



BIODATA OF PROF. RAJENDRAKUMAR V. SARAF, FIE

❖ Personal

- Date of Birth – 6th July 1950
- Present Assignment
Chairman – Viraj Envirozing India Pvt. Ltd.
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❖ Qualifications

- B.Sc. (Physics, Chemistry, Mathematics), Nagpur University
- M.Sc. (Biochemistry) Nagpur University
- AMIE (Chemical Engineering)
- M.Sc. (Environmental Control Engineering & Resource Utilization) University of Strathclyde, Glasgow, U.K.
- FIE (Environmental Engineering)

❖ Memberships

- a. FIE – Life Fellow (Environmental Engineering), Institution of Engineers, India
- b. FIWWA – Life Fellow, Indian Water Works Association.
- c. MIAEM – Life Member Indian Association of Environmental Management
- d. Life Member of Marathi Vidnyan Parishad
- e. Life member of Vijnan Bharati
- f. Life member of Indian Plumbing Association
- g. Founder President of Society of Environmental Activities.
- h. Member Rotary Club Pune Royal

❖ Position Served

- Vice-chairman of India Water Works Association, Pune Center
- Six times served as Committee member of Pune Local Center of The Institution of Engineers (India).
- Executive President of Marathi Vidnyan Parishad

- Convenor 32nd National Convention of Environmental Engineering Division of The Institution of Engineers India held in Pune
- Chairman Technical & Commercial Committee of 45th National Convention of Indian Water Works Association
- Convenor of Environmental Engineering Division of Maharashtra State Centre The Institution of Engineers India for 2014 – 2016 & 2016 -2018
- Editor Water Stream News Letter of IWWA Pune Centre
- Editor News Letter Pune Local Centre of The Institution of Engineers (India)
- Director Technical – Indian Water Works Association
- Honorary Editor Journal Indian Water Works Association
- Member Editorial Board of Journal Indian Water Works Association
- Served as coordinator for Youth Forum organized in 44th 45th & 46th & 50th Annual Convention of IWWA.

❖ **Present Assignment**

- Vice President Marathi Vidnyan Parishad Pune
- Committee member, Pune Local Center The Institution of Engineers (India)
- Chairman of Viraj Envirozing India Pvt. Ltd, Pune
- Director Service Project, Rotary Club of Pune Royal
- Member Editorial Board of Journal Indian Water Works Association
- Director Viraj Paryavaran Prashala Pune

❖ **Association with Universities & Institutions**

- Associated with Savitribai Phule Pune University, SRTM Nanded & Shivaji University Kolhapur etc as the Visiting Faculty
- Associated with 72 Institutes in Pune & all over India
- Research Guide For BE, ME & M.Sc. Students, Pune University

❖ **Professional Achievements- Academic**

- 82 Papers are Published in Indian & International Journals
- Presented Paper in Indian Engineering Congress held in Bangalore, Hyderabad, Gauhati, Kolkata & Chennai.
- More than 15 Articles published in news Paper
- Presented Paper in 31st National Convention of Environmental Engineering held in Chandigarh
- Received three times Hindustan Dorr- Oliver best Paper presentation award in Annual conventions of Indian Water Works Association.
- More than 60 students completed Research Project for their Master Degree
- Participated as Guest Speaker, Chairman and active participants in many technical seminars, workshops, conferences in India & abroad.
- Organized workshops, seminars & conferences on State, National & International levels.

❖ **Professional achievements - Technical**

- Forty Six years of Experience in the Field of Environmental Control Technology.
- Received Patent for Deep Tank Aeration System
- Developed low cost treatment plant named as Zero Energy Natural Treatment Process
- Design water treatment plant for Industries, township & residential complexes of capacities from 0.5 to 60 MLD.
- Carried out Water Audit, Environmental Audit of the Institution & Industries
- Introduce Three Ties System in Residential Complex for Reuse of sewage and reduction of Fresh water consumption
- Converted the waste into Value added products
- Carried out Treat-ability Studies, Developed the Treatment Technology, & Designed Water & Waste Water Treatment Plant, Installed & Commissioned the Waste Treatment Plants for following Industries.
Pulp & Paper Mills, Sugar, Tannery, Dairy, Chemicals, Textiles, Food Processing, Metal manufacturing & Processing, Engineering Units, Fertilizers

