Dr Ashutosh Kumar Singh

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Awards & Achievements
(i) UGC-Meritorious Research Fellowship in Science
(ii) Geo-Host Award
(iii) Oral-Invited Talk
(iv) AGU Chapman Grant

Conference/Seminar
(i) International (**15**)
(ii) National (**07**)
(iii) Workshop/FDP (**07**)

Abroad Visit
(i) Germany,
(ii) Singapore
(iii) Beijing, China
(iv) Jeju, South Korea

Paper Published
(i) SCIE/Scopus/Refereed (**17**)
(ii) Conference Proceeding (**5**)
Adv. Space Research (Elsevier)
Astrophys & Space Sci (Springer)
Annales Geophysicae(EGU)
Radio Science(AGU)
Adv. In Geosciencs(EGU)
Earth Planet Space, *(Springer)*

Educational Qualifications

- Ph.D. in Physics (2014), Banaras Hindu University, Varanasi, India.
- M.Sc. in Physics, June-2007, Bundelkhand University, Jhansi, India.
- B.Sc. (Physics) 2005, V.B.S. Purvanchal University, Jaunpur, India.

Professional Experience

- Assistant Professor in C.M. Science College Darbhanga, 25-07- 2015 to till date
- Assistant Professor in SRM University, Lucknow-Dewa Road, Feb-2015 to Feb-2022
- Project Scientist at RBS Eng. Tech. Campus, Bichpuri, Agra, India, Aug-2013-Jan-2015.
- Reviewer: Advances in Space Research (*Elsevier Pub*.), Indian Journal of Radio and Space Physics., Radio Science (AGU) and many others.

Awards & Achievements

- **UGC-Meritorious Research Fellowship** in Science from July 2010-June 2013.
- **Geo-Host Award** –AOGS- IGU Annual Meeting 2010, Hyderabad, India, 5-9th July 2010.
- **Oral-Invited Talk** in AOGS IGU Annual Meeting 2010, July 5- 9, 2010.
- **Won Second Prize** in DST-SERC Training Programme held at IIG, Navi Mumbai during January 6-19, 2010.

Member of Societies

- Life member of Plasma Science Society of India (**PSSI**) & Division of Plasma Physics, Association of Asia Pacific Physical Societies (AAPPS-DPP).
- Member of American Geophysical Union (**AGU**)
- Member of Indian Science Congress Association

First Author Talk (International/National Conferences/Workshops)

- TRENDS 2024, 12th International Workshop on Long-Term Changes and Trends in the Atmosphere held in Ourense, Galicia, Spain during 6-10 May 2024. (**Oral**)
- FDP conducted by Centre for Research and Industrial Staff Performance (sponsored by DST Govt. of India New Delhi) during 19-06-23 to 01-07-23.
- IIRS Outreach Programme on "Remote Sensing and GIS Technology and Applications for University Teachers and Government Officials" on 13 June – 01 July , 2020
- AGU Chapman Conference, Jeju Island, Republic of Korea, 31 Aug - 5 Sep 2014 **(Oral)**
- AOGS-AGU (WPGM) Joint Assembly 2012, Singapore, 13-17 August 2012 (**Oral**)
- Indo-US workshop on Advanced VLF Science, Goa, India, 28 Nov-01 Dec, 2011 (**Oral**)
- 38th COSPAR scientific Assembly, Bremen, Germany,July 18-25, 2010. (**Oral**)
- AOGS-2010 held at HICC, Hyderabad, India during July 5- 9, 2010. (**Oral-Invited Talk**)

- Also attended Faculty Development Programme, Training Programme, & Workshops ,
- DST International Travel Grant (2010, 2014), CSIR International Travel Grant (2012)

