

Curriculum Vitae

1. **Name:** BHARAT KUMAR HUMAGAI
2. **Position:** Lecturer
3. **Employer:** College of Science and Technology, Royal University of Bhutan.
4. **Date of Birth:** 13th February, 1979
5. **Nationality:** Bhutanese
6. **Education:**



College and/or university Attended	Degree/certificate or other specialized education obtained	Date Obtained
Department of Science, Faculty of Chemistry, Osmania University. Andhra Pradesh, India	Masters in Chemistry (MSc. Chemistry)	2009
Sherubtse College, Kanglung Bhutan (Affiliated to Delhi University)	BSc.(B)	2006

7. Responsibility and Membership in Professional Associations:

- Lecturer in Science and Humanities Department(current)
- Manager, Happiness and Wellbeing Centre, CST (current)
- College Peer Counsellor (current)
- Air Quality monitoring Coordinator-Focal point for DoECC(current)
- Club Adviser, GNH Club(current)
- Dean of Student Affairs(former)
- Head of Department, Science and Humanities Department, College of Science & Technology(former)
- Chief Provost of the College(Former)
- Head, Institute-Industry Relation Officer(Former)
- External Examiner for Sherubtse College(former)
- Exam Cell member(former)
- Member of Disaster Risk Reduction and Community Development Services Centre(former)

8. Current Job Profile

1. Teach Engineering Chemistry and Environmental Science related modules in various programmes of the College.
2. Develop academic modules related to Environmental Science and Green Chemistry.
3. Supervise BE and Master's students in research and thesis work.
4. Provide consultancy services in Air Quality, Water Quality and Soil Assessment.
5. Provide Counselling services to all the students of the College.
6. Provide workshops related to Time Management, Stress Management and Academic planning to the students.
7. Plan, advise and manage GNH Club activities of the College.

9. Publications

1. Agarwal, A., Ilunga, M., Tempa, **K.**, & **Humagai, B. K.** (2024). *CFD analysis of solar air heater using V-shaped artificial roughness to attain heat transfer enhancement*. International Journal of Energy Production and Management.
2. Bani, O., & **Humagai, B. K.** (n.d.). Structural analysis and mass optimization of mobility walkers using lightweight polymer matrix composites. *Precision Mechanics and Digital Fabrication*, 1(3)
3. Kruskopf, M., Saikia, A., Lamichhane, G. P., Rahman, S., **Humagai, B. K.**, & Sayeed, A. (2025). *Insights on building capacity to support the integration of Earth observations into air quality operations in South Asia*.
4. **Humagai, B. K.** (in preparation). *GEDSI initiatives for assessment of disaster risks in Rinchending and enhancing community resilience through advocacy programs*. Paper submitted to the Journal of Environment and Development, through Australian counterparts and is awaiting publication.
5. **Humagai, B. K.** ., Adhikari, K., Pradhan, B., & Yangzom, T. (2022). Assessment of Ambient Particulate Matter Concentrations- PM₁₀, PM_{2.5} and PM₁ at Rinchending in Phuentsholing, Bhutan. *Bhutan Journal of Research and Development*. <https://doi.org/10.17102/bjrd.rub.10.2.01>
6. Assessment of Ground Level Ozone at CST and its impact; 2017-2018 (Project completed and submitted to CST Library for reference).
7. Risk Assessment of Heavy Metal Ions in Pasakha Rivers; 2016 - 2017 (Project completed and submitted to CST Library for reference).
8. Health risk Assessment of Black Carbon and PM_{2.5} in Pasakha Bhutan, 2014-2015 (Project completed and submitted to CST Library for reference).
9. Research on *Pathological Stress on Chirpine, Eastern Bhutan*, 2005. (Project completed and submitted to Sherubtse College Library for reference).
10. Current Status of the Odonata of Bhutan: A Checklist with four New Records, 2003-2004. Published in RNR Journal; Bhu.J.RNR, Vol 2, No 1, 136 - 143 March 2006.
11. Comprehensive Assessment of Occupational Exposure to Air Pollutants in Phuentsholing: Monitoring PM, VOCs, SO₂, and CO in Various Workplaces and Public Spaces. **(ongoing project)**
12. Occupational and Environmental Air Quality in Phuentsholing: Evaluating PM, VOCs, SO₂, and CO Exposure with Development of Affordable Ventilation Solutions. **(ongoing project)**
13. Monitoring PM_{2.5} across 15 sites nationwide in Bhutan through EPIC AQ project as Co-Investigator. **(ongoing project)**