning / thunderstorm generated gravity waves as sensed with optical and radio measurements (USA) (**28 Lakhs, Completed**)

#### Ph D Research

Thesis Title: ELF/VLF wave study of Ionosphere and Magnetosphere electromagnetic phenomenon in low latitude region.

#### Achievements in Ph D Research

- Participated in development of AWESOME VLF and TLE recording stations in Indian region
- First, detailed study of morphological features of lightning generated tweek radio atmospherics

- Development of cost effective method using tweeks to study nighttime D-region ionosphere
- Studied effect of 22 July 2009 total solar eclipse effect on the D-region ionosphere using tweeks
- $\circ~$  Investigated first cases of low latitude ground whistlers unambiguously linked with their causative lightning discharges

# Awards and Fellowships

- Recipient, Department of Science and Technology, India, **fellowship for pursuing the Ph.D. course** from Indian Institute of Geomagnetism (IIG).
- **2007**: Recipient, **National Eligibility Test for Lectureship (NET)** conducted jointly by the Council of Scientific and Industrial Research (CSIR) and University Grants Commission (UGC).
- **2008**: Recipient, **PSSI Best Poster Award, Plasma-2008**, on 23<sup>rd</sup> National Symposium on Plasma Science and Technology organized by PSSI & Bhabha atomic research center, Mumbai.
- **2010**: Participated in DST-SERC Training program on "Electrodynamics Coupling of Atmospheric Regions" Held at IIG, Navi Mumbai and secured **very good grade** in overall performance.
- **2010**: Participated in DST-SERC Training school on "Space Weather" Held at IIG, Navi Mumbai and secured **Second Position** in overall performance.
- **2013**: Recipient of **Research Associate Fellowship** for the year 2013-2014 of Indian Institute of Geomagnetism, Navi Mumbai
- 2014: Received Honorable mention, for a paper presented at Regional Conference in Radio Science-2014 held at SIT Pune during 2-5<sup>th</sup> January 2014, during the Indian URSI Young Scientists Award competition.
- 2014: Recipient of Research Associate Fellowship of CSIR, India
- 2015: Recipient of Fulbright-Nehru Postdoc fellowship for the year 2015-16 awarded by United State-India Education Foundation, New Delhi for doing research in the United States of America
- **2015**: Recipient of **Hungarian Academy of Sciences Postdoc fellowship** for the year 2015-17, awarded by **Hungarian Academy of Sciences**, **Hungary**
- **2016**: **Recipient of Outreach lecturing fund** from Council for International Exchange of Scholars (CIES), Washington DC, USA.
- **2016**: Recipient of **D. S. Kothari Postdoctoral fellowship** of University Grant Commission (UGC)
- **2016**: Recipient of **Ramanujan Fellowship by SERB, DST**. The fellowship is meant for brilliant scientists and engineers from all over the world to take up scientific research positions in India
- **2017**: Received certificate for **Outstanding contribution in Reviewing** by Journal of Atmospheric and Solar-Terrestrial Physics, an Elsevier Journal
- 2018: Young Scientist Award by International Union of Radio Science (URSI)
- 2019: Sunanda and Santimay Basu (International) Early Career Award in Sun-Earth system sciences by American Geophysical Union (AGU), USA

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Academic/Society	Membership type	Year	
Indian Radio Science Society (InRaSS)	Yearly Member (M2019022)	Since 2019	
International Union of Radio Sciences	Individual member (M1838225460)	Since 2018	
(URSI)			
Committee on Space Research (COSPAR)	Associate	Since 2013	
The Plasma Science Society of India	Life Member (LM-1218)	Since 2014	
The American Geophysical Union	Annual Member (248386)	2019-2022	
The Society for Science of Climate Change	Life Member	Since-2021	
and Sustainable Environment, New Delhi			