Select List of the Most Significant Five Research Publication

1. Effect of 21 June 2020 solar eclipse on the ionosphere using VLF and GPS observations and modeling. *Advances in Space Research,* 69(1), 254-265, 2022; (Elsevier Pub.)
2. Solar flare induced D-region ionospheric perturbations evaluated from VLF measurements. *Astrophys and Space Sci,* doi: 10.1007/s10509-013-1699-4, 2013, (Springer Pub.)
3. Response of low latitude D-region ionosphere to the Total Solar Eclipse of 22 July 2009 deduced from ELF/VLF analysis. *J. Adv. Space. Res*., 50, 1352-1361 2012, (Elsevier Pub.)
4. Multiflash whistlers in ELF-band observed at low latitude, *Annales Geophysicae*, 29, 91-96, doi:10.5194/angeo-29-91-2011, 2011, (Copernicus Pub., Europian Geosci. Union)
5. Modeling of Ionospheric Scintillation at Low-Latitude, *Adv. Space Research*, doi:10.1016/j.asr.2010.09.017, 2010, (Elsevier Pub.)

Research Experience and Area of Interest

- Remote sensing of ionospheric perturbations in association with the space weather events like geom.. storms, solar flare, solar eclipse; lightning discharges and associated processes: whistlers VLF emissions etc., lightning induced electron precipitation (LEP's) events. Seismo-Ionospheric Earthquake precursor studies.

