

BIO-DATA

1. **Name:** Dr. Arvind Kumar Mungray
2. **Date of Birth:** 08th July, 1978
3. **Designation:** Assistant Professor
4. **Highest Qualifications:** Ph.D.
5. **Status:** Married



5. Degree Obtained:

University	Degree	Year	Field of Specialization
H.B.T.I. Kanpur/ SSJM Univ. Kanpur	B. Tech.	2000	Chemical Engineering
B.H.U. Varanasi	M. Tech.	2002	Chemical Engineering
I.I.T. Roorkee	Ph.D.	2007	Environmental Engineering

6. Employment Record:.

University	Designation	Period
S.V.N.I.T SURAT	Lecturer, Assistant Professor	15 JAN. 2007 TO TILL DATE

7. Other related experience (research, industrial etc.):

Organization/Employer	Designation	Period
Nil		

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

Sr. No.	Project Title	Name of the funding agency	Fund Sanctioned Rs.	Duration	Status
Principal Investigator					
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	4,13,750/-	One year (Sanctioned in 2007)	Completed
Co- Investigator					
2	Sonocrystallization for the recovery of valuable products from dairy waste stream	Annual Plan	2,25,000/-	One Year (Sanctioned in 2007)	Completed

9. Publications: (Total No.)

- i. Papers published in International Journal: (**Annexure -i**)
(Total: **16**)
- ii. Papers published in National Journal: (**Annexure -ii**)
(Total No.: Nil)
- iii. Papers published/presented in International Conference/Seminar: (**Annexure -iii**)
(Total No.: **22**)
- iv. Papers published/presented in National Conference/Seminar: (**Annexure -iv**)
(Total No.: **4**)

10. Workshops/Summer Schools/ Winter schools/Short term Courses attended: (16)

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 **NRCD**, Ministry of Environment & Forests in Delhi on 15th December 2005.
3. Participated in **Japan International Cooperation Agency (JICA)** sponsored training course on “**Basics of sewage treatment**” from 27th January to 1st 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 12th -14th 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 7th – 11th May, 2007.
6. Participated in a **Short Term course** on “**Hazardous Waste Management**”, conducted by Chemical Engineering Department, Indian Institute of Technology Roorkee, Roorkee, One week from 9th – 13th July, 2007.
7. Participated in **Short-Term Course “Faculty Induction Programme for newly recruited faculty members.”** One week from 15th January, 2008 SVNIT, Surat.
8. Participated in **Short-Term Course “Pedagogy & Research Methology for newly recruited faculty members.”** One week from 3-8 May, 2009 SVNIT, Surat
9. Participated in **Short Term course “Sustainable Water and Waste Management Techniques”** conducted by the Civil Engineering Department, SVNIT, Surat, One week during 27-31 July, 2009.
10. Participated in **Short Term course “Advanced Instrumental Methods of Analysis (AIMA)”** conducted by the Chemical Engineering Department, SVNIT, Surat, One week during 24-28 August, 2009.
11. Participated in **Short Term course “Advances in Condensed matter Physics”** conducted by the Department of Applied Physics, SVNIT, Surat, One week during 31-4 September, 2009.

12. Participated in the 3rd **INDO-GERMAN** workshop on “**Management of Water Supply and Wastewater System**” at IIT Bombay during 19-20 November 2009.
13. Attended **INDO-Australian** workshop on “**Recent Advances in Wastewater Treatment**” at Institute of Chemical Technology, Matunga, Mumbai during 16-17 December 2009.
14. Participated in a **Short-term course** on “**Recent developments and future trends of nanotechnology in modern science**”, conducted by Applied Chemistry Department, SVNIT, Surat, One week from 21st – 25th December, 2009.
15. Participated in two days national Workshop on “**Natural Energies Conservation and use**”, conducted by Hindi cell of SVNIT, Surat, from 29-30 September, 2011.
16. Participated in four day International training workshop on “**Environmental Statistics for professionals**” conducted jointly by IIT Bombay and TSEC from 27-30 December, 2011.

11. Other Information:

Ph.D. Supervision: 1

- (1) Amol Balasaheb Saner (**ongoing**)

M.E./M.Tech. Dissertations Guided: 6

- (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, 2007**).

- (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, 2009**).

- (3) **Mr. Ashwin (M.Tech. IInd Year)**

Project: Post treatment of anaerobic effluents

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

(Recently Joined)

- (5) **Ms. Abhilasha (M.Tech. Ist Year)**

Project: Photochemical oxidation of industrial effluents

- (6) **Mr. Biswas (M.Tech. Ist Year)**

Project: Reuse of wastewater

Memberships in professional bodies: (6)

- 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)**
- Fellow Membership (**F.I.C.C.E.**) in **“International Congress of Chemistry and Environment” FW/A/5055**
- Membership of the **International Water Association (IWA)** having membership number: **01036032**

International Recognition:

Paper Reviewer in International Journals

- (i) Journal of Hazardous Material (Elsevier) (3)
 - (ii) Desalination (Elsevier)
 - (iii) Desalination and Water Treatment Science and Engineering (Desalination Publications International Science Services)
 - (iv) Water Science and Technology (IWA, Elsevier)
 - (v) CLEAN –Soil, Air, Water (Wiley)
 - (vi) Desalination (Elsevier) (5)
 - (vii) Environmental Technology, Taylor & Francis (2)
 - (viii) Environmental Progress and Sustainable Energy, Wiley Publications (1)
 - (ix) Bioresouce Technology, Elsevier (1)
 - (x) Marine Environmental Research, Elsevier (1)
- Biographical profile published in the **MARQUIS’ Who’s Who in the Science and Engineering**, 28th edition, 2011 (Published from New Jersey, U.S.A.).

