

PRASHANT HEGDE

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hegdeprashant@yahoo.com**Area of specialisation:** Analytical chemistry**Research interest:** Aerosol chemical composition studies**Academic Qualifications:** M. Sc. Ph. D. (Atmospheric Science)**Professional Responsibilities:** Assigned research activities on aerosol chemical characterization (major ions and trace elements) and determination of molecular level organics using different analytical instruments/techniques.**Awards and Honors:**

- Received JSPS (Japan Society for the Promotion of Science) fellowship award (2008)
- Received Best Ph D Thesis Award from Mangalore University (2003)
- Awarded Research Fellowship from DST, Govt. of India (1999)

Publications in Journals:

- 1) Aswini, A. R., **Prashant Hegde**, Aryasree, S., Girach I. A. and Nair P. R. (2019) Continental outflow of anthropogenic aerosols over Arabian Sea and Indian Ocean during wintertime: ICARB-2018 campaign, **Science of the Total Environment**, <https://doi.org/10.1016/j.scitotenv.2019>.
- 2) **Prashant Hegde**, B, M, Vyas, A R Aswini, S Aryasree and P. R. Nair (2019) Carbonaceous aerosols over a semi-arid location in North West India: seasonal variations and source characteristics, **Journal of Arid Environments**, <https://doi.org/10.1016/j.jaridenv.2019.104018>.
- 3) Aswini, A R, **Prashant Hegde**, P. R. Nair and S Aryasree (2018) Seasonal trends in carbonaceous aerosols over a tropical coastal location in response to meteorological processes, **Science of the Total Environment**, 656, 1261–1279, <https://doi.org/10.1016/j.scitotenv.2018.11.366>.
- 4) Aswini, A.R., **Prashant Hegde**, and P. R. Nair, (2018) Carbonaceous and inorganic aerosols over a sub-urban site in peninsular India: Temporal variability and source characteristics **Atmospheric Research**, 199, 40-53. <http://dx.doi.org/10.1016/j.atmosres.2017.09.005>.
- 5) **Prashant Hegde**, and Kawamura, K. (2017) Chemical constituents of carbon and nitrogen aerosols over Thumba region. **Archives of Environmental Contamination and Toxicology**, 73, 3, 456-473. doi: 10.1007/s00244-017-0426-5.
- 6) Bindu G., P. R. Nair, S. Aryasree, **Prashant Hegde**, and S. Jacob, (2016) Pattern of aerosol mass loading and chemical composition over the atmospheric environment of an urban coastal station, **Journal of Atmospheric and Solar-Terrestrial Physics**, 121-135.
- 7) **Prashant Hegde**, K. Kawamura, I. A. Girach and P. R. Nair, (2015) Characterisation of water-soluble organic aerosols at a site on the southwest coast of India, **Journal of Atmospheric**

Chemistry, 73, 181-205.

- 8) **Prashant Hegde**, K. Kawamura, H. Joshi and M. Naja, (2015) Organic and inorganic components of aerosols over the central Himalayas: Winter and summer variations in stable carbon and nitrogen isotopic composition, **Environmental Science and Pollution Research**, 23, 6102-6118.
- 9) **Prashant Hegde**, and K. Kawamura (2012) Seasonal variations of water-soluble organic carbon, dicarboxylic acids, ketocarboxylic acids, and α -dicarbonyls in Central Himalayan aerosols. **Atmospheric Chemistry and Physics**, 12, 1–21, doi:10.5194/acp-12-1-2012.
- 10) Girach, I. A., P. R. Nair, L. M. David, **Prashant Hegde**, M. K. Mishra, G. M. Kumar, S. M. Das, N. Ojha, and M. Naja (2011) The changes in near-surface ozone and precursors at two nearby tropical sites during annular solar eclipse of 15 January 2010, **Journal of Geophysical Research**, 117, D01303, doi:10.1029/2011JD016521.
- 11) Kumar, R., M. Naja, S. K. Satheesh, N. Ojha, H. Joshi, T. Sarangi, P. Pant, U. C. Dumka, **Prashant Hegde**, and S. Venkataramani (2011) Influences of the springtime northern Indian biomass burning over the central Himalayas, **Journal of Geophysical Research**, 116, D19302, doi:10.1029/2010JD015509.
- 12) Srivastava, A. K., P. Pant, **Prashant Hegde**, Sachchidanand Singh, U. C. Dumka, Manish Naja, Narendra Singh and Y. Bhavanikumar (2011) The influence of a south Asian dust storm on aerosol radiative forcing at a high-altitude station in central Himalayas, **International Journal of Remote Sensing**, 1-19, doi:10.1080/01431161.2010.531781.
- 13) Srivastava, A K, K Ram, P Pant, **Prashant Hegde** and Hema Joshi (2011) Black carbon aerosols over Manora Peak in the Indian Himalayan foothills: implications for climate forcing, **Environmental Research Letters**, 1-8, 7014002, doi:10.1088/1748-9326/7/1/014002.
- 14) Dumka, U. C, K. Krishna Moorthy, R, Kumar, **Prashant Hegde**, R, Sagar, P. Pant., N, Singh, and S, S, Babu, (2010) Characteristics of Aerosol Black Carbon Mass Concentration over a High Altitude location in the Central Himalayas from multi-year measurements **Atmospheric Research**, 96, 510–521.
- 15) Srivastava, A K, P Pant, U. C. Dumka, and **Prashant Hegde** (2010) Black Carbon Aerosol Characteristics and Its Radiative Impact over Nainital: A High-Altitude Station in the Central Himalayas, **Journal of the Institute of Engineering**, 8, 3, 1-10.
- 16) Ram, K., M. M. Sarin, and **Prashant Hegde** (2010) Long-term record of aerosol optical properties and chemical composition from a high-altitude site (Manora Peak) in Central Himalaya. **Atmospheric Chemistry and Physics**, 10, 11791-11803.

