



### **Biodata**

1. **Full Name** : **Dr. Arvind Kumar Mungray**
2. **Birth Date (age)** : 08<sup>th</sup> July, 1978 (31 years)
3. **Affiliation** : Department of Chemical Engineering  
Sardar Vallabhbhai National Indian Institute of  
Technology Surat (SVNIT)  
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[amungray@yahoo.com](mailto:amungray@yahoo.com)
4. **Position** : Lecturer  
Department of Chemical Engineering, SVNIT Surat,  
Gujarat
5. **Final Education** : Ph.D. - 2007
6. **Final degree** : B. Tech. (Chemical) H.B.T.I. Kanpur, 2000  
M.Tech. (Chemical) I.T. B.H.U. Varanasi, 2002  
Ph.D. (Environmental Engg.) IIT Roorkee, 2007
7. **Job History** :

Sardar Vallabhbhai National Indian Institute of Technology Surat (SVNIT), Gujarat	Lecturer	Jan. 2007 – todate	Teaching, Research, Administrative.
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## 8. Recent Research Activity:

**Research Fields of Interest:** Wastewater Treatment (biological treatment), sludge treatment, aerobic, anaerobic processes

### M.Tech. Dissertations Guided

**(1) Mr. Prakash Konakala (M.Tech.)**

**Project:** To evaluate the performance of tertiary treatment in a full scale up-flow anaerobic sludge blanket (UASB) based sewage treatment plant. **(Completed).**

**(2) Ms. Khushbu Patel (M.Tech. 2nd Yr.)**

**Project:** Removal of Pathogens and Nutrients in up-flow anaerobic sludge blanket (UASB) based sewage treatment plants. **(Completed).**

**(3) Mr. Ashwin (M.Tech. Ist Year)**

**(Recently Joined)**

**(4) Mr. Aantaram Salvey (M.Tech. Ist Year)**

**(Recently Joined)**

## 9. Publications

**(i) Papers published/submitted in International Journal (Refereed journals):  
[7 are published/accepted]**

**(Total No. 10; Published: 5, Accepted: 2, Communicated: 3)**

1. **Mungray, A.K.** and Kumar, P. Degradation of anionic surfactants during drying of UASBR sludges on sand drying beds. **Journal of Environmental Management**, Volume 88(4), 2008, 995-1002. **(Impact factor: 2008: 1.794)**
2. **Mungray, A.K.** and Kumar, P. Anionic surfactants in treated sewage and sludges: Risk assessment to aquatic and terrestrial environments. **Bioresource Technology**, Volume 99(8), 2008, 2919-2929 **(Impact factor: 2008: 4.453)**
3. **Mungray, A.K.** and Kumar, P. Occurrence of anionic surfactants in treated sewage: Risk assessment to aquatic environments. **Journal of hazardous materials**. Volume 160(2-3), 2008, 362-370. **(Impact factor: 2008: 2.975)**
4. **Mungray, A.K.** and Kumar, P. Fate of anionic surfactants in 38 ML/d UASB based sewage treatment Plant. **Journal of Environmental Engineering, American Society of Civil Engineering (ASCE)** Volume 134 (12), 2008, 1014-1022. **(Impact factor 2008: 1.244)**

5. **Mungray, A.K.** and Kumar, P. Tracing anionic surfactants through up-flow anaerobic sludge blanket based sewage treatment plants: Mass balance. **Process Safety and Environmental Protection**. Volume 87 (4), 2009, 254-260 (**Impact factor: 2008: 0.400**).
6. **Mungray, A.K.** and Kumar, P. Fate of Anionic Surfactants in the Environment: A Review. International Biodeterioration and Biodegradation (**Accepted/online**) (**Impact factor: 2008: 1.375**)
7. Khushboo Patel, **A. K. Mungray**, Z.V.P. Murthy, Removal of anionic surfactants in 100 ML/D UASB reactor with diffused aeration based post treatment system. Journal of Environmental Research and Development. Volume 3 (3) 2009, 796-802.

**(ii) Papers published/presented in International Conference/Seminar: (15)**

1. **Mungray, A.K.** and Kumar, P. Fate of anionic surfactants in sewage treatment. Jordan International Chemical Engineering Conference –V, JICEC-V 2005. September 11- 17, 2005, **Amman, Jordan**.
2. **Mungray, A.K.** and Kumar, P. The concentration and fate of anionic surfactants in UASB and ASP based STPs: Assessment of relative impacts on aquatic environment. International symposium on recent advances in water resource development and management, WRD&M, November 23 – 25, 2005, IIT Roorkee, India.
3. **Mungray, A.K.** and Kumar, P. Fate of anionic surfactants in UASB and Oxidation ponds based STPs. Chemical Engineering conference, **CHEMCON**, held in December 14-17, 2005 at IIT Delhi, India.
4. **Mungray, A.K.** and Kumar, P. Fate of anionic surfactants in UASB based STPs: A comparison with activated sludge plant. International congress of Chemistry and Environment, December 24-26, 2005, Indore, India.
5. **Mungray, A.K.** and Kumar, P. Treatment of detergents and phosphorous in UASB based sewage treatment plants. International interdisciplinary conference on sustainable technologies for environmental protection, January 7-9, 2006. Coimbatore, India.
6. Hussain, A., **Mungray, A.K.**, Kumar, P., Mehrotra, I. Anaerobic biotransformation of Phenol: Effect of microbial population and nitrogen. International interdisciplinary conference on sustainable technologies for environmental protection, January 7-9, 2006. Coimbatore, India.
7. **Mungray, A.K.** and Hussain, A. Absorption of Sulfur Dioxide in Aqueous Sodium carbonate solution. International conference on Mesoscale processes in atmosphere, ocean and environmental systems, February 14 – 17, 2006, IIT Delhi, India.