# Membership of Academic bodies

#### Workshop/Seminars organized-

- **Organized (Convenor)** One day webinar "Space Weather: Ionospheric and Technological Impact" 6<sup>th</sup> October 2020 at Doon University
- **Convener and Chair for session** GEH6 ULF/ELF/VLF Remote sensing of the Ionosphere and Magnetosphere for the Commission G at **URSI-APRASC 2019**
- **Publication chair** for the URSI-RCRS 2020 international conference held during 12-14 February 2020, at IIT BHU, Varanasi

- Local Organizing Committee member, Asia Pacific Radio Science Conference (URSI-APRASC 2019)
- Local Organizing Committee member, Indo-US Workshop on VLF Sciences, 2011
- Local Organizing Committee member, DST SERC School on "Space Weather", held at IIG in 2010

## **Educational Credentials**

- 1. **Ph D** (Physics and Space Physics) September 2008- February 2013 Very Low Frequency Lab Indian Institute of Geomagnetism (IIG) Navi Mumbai
- 2. **Master of Science** (Physics) University of Lucknow, Lucknow, India

July 2004-June 2006

3. Bachelor of Science University of Lucknow, Lucknow, India July 2001 - June 2004

#### **Academic Projects Executed**

- Investigation of the coupled Ionosphere-Atmosphere (IA) system due to forcing from Below and Above as a part of UGC-D.S. Kothari *postdoctoral work* (May 2017).
- Climate Change and Severe Weather events: The role of lightning/thunderstorm generated gravity waves as sensed with optical and radio measurements as a part of **Fulbright-Nehru Postdoctoral research work at Georgia Institute of Technology**, USA (2016).
- Upper atmosphere studies by Extremely low frequency (ELF) and very low frequency (VLF) waves in Indian low latitude region as a part of **CSIR-Research Associate fellowship at Dr. K S K Geomagnetic Research Lab, IIG, Pryagraj** (2015).

### National and International collaborations

- Indian Institute of Geomagnetism, Navi Mumbai, India: Prof Rajesh Singh, Dr. Navin Parihar
- Department of Physics, Banaras Hindu University, Varanasi, India: Prof. Abhay K Singh
- Institute of Radio Physics and Electronics, University of Calcutta, Kolkata, India: Prof. Ashik Paul
- Indian Institute of Technology, Indore, India: Prof. Abhirup. K. Datta
- Georgia Institute of Technology, Atlanta, USA: Prof. Morris. B. Cohen
- The University of South Pacific, Suva, Fiji: Prof. Sushil Kumar
- Institute for Space-Earth Environmental Research, Nagoya University, Japan: Prof. Yuichi Otsuka,
- Department of Geological Sciences, Universidad Catolica del Norte, Antofagasta, Chile: Dr. M. N. Shrivastava

# Administrative and Corporate activities

- > Member department research committee
- > Member department syllabus committee
- > Reviewer of several international journals in field of space and atmospheric sciences
- > Students mentor for Physics Department, Doon University
- Volunteer for ASHA GT, (an NGO working for education of underprivileged children in India) for various fundraiser events

#### **Personal Profile**

Date of Birth Marital Status Gender Nationality September 10, 1983 Married Male Indian