Complete List of Research Publications

1. G.Tripathi, **Ashutosh K. Singh**, P. Singh, A. K. Singh, Response of low-latitude lower ionosphere during solar flare events over the complete solar cycle 24. *Acta Geod Geophys* **60**, 115–136, 2025; ISSN: (**IF=1.8**) https://doi.org/10.1007/s40328-025-00461-6 (Springer Pub.) 21-02-2025.
2. G.Tripathi, S.B. Singh, S. Kumar, **Ashutosh K. Singh**, R. Singh, A. K. Singh, Effect of 21 June 2020 solar eclipse on the ionosphere using VLF and GPS observations and modeling. *Advances in Space Research,* 69(1), 254-265, 2022; ISSN: 0273-1177, (**IF=2.611**) https://doi.org/10.1016/j.asr.2021.11.007 (Elsevier Pub.) 01-01-2022.
3. S. Kumar, G. Tripathi, P. Kumar, **Ashutosh K. Singh**, A.K. Singh, Ionospheric perturbations observed due to Indonesian Earthquake (Mw = 7.4) using GPS and VLF measurements at multi-stations, *Acta Geodaetica et Geophysica*, 56, 559–577, 2021; ISSN: 2213-5820 (**IF=1.768**) https://doi.org/10.1007/s40328-021-00345-5 (Springer Pub.) 26-05-2021
4. V.S. Rathore, S. Kumar, **Ashutosh K. Singh**, A. K. Singh, Ionospheric response to an intense solar flare in equatorial and low latitude region *Indian Journal of Physics* 92(10), 1213-1222, 2018; ISSN: 0974-9845 **(IF=1.947)** https://doi.org/10.1007/s12648-018-1224-2 (Springer Pub.) 30-05-2018
5. U Pandey, **Ashutosh K. Singh**, S. Kumar, A.K. Singh, Seismogenic ionospheric anomalies associated with the strong Indonesian earthquake occurred on 11 April 2012 (M= 8.5), *Advances in Space Research,* 61(5), 1244-1253, 2017; ISSN: 0273-1177 (**IF=2.611**) https://doi.org/10.1016/j.asr.2017.12.022 (Elsevier Pub.) 01-03-2018.
6. U Pandey, **Ashutosh K. Singh**, O.P. Singh, Birbal Singh, V.Sarswat, A study of early/slow VLF perturbations observed at Agra, India, *Acta Geophysica*, 64(3), 755-771, 2016, ISSN:1895-7455, (**IF=2.293**) De Gruyter (Polish Academy of Sciences) https://doi.org/10.1515/acgeo-2016-0016 (Springer Pub.) 02-12-2016
7. S.B. Singh**,** V.S. Rathore, **Ashutosh K. Singh**, A. K. Singh, Ionospheric irregularities at low latitude using VHF scintillations during extreme low solar activity period (2008–2010), *Acta Geodaetica et Geophysica*, 51(1), 1-17, 2016, ISSN: 2213-5820, (**IF=1.768)** https://doi.org/10.1007/s40328-016-0168-2 (Springer Pub.) 16-03-2016
8. **Ashutosh K. Singh**, A. K. Singh, R. Singh, R.P. Singh, K. Adams, and R. L. Dowden, Subionospheric VLF perturbations observed at a low latitude station Varanasi (L = 1.07) using SoftPAL receiver *Advances in Space Research* 55(2), 575-585, 2015; ISSN: 0273-1177, (**IF=2.611**) https://doi.org/10.1016/j.asr.2014.10.032 (Elsevier Pub.) 01-11-2014
9. **Ashutosh K. Singh,** A. K. Singh, Rajesh Singh, R.P. Singh, Solar flare induced D-region ionospheric perturbations evaluated from VLF measurements. *Astrophysics and Space Science,* 350(1), 1-9, 2013, ISSN:1572-946X, (**IF=1.909**) https://doi.org/10.1007/s10509-013-1699-4, (Springer Pub.) 03-12-2013
10. **Ashutosh K. Singh**, R. Singh, B. Veenadhari and A. K. Singh, Response of low latitude D-region ionosphere to the Total Solar Eclipse of 22 July 2009 deduced from ELF/VLF analysis. *Advances in Space Research*, 50(10), 1352-1361; 2012, ISSN: 0273-1177, (**IF=2.611**) https://doi.org/10.1016/j.asr.2012.07.005, (Elsevier Pub.) 11-07-2012
11. **Ashutosh K. Singh**, K. K. Singh, S. B. Singh, A. K. Singh and Lalmani, Multiflash whistlers in ELF-band observed at low latitude, *Annales Geophysicae*, 29(1), 91-96, 2011, ISSN: 0992-7689, (**IF=2.190)** https://doi.org/10.5194/angeo-29-91-2011, (Copernicus Pub., Europian Geosci. Union) 10-01-2011
12. **Ashutosh K. Singh**, K. K. Singh, A. K. Singh and Lalmani, Simultaneous observation of whistlers and emissions during a magnetically quiet period at low latitude, *Astrophysics and Space Science*, **331**, 459-468, 2010, ISSN:1572-946X, (**IF=1.909**) https://doi.org/10.1007/s10509-010-0465-0, (Springer Pub.) 24-08-2010
13. K. Patel, **Ashutosh K. Singh**, P. Subrahmanyam and A. K. Singh, Modeling of Ionospheric Scintillation at Low-Latitude, *Advances in Space Research*, **47**(3), 515-524, 2011, ISSN: 0273-1177, (**IF=2.611**) https://doi.org/10.1016/j.asr.2010.09.017, (Elsevier Pub.) 25-09-2010
14. K. K. Singh, J. Singh, M. Altaf, **Ashutosh K. Singh**, S. Kumar, A. K. Singh, Shyampati and Lalmani, Simultaneous observation of some unusual whistler and VLF hiss emission at a low L-value (L = 1.17). *Advances in Space Research*, **45**(6), 790-797, 2010, ISSN: 0273-1177, (**IF=2.611**) https://doi.org/10.1016/j.asr.2009.10.016, (Elsevier Pub.) 15-03-2010
15. K. Patel, **Ashutosh K. Singh**, A. K. Singh and R. P. Singh, Characteristics of Quasi-Periodic Scintillation Observed at Low Latitude, *Radio Science.*, **44**(6), RS6007, 2009, ISSN:1944-799X, (**IF=1.680**) https://doi.org/10.1029/2008RS003975, (American Geophysical Union, Pub.) 16-12-2009
16. **Ashutosh K. Singh**, R. P. Patel, R. Singh, K. K. Singh and A. K. Singh, Characteristics of discrete VLF falling-tone chorus emissions observed at low latitude ground station Jammu, *Earth, Planets and Space*, **61**, 1179-1183, 2009; ISSN:1880-5981, (**IF=3.362**). https://doi.org/10.1186/BF03352969 (Terra Pub. SGEPSS, Japan) 23-11-2009