8. Hussain, A. and **Mungray, A.K.** Ambient Air Quality Monitoring of Aligarh City and its Health Effect. International conference on Mesoscale processes in atmosphere, ocean and environmental systems, February 14 – 17, 2006, IIT Delhi, India.
9. Gaule, H., Gupta, A. and **Mungray, A.K.** Hazards and Management of E-Waste: A Review. International Conference on E-Waste Management in India A Sustainable Solution, May 18, 2007, Mumbai, India.
10. Konakala, P., Patel, S.R., **Mungray, A.K.** and Murthy, Z.V.P. Treatment of anaerobic reactor effluents: A comparative approach. International Conference on “Environmental Management: Scenario and Strategies to 2020” held in the Department of Chemical Engineering, Ujjain Engineering College, Ujjain (M.P.), Dec. 26-27, 2007.
11. Patel, S.R., Jayant, M.B. John, J.V., **Mungray, A.K.** and Murthy, Z.V.P. Sonocrystallization as a method for the treatment of dairy effluents. International Conference on “Environmental Management: Scenario and Strategies to 2020” held in the Department of Chemical Engineering, Ujjain Engineering College, Ujjain (M.P.), Dec. 26-27, 2007.
12. Gaule, H., Gupta, A. and **Mungray, A.K.**, Water Reduce, Reuse and Recycle: A Review. CHEMCON 2007, Kolkata, 27-30 December, 2007
13. Bajpai, A., Jindal, A., Mungray, A. K., Phytoremediation, An effective technology for wastewater treatment: A review. CHEMCON 2007, Kolkata, 27-30 December, 2007.
14. Khushboo Patel, A. K. Mungray, Z.V.P. Murthy, Removal of anionic surfactants in 100 ML/D UASB reactor with diffused aeration based post treatment system. International Congress of Environmental Research (ICER-08), 18-20 December, 2008 BITS Pilani Goa Campus.
15. **Mungray, A.K.** and Kumar, P. Risk Assessment to the Environment Due to Anionic Surfactants in Treated Sewages and Dried Sludge’s. Environmental & Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE), World Environmental & Water Resources Congress 2009, May 17-21 in Kansas City, Missouri, USA.

**(iii) Papers published/presented in National Conference/Seminar: (4)**

1. Hussain, A., **Mungray, A.K.**, and Kumar, P. Air pollution and its impact on health. All India seminar on air pollution & health impacts, February 23-24, 2006, organized by **The Institution of Engineers (India)**, IITR, India.
2. **Mungray, A. K.** Parikh, P. A. Performance of Monolith Bioreactors in Gas-Liquid-Solid Three-phase Systems: A Review. 23<sup>rd</sup> National convention of chemical Engineers, Theme: “Recent trends in Chemical Engineering” at the Institution of Engineers (India), Roorkee, organized by Chemical Engg. Deptt., Indian Institute of Technology (IITR) on 5-7 Oct. 2007.
3. Bajpai, A., Jindal, A., **Mungray, A. K.**, Phytoremediation, an option for tertiary treatment of sewage. National Conference on Sustainable Urban Environment: Issues and Management Strategies, 27-29 Feb. 08, Civil Engg. Deptt, SVNIT, Surat.

4. Prakash, K., **Mungray, A. K.** Murthy, Z.V.P. Performance of Up-Flow Anaerobic Sludge Blanket Reactor in India. National Conference on Sustainable Urban Environment: Issues and Management Strategies, 27-29 Feb. 08, Civil Engg. Deptt, SVNIT, Surat.

**10. Consultancy and Sponsored research activities: (2 Research Projects)**

Sr. No.	Project Title	Name of the funding agency	Fund Sanctioned Rs.	Duration	Status
<b>Principal Investigator</b>					
1.	To evaluate the performance of tertiary treatment in a full scale up-flow anaerobic sludge blanket (UASB) based sewage treatment plant (STP).	Annual Plan, SVNIT	4,13,750/-	One year (Sanctioned in 2007)	Completed
<b>Co- Investigator</b>					
2	Sonocrystallization for the recovery of valuable products from dairy waste stream	Annual Plan, SVNIT	2,25,000/-	One Year (Sanctioned in 2007)	Completed

**8. Expert lecture**

Expert lecture on Wastewater treatment by using UASB reactors at N. G. Patel Polytechnic, Bardoli- Navsari road, Surat.