#### List of Publications

- 1. Shrivastava, M. N., **Ajeet K Maurya**, Gabriel Gonzalez, Poikayil S Sunil, Juan Gonzalez, Pablo Salazar and Rafael Aranguiz (2021), Tsunami detection by GPS-derived ionospheric total electron content, Scientific reports, Accepted June 2021.
- 2. **Maurya Ajeet Kumar**, Mahesh N. Shrivastava, K. Niranjan Kumar, (2020), Ionospheric monitoring with the Chilean GPS eyeball during the South American total solar eclipse on 2nd July 2019, Scientific reports 10 (1), 19380, https://doi.org/10.1038/s41598-020-75986-7
- 3. Dube, A., Singh, R., **Maurya**, A. K., Kumar, S., Sunil, P. S., & Singh, A. K. (2020). Ionospheric perturbations induced by a very severe cyclonic storm (VSCS): A case study of Phailin VSCS. Journal of Geophysical Research: Space Physics, 125, https://doi.org/10.1029/2019JA027197, IF 4.
- 4. Dubey, A., R. Singh, A. K. Maurya (2020) Electrical Signature of October 2013, Very Severe Cyclonic Storm (VSSC) Phailin, Current Science, 118 (3), 421-427, IF 1.
- 5. **Maurya, A. K**., Cohen, M. B., Niranjan Kumar, K., Phanikumar, D. V., Singh, R., Vineeth, P. K., & Kishore Kumar, K. (2019). Observation of very short period atmospheric gravity waves in the lower ionosphere using very low frequency waves. Journal of Geophysical Research: Space Physics, 124. https://doi.org/10.1029/2019JA027360, Page 9448-9461.
- 6. K. Venkatesh, R. Singh, A. K. Maurya, A. Dube, S. Kumar, and D.V. Phani Kumar (2019), 22 July 2009 Total Solar Eclipse: Modeling D-region ionosphere using narrowband VLF observations, Journal of Geophysical Research: Space Physics, 124, doi:10.1029/2018JA02613.
- 7. **Maurya**, A. K. K. Venkatesham, R Singh, S. Kumar, P. Tiwari and A. K. Singh (2018), Effects of St. Patrick's Day geomagnetic storm of March 2015 and of June 2015 on low-equatorial D-region ionosphere, Journal of Geophysical Research-Space Physics, 123, 6836–6850. https://doi.org/10.1029/2018JA025536.
- 8. Phani Kumar, **Ajeet K Maurya**, Niranjan Kumar, Rajesh Singh, K Venkatesh, Some Kumar, Manish Naja (2018), Anomalous variations of VLF sub-ionospheric signal and Mesospheric Ozone prior to 2015 Gorkha Nepal Earthquake, Scientific Report, 8, 9381, DOI:10.1038/s41598-018-27659-9,
- Singh R, A. K Maurya, O. Chanrion, T. Neubert, S. A. Cummer, J. Mlynarczyk, M. B. Cohen, D. Siingh, S. Kumar (2017), Assessment of Unusual Gigantic Jets observed during the Monsoon season: First observations from Indian Subcontinent, Scientific Report, 7: 16436, DOI:10.1038/s41598-017-16696-5,
