

वीनस वेणुगोपाल

सीनियर रिसर्च फेलो

अंतरिक्ष भौतिकी प्रयोगशाला (एसपीएल)

विक्रम साराभाई अंतरिक्ष केंद्र (वीएसएससी)

भारतीय अंतरिक्ष अनुसंधान संगठन (इस्रो)

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शैक्षिक योग्यता

- एम एस सी फिसिक्स, सेंट पॉल्स कॉलेज, कलमशेरी. महात्मा गाँधी यूनिवर्सिटी, कोट्टयम
- बी एस सी फिसिक्स, श्री शंकरा विद्यापीठम, पेरुम्बवूर. महात्मा गाँधी यूनिवर्सिटी, कोट्टयम
- एच एस ई, गवर्नमेंट बोय्स एच एस एस, आलूवा

प्रोफेशनल बैकग्राउंड

- सीनियर रिसर्च फेलो (2021 से), वायुमंडलीय गतिकी शाखा, अंतरिक्ष भौतिकी प्रयोगशाला
- जूनियर रिसर्च फेलो (2019-2021), वायुमंडलीय गतिकी शाखा, अंतरिक्ष भौतिकी प्रयोगशाला
- लेक्चरर [कोण्ट्राक्ट] (2016-2018), सेंट पॉल्स कॉलेज, कलमशेरी

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Academic Qualifications

- ☐ M.Sc. Physics, St. Paul's College, Kalamassery, Mahatma Gandhi University, Kottayam
- ☐ B.Sc. Physics, Sree Sankara Vidyapeetom, Perumbavoor, Mahatma Gandhi University, Kottayam
- ☐ HSE, Govt. Boys H.S.S., Aluva

Professional Background

- ☐ Senior Research Fellow (2021-Present), Atmospheric Dynamics Branch, Space Physics Laboratory
- ☐ Junior Research Fellow (2019-2021), Atmospheric Dynamics Branch, Space Physics Laboratory
- ☐ Lecturer (in contract), (2016-2018) St. Paul's College, Kalamassery.

Research Interests

Core area: Stratosphere-Troposphere interactions

Present research interest: Brewer-Dobson circulation, Stratospheric ozone, stratospheric water vapor, cold-point tropopause, upper-troposphere lower-stratosphere region.

Conference Publications

1. **Veenus** Venugopal & Das, S. S., (2023) “The Tonga volcanic eruption: Implications on the stratospheric circulation and ozone depletion” Stratospheric Processes and Their Role in Climate (SPARC) *Hunga-Tonga impacts: open science workshop*, Online.
2. **Veenus** Venugopal & Das, S. S., (2023) “The unprecedented stratospheric water vapor signal and the meridional circulation”, *35th Kerala Science Congress*, Mar Baselios Christian College of Engineering, Idukki.
3. **Veenus** Venugopal & Das, S. S., (2022) A new perspective on Aura MLS observations of stratospheric ozone distribution associated with Southern Hemisphere sudden stratospheric warming, *URSI-RCRS 2022*, at IIT, Indore
4. **Veenus** Venugopal, Das, S. S., and Liji M. David (2022) Modulation of Brewer-Dobson Circulation’s intensity and stratospheric composition by sudden stratospheric warming events, *7th SPARC General Assembly*, Online.
5. **Veenus** Venugopal, Das, S.S., & K. N. Uma (2022) Response of Brewer-Dobson Circulation to SSWs over the Northern and Southern Hemisphere, *National Space Science Symposium*, Indian Institute of Science Education and Research, Kolkata.
6. **Veenus** Venugopal, Das, S.S., K. N. Uma, & Liji M. David (2021) Role of Sudden Stratospheric Warming induced Brewer-Dobson Circulation changes in the thermal structure and compositions in the upper troposphere and lower stratosphere region, *International Symposium on Tropical Meteorology*, Cochin University of Science and Technology and Indian Meteorological Society, Kochi.

Recognitions

1. Individual support for attending Stratospheric Processes And their Role in Climate (SPARC) general assembly being held at the University of Reading, UK during 24–28 October 2022 by World Climate Research Programme (WCRP) under the World Meteorological Organisation and International Science Council.
2. ISRO Research Fellowship: SPL, VSSC, Thiruvananthapuram, India, December 2019-present.
3. Qualified GATE-2021 conducted by IIT, Bombay.

Workshops/Schools Attended

1. “**QBOi workshop**” organised by SPARC during 27-31 March 2023 held at Oxford, UK (online).
2. “**Hunga-Tonga impacts: open science workshop**” organised by SPARC during 16-17 May 2023 (online).
3. “**Workshop on Atmospheric Research Using Radar**” jointly organized by URSI, InRaSS and IIT Indore, on 1 December 2022 held at IIT, Indore.
4. International Conference on Clouds and Precipitation (ICCP) **short course on dual polarization radar and cloud microphysical processes** organised by The Indian Institute of Tropical Meteorology, Pune on 7 August 2021.
5. **NavIC/GNSS: Technique and Applications** organised by National Atmospheric Research Laboratory, Gadanki during 5 August 2021.
6. Satellite Meteorology and Oceanography Research and Training (**SMART**) by Space Applications Centre, Ahmedabad during 21-23 December 2020.

Publications in Refereed International Report

Karpechko A., Kremser S., Charlton-Perez A., ..., **Veenus V.**, ..., Kloss C. (2023). Report on the multi-hub 7th SPARC General Assembly, SPARC Newsletter, 60, 17–25.

Journal Publications

1. **Veenus V.**, Siddarth Shankar Das, and Liji M. David. (2023) “Ozone transport due to sudden stratospheric warming-induced change in the intensity of Brewer-Dobson Circulation: A composite analysis using Observations and chemical-transport model”, *Geophysical Research Letters*, 50, e2023GL103353, <https://doi.org/10.1029/2023GL103353>.
2. Das S S., K. N. Uma, K. V. Suneeth, and **V. Veenus**. (2022) “Diurnal variability of lower and middle atmospheric water vapour over the Asian summer monsoon region: first results from COSMIC-1 and TIMED-SABER measurements” *Climate Dynamics*, [doi:10.1007/s00382-022-06282-5](https://doi.org/10.1007/s00382-022-06282-5).
3. **Veenus V.**, Siddarth Shankar Das, Bukya Sama, and K. N. Uma, (2022). “A comparison of temperature and relative humidity measurements derived from COSMIC-2 radio occultations with radiosonde observations made over the Asian summer monsoon region”. *Remote Sensing Letters*, VOL. 13, NO. 4, 394–405, [doi:10.1080/2150704X.2022.2033345](https://doi.org/10.1080/2150704X.2022.2033345)