Event Organized:

Sr. No.	Name of Faculty Member	Name of Programme	Dates of Programme
1.	Dr. Arvind Kumar Mungray (Co-Coordinator)	Faculty Induction Programme for newly recruited faculty	One week from 15 th January, 2008
2.	Dr. Arvind Kumar Mungray (Coordinator)	AICTE approved STTP on “Treatment and Disposal of Wastewaters”	One week from 5 th -9 th October, 2009
3.	Dr. Arvind Kumar Mungray (Coordinator)	AICTE approved STTP on Anaerobic Digestion of Wastewaters	One week from 22 th – 26 th February 2010

Administrative Responsibilities

1. Hostel Warden of Hostel 2nd (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 (2009-2011).
3. Chief Warden of Hostel 1 (Bhabha Bhavan of 800 capacity) in S.V. National Institute of Technology, Surat (2011-2012 to till date).
4. Departmental Post Graduate programme In-Charge (M.Tech. Research programme) (2007-2008 & 2008-2009).
5. Departmental Coordinator of Technical Education Quality Improvement Programme (TEQIP) (2007-2008 to till date).
6. Member of mess tender committee (2007-2008).
7. Member of Institute Software Development and Implementation. (2008 -2009).
8. 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.
9. Member of hostel admission committee (2007-2008).
10. First year Divisional Coordinator of Division A (2008-2009 & 2009-2010)
11. B. Tech. Final Year Faculty advisor (2008-2009 & 2009-2010)
12. In-charge Head of the Department (23-05-09 to 15-06-09)
13. Departmental Post Graduate program In-Charge (M.Tech. program) (2010-2011).

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 IICHe in an International Conference on **“E-Waste Management in India A Sustainable Solution”**.

Achievements

- Worked as a **Co-Chairman** in one the technical sessions in Jordan International Chemical Engineering Conference –V, on September 11- 17, 2005 at Amman, **Jordan**.
- Worked as a **Co-Chairman** in one the technical sessions on Environmental Impact Assessment and Remote Sensing in National Conference on Sustainable Urban Environment: Issues and Management Strategies” during 27-29 Feb. 2008 at Civil Engineering Department, SVNIT, Surat.

- Worked as a **Chairman** in one the technical sessions in International Congress of Environmental Research at BITS-Pilani, Goa Campus, India during Dec. 18-20, 2008.

Expert lecture Delivered

- (i) Expert lecture on Wastewater treatment by using UASB reactors at N. G. Patel Polytechnic, Bardoli- Navsari road, Surat.
- (ii) Expert lecture on Post treatment of UASB effluents in AICTE approved STTP “**Sustainable Water and Waste Management Techniques**” conducted by the Civil Engineering Department, SVNIT, Surat, One week during 27-31 July, 2009.
- (iii) Expert lecture on “Need of tertiary treatment for anaerobic wastewater treatment” in AICTE approved STTP “**Treatment and Disposal of Wastewaters**” conducted by Chemical and Civil Engineering Department, SVNIT, Surat.
- (iv) Expert lecture on “Anaerobic treatment of wastewaters” in AICTE approved STTP “**Anaerobic Digestion of Wastewaters**” conducted by Chemical Engineering Department, SVNIT, Surat.
- (v) Expert lecture on “Sustainable solution for wastewater treatment” at Kribkho.
- (vi) Expert Lecture at Center for Environment Research, Vidyabharti Institute of Technology and Research Centre on “Wastewater treatment and reuse”

Annexure- (i)

(i) Papers published in International Journal: 16

1. **Mungray, A.K.** and Kumar, P. Degradation of anionic surfactants during drying of UASBR sludges on sand drying beds. **Journal of Environmental Management**, 88(4), 2008, 995-1002.
(Impact factor: 2009: 2.367)
2. **Mungray, A.K.** and Kumar, P. Anionic surfactants in treated sewage and sludges: Risk assessment to aquatic and terrestrial environments. **Bioresource Technology**, 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**. 160(2-3), 2008, 362-370.
(Impact factor: 2009: 4.144)