- Maurya, A. K., K Venkatesham, P Tiwari, K. V. Kumar, R. Singh. A. K. Singh, D. Ramesh (2016), 25 April 2015 Nepal Earthquake: Investigation of precursor in VLF sub-ionospheric signal, Journal of Geophysical Research, 121, pp 10,403–10,416, doi:10.1002/2016JA022721, IF 3.4,
- 11. Vijaykumar K, **A. K. Maurya**, S. Kumar, R. Singh (2016), 22 July 2009 Total Solar Eclipse induced gravity waves in ionosphere as inferred from GPS observations over EIA, Advance in Space Research, 58, pp 1755–1762, IF 1.5,
- 12. Kumar S., A. Kumar, A. K. Maurya, and R. Singh (2016), Changes in the D-region associated with three recent solar eclipses in the South Pacific Region, Journal of Geophysical Research, 121, 5930–5943 doi:10.1002/2016JA022695, IF 3.4,
- 13. Gokani, S. A., R. Singh, M. B. Cohen, S. Kumar, K. Venkatesham, A. K. Maurya, R. Selvakumaran and J. Lichtenberger (2015), Very low latitude (L=1.08) whistlers and correlation with lightning activity, J. Geophys. Res. Space Physics, 120, doi:10.1002/2015JA021058, IF 3.4,
- 14. Singh, R., D. Siingh, S. A. Gokani, M. G. Sreeush, P. S. Buchunde, **A. K Maurya**, R. P. Singh and A. K. Singh, (2015) Climatic, meteorological and topographical causes of the 16-17 June, 2013 Kedarnath (India) natural disaster event, Nat. Hazards Earth Syst. Sci., 15, 1597–1601, doi:10.5194/nhess-15-1597-2015, IF 2.463,
- 15. R. Selvakumaran, A. K. Maurya, S. A. Gokani, B.Veenadhari, S. Kumar, K. Venkatesham, D. V. Phanikumar, A. K. Singh, R. Singh (2015), Solar flares induced D-region ionospheric and geomagnetic perturbations in the Indian Sector, J. Atmos. Sol.-Terr.Phys., Vol. 123, Jan 2015, pp 102-112, ISSN/ISBN no 1364-6826, IF 1.8,
- Kumar S., A. Kumar , F. Menk , A. K. Maurya , B. Veenadhari and R. Singh (2015), Response of the low latitude D-region ionosphere to extreme space weather event of 14-16 December 2006, J. Geophysical. Res. , 120, 788–799, January 2015, doi:10.1002/2014JA020751, IF 3.4,
- Maurya, A. K., D. V. Phanikumar, R. Singh, S. Kumar, B. Veenadhari, Y.-S.Kwak, A. Kumar, and A. K. Singh, K. N. Kumar (2014), Low-mid latitude D-region ionospheric perturbations associated with 22 July 2009 Total Solar Eclipse: Wave-like Signatures inferred from VLF observations, J. Geophysical. Res., Vol. 119 (10), 8512-8523, doi:10.1002/2013JA019521, IF 3.4,
- 18. Singh, R., A. K. Maurya, B. Veenadhari, S. A. Gokani, R. Selvakumaran, M. B. Cohen, O. Chanrion, T. Neubert (2014), First Observations of Transient Luminous Events (TLE's) in Indian sub-continent, Current Science, 107(7), pp 1107-1108, October 2014, IF 1.0,
- 19. Phanikumar, D.V., Y.-S. Kwak, A. K. Patra, A. K. Maurya, Rajesh Singh, and S.-M. Parke (2014), Response of the mid-latitude D-region ionosphere to the Total Solar Eclipse of 22 July 2009 studied

