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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., **Hegde, P.**, and Prabha 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.

2) **Hegde, P.,** 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.

3) Bindu G., P. R. Nair, S. Aryasree, **Hegde, P**., 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.

4) **Hegde, P**., 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.

5) **Hegde, P**., 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.

6) **Hegde, P.** 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.

7) Girach, I. A., P. R. Nair, L. M. David, **Hegde, P**., 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.

8) Kumar, R., M. Naja, S. K. Satheesh, N. Ojha, H. Joshi, T. Sarangi, P. Pant, U. C. Dumka, **P. 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.

9) Srivastava, A, K., P. Pant, **P. 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.

10) Srivastava, A K, K Ram, P Pant, **P. 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.

11) Dumka, U. C., K. Krishna Moorthy, R, Kumar., **P. 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.

12) Srivastava, A K, P Pant, U. C. Dumka, and **P. 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.

13) Ram, K., M. M. Sarin, and **P. 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.

14) **Hegde, P.,** 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

15) **P. 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).

16) **P. 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).

17) **P. 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:101029/2007GL030692 (2007).

18) P. Pant, **P. 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).

19) Dumka, U. C., S. K. Satheesh, P. Pant, **P. 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).

20) Srivastava, M. K., S. Singh, A. Saha, U. C. Dumka, **P. 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).

21) P. Pant, **P. 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).

22) **P. 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).

23) Sreekumar, N.V., Narayana, B., **P. Hegde**, Manjunatha, B.R., Sarogini, B.K., Determination of nitrite by simple diazotization method. **Microchemical Journal (Elsevier)** 74:27-32 (2003).

24) Sreekumar, N.V., N.G. Bhat, Narayana, B., Nazareth, R., **P. 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).

25) Sreekumar, N.V., Nazareth, R., Narayana, B., **P. Hegde**, Manjunatha, B.R., Indirect complexometric determination of mercury (II) using potassium bromide as a selective masking agent. **Mikrochemica Acta** 140, 63-67 (2002).

26) Sreekumar, N.V., Nazareth, R., Narayana, B., **P. Hegde,** Manjunatha, B.R., Indirect complexometric determination of thorium (IV) using sodium fluoride as a masking agent. **Mickochemica Acta** 140, 77-79 (2002).

27) Sreekumar, N.V., Nazareth, R., Narayana, B., **P. 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).