

## **Dr. Somvir Bajar**

Assistant Professor

Department of Environmental Sciences

School of Earth, Environment & Space Studies

Central University of Haryana

Jant-Pali, Mahendergarh (Haryana)-123031

E-mail: [sk\\_somvir@yahoo.com](mailto:sk_somvir@yahoo.com), [sksomvir@cuh.ac.in](mailto:sksomvir@cuh.ac.in)

Mob.: +91 89 50 000270



### **Education**

---

**Ph.D., Environmental Science & Engineering**, Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar, Haryana (India), 2014

*Title: Flux and Mitigation of Methane from Solid Waste Dumpsites in Subtropical conditions*

**M.Sc., Environmental Science**, Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar, Haryana (India), 2006 (1<sup>st</sup> Class, 74.92%)

**Post Graduate Diploma in Industrial Safety Management (PGDISM)**, Directorate of Distance Education, Guru Jambheshwar University of Science & Technology, Hisar, Haryana (India), 2009 (1<sup>st</sup> Class, 70.22%)

**B.Sc. (Medical)**, JVMGRR College, Ch. Dadri (Bhiwani, Haryana), Maharashi Dayanand University, Rohtak, Haryana (India), 2004 (1<sup>st</sup> Class, 75.03%)

### **Academic/ Research Positions**

---

2014- 2016	Senior Demonstrator (Env. Health), PGIMER, Chandigarh (India)
2013-14 & 2011-12	Project Fellow, UGC-MRP, Department of Env. Sc. & Engg., GJUS&T, Hisar
2010-12	Guest Faculty, Department of Env. Sc. & Engg., GJUS&T, Hisar
2008-09	Contractual Faculty, Department of Env. Sc. & Engg., GJUS&T, Hisar
2008	Guest Faculty, Department of Env. Sc. & Engg., GJUS&T, Hisar

### **Research Projects Experience**

---

- UGC Major Research Project entitled “Photobioreactor based Sustained Hydrogen Production Integrated with Heavy metal Removal from Wastewaters using Cyanobacterial Systems” (2011-2012 & 2013-14)
- Department of Environment (DoEn), Government of Haryana (GoH), project entitled, “Assessment of Atmospheric Pollutants Associated with Respirable particulate matter (PM<sub>10</sub> & PM<sub>2.5</sub>) in Panipat area” (2011-12)
- Department of Environment (DoEn), Government of Haryana (GoH), project entitled, “Emission and Siting Criteria for Brick Kilns in Haryana” (2007)
- National Ambient Air Monitoring Programme (NAMP) - CPCB, New Delhi, operated one of the station at Hisar, Haryana (India) (2007-2013).
- M.Sc. dissertation project entitled, “Tolerance of two indigenous cyanobacteria to Cr (VI) and metal removal potential of their exopolysaccharides” (2005-06).

### **Consultancy Experience**

---

- Visited more than 800 industries for environmental sample collection/ consultancy (2007-2013, Amount: Approx. Rs. 80 lakhs).
- Consultancy Project entitled, “Regular Monitoring of Regular Environmental Monitoring of Ambient Air, Stack Emission, ESP Efficiency, Water Effluent, Fly Ash Quality & Meteorological Parameters” for “Panipat Thermal Power Station (PTPS), Panipat (Haryana) (December, 2010 to March, 2013; Amount: Rs. 60, 32, 980).
- Annual EMG Contract for testing of Ambient Air, Water, Effluent, Water Quality, Analysis of Iron & Various Heavy Metals, Stack Emission and Analysis of Drinking Water Testing for plant and Township in and Around NTPC Faridabad” for “Faridabad Gas Power Station, NTPC Ltd., Neemka Faridabad (Haryana) (June, 2011 to May, 2012 & June, 2012 to March, 2013; Amount: Rs. 16,67, 100)
- Consultancy Project entitled, “Environmental Monitoring at and around IGSTPP” for “Indira Gandhi Super Thermal Power Plant, Araveli Power Corporation Pvt. Ltd., Jharli, Jhajjar (Haryana) (November, 2011 to October, 2012 & December, 2012 to August, 2013; Amount: Rs. 21,38,150).