using VLF signals in South Korean peninsula, Advance in Space Research, 54, 961-968, IF 1.5

- 20. Srivastava, P. R., S. A. Gokani, **A. K. Maurya**, R. Singh, S. Kumar, B. Veenadhari, R. Selvakumaran, A. K. Singh, J. Lichtenberger (2013), One-to-one relationship between low latitude whistlers and conjugate source lightning discharges and their propagation characteristics, Advance in Space Research, 52, 1966-1973, IF 1.5,
- 21. **Maurya**, A. K., R. Singh, B. Veenadhari, S. Kumar and A. K. Singh (2013), Subionospheric VLF perturbations associated with the 12 May 2008 M7.9 Sichuan earthquake, Nat. Hazards Earth Syst. Sci., 13, 2331–2336, September 2013 doi:10.5194/nhess-13-1-2013, IF 2,
- 22. Singh, R., M. B. Cohen, A. K. Maurya, B. Veenadhari, S. Kumar, P. Pant, R. Said, U. S. Inan (2012), Very Low latitude (L=1.08) whistlers, Geophys. Res. Lett., 39, L23102, doi:10.1029/2012GL054122, IF 4.2
- 23. **Maurya**, A. K., B. Veenadhari, R. Singh, S. Kumar, M. B. Cohen, R. Selvakumaran, S. Gokani, P. Pant, A. K. Singh and U. S. Inan (2012), Nighttime D-region electron density measurements from ELF-VLF tweek radio atmospherics recorded at low latitudes, J. Geophys. Res., 117, A11308, doi:10.1029/2012JA017876, IF 3.4,
- 24. **Maurya**, A. K., R. Singh, B. Veenadhari, S. Kumar, M. B. Cohen, R. Selvakumaran, P. Pant, A. K. Singh, D. Siingh, and U. S. Inan (2012), Morphological features of tweeks and nighttime D-region ionosphere at tweek reflection height from the observations in the low latitude Indian Sector, J. Geophys. Res., 117, A05301, doi:10.1029/2011JA016976, IF 3.4,
- 25. Singh, R., B. Veenadhari, A. K. Maurya, M. B. Cohen, S. Kumar, R. Selvakumaran, P. Pant, A. K. Singh, and U. S. Inan (2011), D-region ionosphere response to the total solar eclipse of 22 July 2009 deduced from ELF-VLF tweek observations in the Indian sector, J. Geophysical. Res., 116, A10301, doi:10.1029/2011JA016641, IF 3.4,
- 26. Veenadhari B., R. Selvakumaran, R. Singh, A. K. Maurya, N. Gopalswamy, S. Kumar, T. Kikuchi (2012), CME-driven shocks and the associated sudden commencements/sudden impulses, J. Geophysical. Res., 117, A04210, doi:10.1029/2011JA017216, IF 3.4,
- 27. Singh, R., B. Veenadhari, M. B. Cohen, P. Pant, **A. K. Singh**, A. K. Maurya, P. Vohat, U. S. Inan (2010), Initial results from AWESOME VLF receivers: Setup in low latitude Indian region under IHY2007/UNBSSI program, Current Science, Vol. 98, No. 3, 398-405, IF 1.0,
- 28. **Maurya**, **A. K.**, R Singh, B Veenadhari, P Pant and A K Singh (2010), Application of lightning discharge generated radio atmospherics / tweeks in lower ionospheric plasma diagnostic, Journal of Physics: Conference Series, 208, doi:10.1088/1742-6596/208/1/012061.
- 29. P. Pant, A. K. Maurya, R. Singh, B. Veenadhari, and A. K Singh (2010), Estimation of D-region Electron Density using Tweek measurements at Nainital and Allahabad, Proceedings of the 1st International Conference on Science with Very Low-Frequency Radio Waves: Theory and Observations (VELFRATO-10), AIP Conf. Proc., October 20, Volume 1286, pp. 150-157. doi:10.1063/1.3512876,
- 30. **Maurya**, A. K., R. Selvakumaran, R. Singh, B. Veenadhari (2011), Characteristics of tweeks radio atmospherics observed in Indian low latitude region using AWESOME VLF receiver, XXXth URSI General Assembly, IEEE Xplore Conference Proceedings, 13-20 August, doi: 10.1109/URSIGASS.2011.6051176.
- 31. **Maurya**, A. K., R. Singh, S. Kumar, D. V. Phanikumar and B. Veenadhari (2014), Waves-like signatures in the D-region ionosphere generated by solar flares, XXXIth URSI General Assembly, IEEE Xplore Conference Proceedings, 16-23 Aug. 2014, Beijing China, doi: 10.1109/URSIGASS.2014.6929796
- 32. **Maurya A. K.**, M. B. Cohen, K Niranjan Kumar, D. V. Phanikumar, and R. Singh (2019), The low period atmospheric gravity waves observed using very low frequency signals, URSI AP-RASC 2019, New Delhi, during 9-15 March 2019, doi:10.23919/URSIAP-RASC.2019.8738659.
- 33. **Maurya A. K.**, and M N Shrivastava (2020), Study of July 2, 2019 South American Total Solar Eclipse effect on the ionosphere using GPS signal, URSI RCRS 2020, 1-3, IEEE Xplore Conference Proceedings, doi:10.23919/URSIRCRS49211.2020.9113612.

#### Papers Presented in conferences

- **1. A. K. Maurya** and Rajesh Singh, The lower ionospheric anomalous response to the Solar flares: reveled using very low frequency waves (2020), VERSIM workshop (virtual mode), Kyoto, Japan, 16-20 November, 2020.
- 2. A. K Maurya and M. N. Shrivastava, Study of July 2, 2019 South American Total Solar Eclipse effect on the ionosphere using GPS (2020), URSI RCRS 2020, IIT (BHU), Varanasi, India, 12 14 February, 2020 (International, Oral)