- 17) **Prashant Hegde**, Pant, P. and Kumar, Y. B. (2009) An integrated analysis of lidar observations in association with optical properties of aerosols from a high altitude location in central Himalayas, **Atmospheric Science Letters**, 10, 48–57.
- 18) **Prashant Hegde**, Major ionic composition of aerosol, rainwater and its impact on surface and sub-surface waters, in and around Mangalore, west coast of India. **Journal of Environmental Monitoring And Assessment** DOI 10.1007/s10661-006-9565-2 (2007).
- 19) **Prashant Hegde**, M.M. Sarin, A.K. Sudheer and B.R. Manjunatha, Characteristics of atmospheric aerosols over Mangalore region: southwest coast of India. **Atmospheric Environment** 41, 7751–7766 (2007).
- 20) **Prashant Hegde**, P. Pant, M. Naja, U. C. Dumka, Ram Sagar, Aerosol physical and optical properties during dust episode over Nainital. **Geophysical Research Letters** 34, L23802, doi:10.1029/2007GL030692 (2007).
- 21) P. Pant, **Prashant Hegde**, U. C. Dumka, R. Sagar, S. K. Satheesh, K. K. Moorthy, A. Saha, and M. K. Srivastava, Aerosol characteristics at a high-altitude location in central Himalayas: Optical properties and radiative forcing. **Journal of Geophysical Research**, 111, D17206, doi:10.1029/2005JD006768 (2006).
- 22) Dumka, U. C., S. K. Satheesh, P. Pant, **Prashant Hegde**, and K. Krishna Moorthy, Surface changes in solar irradiance due to aerosols over central Himalayas. **Geophysical Research Letters**, 33, L20809, doi: 10.1029/2006GL027814 (2006).
- 23) Srivastava, M. K., S. Singh, A. Saha, U. C. Dumka, **Prashant Hegde**, R. Singh, and P. Pant, Direct solar ultraviolet irradiance over Nainital, India, in the central Himalayas for clear-sky day conditions during December 2004. **Journal of Geophysical Research**, 111, D08201, doi:10.1029/2005JD006141 (2006).
- 24) P. Pant, **Prashant Hegde**, U. C. Dumka, Ram Sagar, S. K. Satheesh, K. Krishna Moorthy, Aerosol characteristics at a high altitude location during the ISRO-GBP Land Campaign-II. **Current Science**, 91, 8, 1053-1061 (2006).
- 25) **Prashant Hegde** and Manjunatha, B. R., Atmospheric deposition of H⁺ and major ions around Mangalore, southwest coast of India. **Journal of Applied Geochemistry**, 5: 89-93 (2003).
- 26) Sreekumar, N.V., Narayana, B., **Prashant Hegde**, Manjunatha, B.R., Sarogini, B.K., Determination of nitrite by simple diazotization method. **Microchemical Journal (Elsevier)** 74:27-32 (2003).
- 27) Sreekumar, N.V., N.G. Bhat, Narayana, B., Nazareth, R., **Prashant Hegde** and Manjunatha, B.R., Selective complexometric determination of titanium (IV) using sodium potassium tartrate or ascorbic acid as masking agent. **Microchimica Acta** (Springer-Verlag) 141:29-33 (2003).

- 28) Sreekumar, N.V., Nazareth, R., Narayana, B., **Prashant Hegde**, Manjunatha, B.R., Indirect complexometric determination of mercury (II) using potassium bromide as a selective masking agent. **Mikrochemica Acta** 140, 63-67 (2002).
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- 30) Sreekumar, N.V., Nazareth, R., Narayana, B., **Prashant Hegde** and Manjunatha, B.R., Indirect complexometric determination of thorium (IV) using 5-sulfosalicylic acid as a masking agent'. **Chemical Analysis** (Warsaw) 47: 1-6 (2002).