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)* 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*. 87 (4), 2009, 254-260.
(Impact factor: 2009: 1.124)
6. **Mungray, A.K.** and Kumar, P. Fate of Anionic Surfactants in the Environment: A Review. *International Biodeterioration and Biodegradation*. 63 (8), 2009, 981-987
(Impact factor: 2009: 2.252)
7. Patel, K, **Mungray, A. K.**, Murthy, Z.V.P. Removal of anionic surfactants in 100 ML/D UASB reactor with diffused aeration based post treatment system. *Journal of Environmental Research and Development*. 3 (3) 2009, 796-802.
8. Patel, K., Sarve, A., **Mungray A. K.** Hydrodynamics of a Bench Scale Aerated Post Treatment Unit for up-flow anaerobic sludge blanket Reactor. *Chemical Product and Process Modeling*. 4(1), 2009, Article 40.
9. **Mungray, A.K.** and Patel K. Coliforms Removal in 43 ML d⁻¹ and 100 ML d⁻¹ UASB + ASP Based Systems. *International Biodeterioration and Biodegradation*, 65, 2011, 23-28.
(Impact factor: 2008: 2.252)
10. Mungray, A.K., Murthy, Z.V.P., Tirpude, A.J. Post Treatment of Up-Flow Anaerobic Sludge Blanket Based Sewage Treatment Plant Effluents: A Review. *Desalination and Water Treatment*, 22 (2010) 220–237.
(Impact factor: 2011: 0.750)
11. **Mungray, A.K.** and Patel K. Combination of up-flow anaerobic sludge blanket reactor and a novel cascade sponge reactor for sewage treatment. *Water Science and Technology*, 2011.
(Impact factor: 2009: 1.094).
12. Dixit A, Tirpude A. J., **Mungray A. K.** , Chakraborty M. Degradation of 2, 4 DCP by sequential biological – advanced oxidation process using UASB and UV/TiO₂/H₂O₂. *Desalination*, 272, 2011, 265-269. (Impact Factor: 2009: 2.034).
13. Dixit, A., **Mungray, A. K.**, Chakraborty, M. Photochemical oxidation of phenol and chlorophenol by UV/H₂O₂/TiO₂ process: A Kinetic Study. *International Journal of Chemical Engineering and applications*. 1(3) 2010. ISSN: 2010-0221.
14. Shilpa, A., **Mungray, A. K.**, Chakraborty, M. Modelling and optimization of process parameters by Taguchi method: Degradation of phenolic compounds by UV/H₂O₂/TiO₂ process. *Chemical Product and Process Modeling*. (Accepted).

15. Mungray, A. A., **Mungray, A. K.**, Kulkarni, S. V. Removal of Mercury from wastewater using miceller enhanced ultrafiltration. **Research Journal of Chemistry and Environment**. 15(4), 2011. (Impact Factor: 2009: 0.323).
16. Mungray, A. A., **Mungray, A. K.**, Kulkarni, S. V. Removal of heavy metals from wastewater using MEUF technique: A review. **Central European Journal of Chemistry**. 10(1), 27-48, 2012. (Impact Factor: 2010: 0.0.991).

Annexure: -(ii)

(ii) Papers published in National Journal: Nil

Annexure -(iii)

(iii) Papers published/presented in International Conference/Seminar: 22

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.
 16. **Patel, K. and Mungray, A. K.** Performance of 43 ML/d Up-flow Anaerobic Sludge Blanket Reactor with Activated Sludge Process as a Post treatment for Coliform removal. 4th International congress of Chemistry and Environment (ICCE-2009) at **Thailand** during 21-23 Jan 2010.
 17. Dixit, A., **Mungray, A. K.**, Chakraborty, M. Photochemical oxidation of phenol and chlorophenol by UV/H₂O₂/TiO₂ process: A Kinetic Study. 2nd International Conference on Chemical, Biological and Environmental Engineering (ICBEE 2010) at Cairo, Egypt during 2-4 November, 2010.
 18. Mungray, A. A., **Mungray, A. K.**, Kulkarni, S. V. Removal of Mercury from wastewater using micellar enhanced ultrafiltration. 5th International congress of Chemistry and Environment (ICCE 2011) at Malaysia during 27 – 29 May, 2011.
 19. **Mungray, A. K.**, Kumar, P. Removal of Anionic Surfactants in UASB and Polishing Pond Based Sewage Treatment Plants. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011.

20. **Mungray, A. K.**, Biswas, S. Fate of Up-Flow Anaerobic Sludge Blanket Reactor Effluents in Biologically Activated Carbon Filter. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011.
21. Mungray, A. A., **Mungray, A. K.**, Kulkarni, S. V. Removal of Heavy Metal from Wastewater Using Surfactant by Ultrafiltration. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011.
22. Mungray, A. A., Kanan, K.P., **Mungray, A. K.** Performance of Dynamic Membranes in Anaerobic Membrane Bioreactor: A Review. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011

(Annexure- iv)

(iv) 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. 23rd National convention of chemical Engineers, Them: "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.

References

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

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

Designation: Professor

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E-mail: zvpm2000@yahoo.com

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 10-06-11

Place: Surat

Dr. Arvind Kumar Mungray