- **3. A. K. Maurya**, V. Panwar and R. Singh, Anomalous Effect of Solar Flares on the D-region: Observed Using Very Low Frequency waves, 12<sup>th</sup> International Conference on Plasma Science and Applications (ICPSA-2019), 11-14 November, 2019, University of Lucknow, Lucknow (**poster**)
- **4. A. K. Maurya**, R. Singh and S. Kumar, On the effects of severe geomagnetic storms of March and June 2015 at low-equatorial D-region ionosphere using very low-frequency radio waves, International space weather initiative workshop, **ICTP**, **Trieste**, **Italy**, **20-24 May 2019** (International, Oral)
- 5. A. K. Maurya, M. B. Cohen, D. V. Phanikumar, and R. Singh, Wavy signatures at lower and upper ionospheric altitude simultaneously observed on GNSS and VLF data, GNSS workshop, ICTP Trieste, 27-31 May, 2019, (International, Oral)
- **6. A. K Maurya**, M. B. Cohen, K Niranjan Kumar, D. V. Phanikumar, and R. Singh, The low period atmospheric gravity waves observed using very low frequency signals, URSI AP-RASC 2019, New Delhi, during 9-15 March 2019 (oral).
- **7. A. K Maurya**, R, Singh, St. Patrick's day geomagnetic storm effect on mid-low-equatorial D-region ionosphere using very low-frequency radio waves, 2<sup>nd</sup> URSI Atlantic Radio Science meeting, 28 May-02 June 2018, Gran Canaria, Spain.
- **8.** A. K Maurya, R. Singh, and A. K. Singh, St. Patrick's Day storm effect at mid-low-equatorial Dregion ionosphere inferred using VLF waves, 32<sup>nd</sup> National Symposium on Plasma Science & Technology, 7-10 November, 2017, Institute of Plasma Research, Gandhinagar, Gujrat, India (Oral).
- **9. A. K Maurya**, A. K Singh, VLF sub-ionospheric signal and mesospheric ozone anomaly as precursors to Nepal 2015 EQs? Current Trends in Physics-II, 23-24<sup>th</sup> September 2017, Department of Physics, BHU, Varanasi.
- **10.A. K. Maurya**, Rajesh Singh and D. S. Ramesh, Manifestations of Mw7.8 and Mw7.3 2015 Nepal Earthquakes in lower ionospheric plasma perturbations from VLF measurements, 1<sup>st</sup> Triennial Congress of FIGA, November 8-10, 2016 at IIT (ISM) Dhanbad, India (Oral).
- **11. A. K Maurya** and Morris B Cohen, On the detection of AGWs signature in the VLF transmitter signal, VERSIM meeting, September 19-24, 2016, Hermanus, South Africa (Oral).
- **12. A. K Maurya**, M. B. Cohen, R. Singh, T. Neubert, O. Chanrion, the morphology of TLEs producing thunderstorm over Indian region, USNC-URSI, meeting, Jan 6-9, 2016, Boulder, CO, USA (Oral).
- **13. A. K Maurya**, M. B Cohen, A Dubey, R. Singh, Response of Ionosphere to the Tropospheric disturbances, American Geophysical Union, AGU-2015, 13-20 December, 2015, San Francisco, CA, USA (Poster).
- 14. A. K Maurya, Rajesh Singh and B Veenadhari, On The Characteristics Of Transient Luminous Events (Sprite) Producing Thundercloud/storm Over Indian Region: A Case Study, 29th National Symposium on Plasma Science & Technology and International conference on Plasma and Nanotechnology, 8-11 December, 2014, Mahatma Gandhi University, Kottayam Kerala, India (Oral)(International).
- **15. A. K. Maurya**, D. V. Phanikumar, Rajesh Singh, Sushil Kumar and B. Veenadhari, First observations of wave-like signatures in D-region Ionosphere associated with 22 July 2009 Total Solar Eclipse: Coordinated measurements using VLF waves from India, Korea and Fiji, 18th National Space Science Symposium, 29th January 01 February 2014, Dibrugarh, Assam, India (**Oral**),
- **16.A. K Maurya**, R. Singh, Solar flares associated periodic waves-like signatures in the D-region ionosphere, Regional Conference on Radio Sciences, 02-05 January 2014, Pune, India (**Oral**)
- 17. A. K. Maurya, R. Singh, B. Veenadhari, Night time D-region plasma density measurements from lightning generated tweek radio atmospherics recorded at low latitude India station, 28th National Symposium on Plasma Science and Technology Plasma-2013, during 3-6 December 2013, at KIIT, Bhubaneswar, Orissa, India, (Oral)
- **18. A. K Maurya**, R. Singh, B. Veenadhari, and R. Selvakumaran, Response of Low-latitude Ionosphere to Annular Solar Eclipse of 15 January 2010, by DEMETER observations, AOGS-AGU (WPGM) Joint Assembly, 13-17, August 2012, Singapore, **(Oral)**.
- **19. A. K. Maurya**, B. Veenadhari, R Singh, R. Selvakumaran, H. Ohya, P. Pant and A. K. Singh, Geomagnetic storm effect on night-time D-region ionosphere and magnetosphere, as measured by ELF-VLF waves, 39th COSPAR Scientific Assembly, July 14-22, 2012, Mysore, India (Oral).
- A. K. Maurya, R. Singh, B. Veenadhari, S. Kumar, M. B. Cohen, R. Selvakumaran, P. Pant, A. K. Singh, and U. S. Inan, Night time *D*-region electron density measurements from tweek radio atmospherics recorded at low latitudes, Indo-US VLF AWESOME workshop, 28 Nov 01 December 2011, GOA, India, (Oral)