## Refereed Journal Articles

---

- **Bajar, S.\***, Singh, A., Kaushik, C.P., Kaushik, A. (2016). Statistical assessment of dumpsite soil suitability to enhance methane bio-oxidation under interactive influence of substrates and temperature. *Waste Management*, DOI: 10.1016/j.wasman.2016.12.021
- **Bajar, S.\***, Singh, A., Kaushik, C.P., Kaushik, A. (2016). Evaluation and Statistical Optimization of Methane Oxidation using Rice Husk Amended Dumpsite Soil as Biocover. *Waste Management*, 53: 136–143.
- Singh, A., **Bajar, S.**, Bishnoi, Narsi R. (2014). Enzymatic hydrolysis of microwave alkali pretreated rice husk for ethanol production by *Saccharomyces cerevisiae*, *Scheffersomyces stipitis* and their co-culture. *Fuel*, 116: 699–702.
- Kulhari, A., Sheorayan, A., **Bajar, S.**, Sarkar, S., Chaudhury, A., Kalia, R.K. (2013). Investigation of heavy metals in frequently utilized medicinal plants collected from environmentally diverse locations of north western India. *Springer Plus (Springer)*, 2: 676-684.
- **Bajar, S.\***, Kaushik, C.P., Kaushik, A. (2013). Dynamics of methane oxidation in landfill cover soil under variable composition of microcosm gaseous regime. *International Journal of Environmental Research and Development*, 3: 17-24.
- **Bajar, S.**, Kaushik, C.P., Kaushik, A. (2013). Optimization of temperature and moisture content for methane oxidation in acclimatized subtropical landfill soil using Response Surface Methodology. *Indian Journal of Environmental Science*, 17(2): 91-99.
- Singh, A., **Bajar, S.**, Bishnoi, Narsi R., Singh, N. (2010) Laccase production by *Aspergillus heteromorphus* using distillery spent wash and lignocellulosic biomass. *Journal of Hazardous Materials*, 176: 1079-1082.
- Sharma, M., Kaushik, A., **Somvir**, Bala, K. and Kamra, A. (2008), Sequestration of Chromium by exopolysaccharides of *Nostoc* and *Gloeocapsa* from dilute aqueous solutions". *Journal of Hazardous Materials*, 157: 315-318.

\* Corresponding Author

## Proceedings / Books chapters

---

- Singh, A. and **Bajar, S.** (2016). Microalgal Biomass a Renewable Source for Bioethanol Production, *Microalgae: Windows of Opportunity* (Ed. Sharma, M., Bansal, D. and Chauhan, A.), SBW Publishers, New Delhi (ISBN - 978-81-85708-64-5 (Print).
- Verma, S., Verma, M., Singh, A., **Bajar, S.** (2014). Isolation and Screening of Cellulase Producing Fungi from Jammu Region. Proceeding of 2<sup>nd</sup> National Conference on Converging Technologies Beyond 2020, Nov 28 – 29, 2014. University Institute of Engineering and Technology, Kurukshetra University, Kurukshetra, Haryana (India) (ISSN -2394-2339 (Print).
- **Bajar, S.**, Singh, A. (2008). Technique of Remote Sensing and its application in Environmental Management. National Conference on Environmental Degradation –Challenges and Remedies (EDCR-08), Mar 13-14, 2008. Maharashi Markandeshwar University, Mullana - Ambala, Haryana (India), pp. 451-456.
- **Bajar, S.**, Singh, A. (2008). E-Waste and its management challenges in India. National Conference on Environmental Degradation –Challenges and Remedies (EDCR-08), Mar 13-14, 2008. Maharashi Markandeshwar University, Mullana - Ambala, Haryana (India), pp. 463-469.
- Singh, A., Dhanda, N., Jakhar, S., **Somvir** (2008). Analysis of ground water quality of Ellenabad by correlation technique. National Conference on Futuristic Trend in Engineering & Technology (FTET-08), Jan 28-29, 2008. J.C.D.M. College of Engineering, Sirsa, Haryana (India), pp. 392-394.

## Personal Details

---

Date of Birth	October 10, 1983
Religion	Hindu
Marital Status	Married