❖ **Professional Achievements – Public Lectures**

- Deliver more than 300 lectures on the related topics as the Chief Guest, Guest of honor and the theme address speaker on the relevant topics of Environment.
- Delivered more than 300 lectures on topics related to Energy, Water & Environment. Some of the important topics are as below.
 - Value added Products from Waste
 - Small Business Opportunities in Water Sector
 - Low cost Water & Waste Water Treatment Technologies
 - Reduction, Treatment & Disposal of Municipal Solid waste
 - Capacity Building Water Quality Management
 - Water Foot Print to Assess & Reduce Water Consumption
 - Reduction of Water Consumption from 135 to 90 LPCD
 - Capacity Building in Technical Write-up
 - Environment Management Plan for Temples
 - Critical Evaluation of Rain Water Harvesting
 - Energy costing of Residential Complex.
- Some of the Prestigious lectures are as below
 - ✓ Water Foot Print – Vasnat Vakhyan Mala Pune
 - ✓ Water Foot Print a new tool – Vasnat Vyakhyan Mala, Nashik
 - ✓ Key note address on World Water Day – School of Earth Science SRTM University, Nanded
 - ✓ Key Note Address in the International Conference held at MMNIT, Allahabad
 - ✓ Theme Address on World Environment Day celebration at CIDCO, Navi Mumbai.

- ✓ Theme address on World Environment Day Celebration by Indian Water Works Association & UP Jalnigam, Lucknow.
- As Editor of IWWA Conducted 10 Workshops on Capacity Building in Technical Write-up for professionals, academicians, research Scholars & students.
- Delivered more than 50 lectures to promote Science in Marathi Schools.
- Conduct Workshops on Science & Engineering of Listening students of School & College & Employees of the organizations to develop learning skill for better performance.

❖ **Specially developed projects.**

1. Develop Design Parameters for Swimming Pool that is safe and having Crystal Clear water.
2. Design of Special Swimming pools for Marine Engineers at Tolani Maritime Institute.
3. Application of wet land for Sewage Treatment
4. Low cost Natural Treatment named as Root Zone Cleaning System for Sewage, Dairy effluent, Waste Coolant, Laundry Waste & kitchen Waste Water etc.
5. Up flow Anaerobic Fixed Media Reactor for treatment of wastewater containing Phenols & Detergents.
6. Value added products from organic & inorganic sludge & solid waste e.g.
 - Briquette of Organic Solid Waste from Pulp & Paper Mills
 - Conversion of lime sludge from Paper Mills into Cement
 - Solid waste from fruit processing industry into the fodder
 - Segregation of Solid waste & recovery of valuable products from Municipal & industrial solid wastes
 - Chemicals from Eggshell.
7. Low Cost Rotating Biological Contactor for Sewage
8. Compact Sewage Treatment Plant with deep tank aeration
9. Critical evaluation techniques for Rain Water Harvesting
10. Recycling of Waste water and reduction in fresh water consumption by 40 to 50% in Residential complex.
11. Iron Removal from water
12. Recovery of Liquid Fertilizer during composting
13. Green buildings & Eco housing
14. Calculation of Carbon dioxide Foot print in Building industry
15. Model development for calculation of Water Foot print of the products and activities.
16. Environment management Systems for Pilgrim places.
17. Developed energy & water efficient Three Tier Model for Water Management in Residential complex that saves 30 to 40% energy 40 to 50% of fresh water.

❖ **Training Program**

Conducted many training program for Students, Engineers and professional on following subjects

- Water, Waste & Environment Audit
- Energy costing
- Total water quality management
- Value added Products from waste
- Water conservation.
- Critical review of Rain water harvesting
- Eco-housing & Green Buildings
- Capacity Building in Water Supply & Sanitation
- Capacity Building of Maid Servant for Water & Resource Conservation
- Science & Engineering of Listening

❖ **Books**

- Pani Apli Jeevan dhara
- Contributed Chapter in Environmental Science
- Vision on Pollution

❖ **Patent**

- Deep Tank Aeration system for Sewage Treatment Plant (Received)
- Zero Energy Natural Treatment Process (Pending)

❖ **Citation**

- Kavya Mitra Sanstha, Pune Rashtriya Jeevan Gaurav Pursakar – Paryavaran
- Marathi Vidnyan Parishad Pune for propagating Science in Marathi

❖ **Workshops, Seminar & Conference Organized**

More than 100 on Water & Environment related Topics in Pune & all over India.

❖ **Social Cause**

- Member of Expert Committee for Smart City Cell of Pune Municipal Corporation.
- Member of Syllabus Committee for Savitribai Phule University, Pune & others.
- Propagate the concept of Reduction in Water Consumption and Waste Generation.
- Delivered more than 300 Public lectures to create awareness for Reduction in Resource consumption & Waste generation.