- **21. A. K. Maurya**, R. Selvakumaran, R. Singh, B. Veenadhari, Characteristics of tweek radio atmospheric observed in Indian low latitude region using AWESOME VLF receiver, *XXX URSI* general assembly, Istanbul, Turkey, August 13-20, 2011 (Poster).
- **22.A. K. Maurya**, Rajesh Singh, R. Selva kumaran and B. Veenadhari, Seismic effects on the subionospheric VLF signals: Results from the studies of some recent Earthquakes, International Workshop on Seismo-Electromagnetics & Atmospheric Science (IWES-AS-2010), 16-18 November 2010. (Oral)
- **23.A. K. Maurya**, R Singh, B Veenadhari, P Pant and A K Singh, Effect of 22 July 2009 Total Solar Eclipse on D-region ionosphere: As studied from tweek VLF broadband measurements, Asia Oceania Geosciences Society (AOGS), 5-9 July 2010, Hyderabad, India. (**Oral**)
- **24.A.** K. Maurya, R Singh, B Veenadhari, P Pant, A K Singh, VLF sub-ionospheric signal and earthquake precursor signatures ? Results from the studies of some recent earthquake. The Sharjah-Stanford VLF Workshop, University of Sharjah, Feb 22-24, 2010. (Oral)
- **25.A. K. Maurya**, R Singh, B Veenadhari, P Pant and A K Singh, Tweek radio atmospheric: Locating there source causative lightning discharge and application in lower ionospheric plasma studies, 24<sup>th</sup> National Symposium on Plasma Science and Technology Plasma-2009, during December 08-11, 2009, Hamirpur, H.P. (Poster)
- **26.A. K. Maurya**, R Singh, B Veenadhari, P Pant and A K Singh, Application of lightning discharge generated radio atmospherics / tweeks in lower ionospheric plasma diagnostic, 23<sup>rd</sup> National Symposium on Plasma Science and Technology Plasma-2008, during December 10-13, 2008, BARC, Mumbai (**Poster**)

#### **Books**

• Tweek Radio Atmospherics: Characteristic & Application in D-Region remote sensing Technique" LAP LAMBERT Academic Publishing -2018) Germany, ISBN-13: 978-6136749280, Author by Dr. Ajeet Kumar Maurya

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