Expert lecture on

**11. Memberships in professional bodies: (5)**

- Life associate Member in **IChE (Indian institute of chemical engineers) (LAM-29862)**
- Life associate Member in **“The Institution of Engineers (India)” (AM-093702/1)**
- Life Member in **“Indian Society of Technical Education” (LM 52069)**
- Life Member in **“Indian Water Resources Society” (LM-07-6952)**
- Life Member in **“Indian Environmental Association” (LM-128)**

**12. Languages**

Hindi : RWS- excellent  
English : RWS-excellent  
German : R-basic W-basic S-basic

### **13. Awards Received**

- GATE Scholarship, University Grants Commission, 2000-2002
- MHRD Scholarship, Ministry of human resources & development, from 2002.
- First Prize (Trophy + 5000/- Rs.) in Poster Competition held at Mumbai organized by IChE in an International Conference on “**E-Waste Management in India A Sustainable Solution**”.

### **14. Achievements**

- Worked as a **Co-Chairman** in one the sessions in Jordan International Chemical Engineering Conference –V, on September 11- 17, 2005 at Amman, **Jordan**.

### **15. Administrative Responsibilities**

1. Hostel Warden of Hostel 2<sup>nd</sup> (Narmed Bhavan) in S.V. National Institute of Technology, Surat (2007-2008 & 2008-2009).
2. Hostel Warden of Hostel 10 (Raman Bhavan) in S.V. National Institute of Technology, Surat (2009-2010 to till date).
3. Departmental Post Graduate programme In-Charge (M.Tech. Research programme) (2007-2008 & 2008-2009).
4. Departmental Coordinator of Technical Education Quality Improvement Programme (TEQIP) (2007-2008 to till date).
5. Member of mess tender committee (2007-2008).
6. Member of Institute Software Development and Implementation. (2008 -2009).
7. Member of Institute furniture procurement committee (2007-2008 & 2008 -2009).
  - a. Member Secretary for the procurement of Class Room Boards & Display System for SVNIT, Surat.
  - b. Member Secretary for the procurement of Class Room Benches for SVNIT, Surat.
  - c. Member Secretary for the procurement of Gym Equipments for SVNIT, Surat.
  - d. Member for the procurement of Faculty Furniture for SVNIT, Surat.
8. Member of hostel admission committee (2007-2008).

### **16. Workshops/Summer Schools/ Winter schools/Short term Courses attended**

1. Assistance in the short-term course on Physical, Chemical and Biological Phenomena for WW treatment, sponsored by **CPCB** on November 16-20, 2005.
2. Attended workshop on **Special Assistance for Project Sustainability (SAPS)** study on **Yamuna Action Plan Phase-I** conducted by **NRC**, Ministry of Environment & Forests in Delhi on 15<sup>th</sup> December 2005.

3. Participated in **Japan International Cooperation Agency (JICA)** sponsored training course on “**Basics of sewage treatment**” from 27<sup>th</sup> January to 1<sup>st</sup> February at IIT Roorkee.
4. Participated in the **Indo-Australian Workshop on “CFD Approach on fluid Flow, Heat and Mass Transfer”** and symposium on “**CFD Application in Multidisciplinary Areas**” from 12<sup>th</sup> -14<sup>th</sup> April, 2007 at IIT Roorkee, India.
5. Participated in the workshop on “**Opportunities in Catalysis and Adsorptive Separation**”, conducted by Chemical Engineering Department, S.V. National Institute of Technology, Surat, from 7<sup>th</sup> – 11<sup>th</sup> May, 2007.
6. Participated in a short-term course on “**Hazardous Waste Management**”, conducted by Chemical Engineering Department, Indian Institute of Technology Roorkee, Roorkee, from 9<sup>th</sup> – 13<sup>th</sup> July, 2007.
7. Participated in Short-Term Course “**Faculty Induction Programme for newly recruited faculty members.**” One week from 15<sup>th</sup> January, 2008 SVNIT, Surat.
8. Participated in Short Term course “Sustainable Water and Waste Management Techniques” conducted by the Civil Engineering Department, SVNIT, Surat during 27-31 July, 2009.
9. Participated in Short Term course “Advanced Instrumental Methods of Analysis (AIMA)” conducted by the Chemical Engineering Department, SVNIT, Surat during 24-28 August, 2009.
10. Participated in Short Term course “Advances in Condensed matter Physics” conducted by the Department of Applied Physics, SVNIT, Surat during 31- 4 September, 2009.

### References

(i) Name: **Dr. Pradeep Kumar**

Designation: Professor

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(ii) Name: **Dr. Z.V.P. Murthy**

Designation: Professor

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### DECLARATION

**I hereby declare that all statements made in this resume are true and complete to the best of my knowledge and belief and nothing has been concealed/distorted.**

Date 16-09-09

Place: Surat

**Dr. Arvind Kumar Mungray**