#### **BIO-DATA**

Name : R.SARASWATHI

**Date of birth** : 12-03-1970

Marital status : Married

**Religion** : HINDU

**Address for communication** : P-1, New Quarters

Government College of Technology

Coimbatore - 641013.

Phone (Resi.): 0422-2450089

Mobile: 9994672205

Email: n\_sasicit@yahoo.co.in; saraswathi70@rediffmail.com

**Permanent address** :  $\frac{1}{578}$ , Ramalakshmi Nagar

3<sup>rd</sup> Street, Collectorate Post Chettinaickenpatti Village

Dindigul – 624004.

Languages known : Tamil & English.

# **EDUCATIONAL QUALIFICATION**

COURSE	SCHOOL/INSTITUTION	BOARD/ UNIVERSITY	YEAR OF PASSING	% OF MARKS
Ph.D. (Civil Engg.)	Govt. College of Technology Coimbatore	Anna University Chennai	May 2013	
M.E. (Env. Engg.)	Govt. College of Technology Coimbatore	Bharathiar University	Dec 2000	67.00
B.E (Civil Engg.)	Govt. College of Technology Coimbatore	Bharathiar University	May 1999	67.71
D.C.E.	Tamilnadu Women's Polytechnic, Madurai	State Board	Apr 1989	78.00
S.S.L.C.	St. Joseph's Girls Hr. Sec. School Dindigul	State Board	Mar 1986	84.80

Title of thesis in PhD Degree: Optimization and Modelling of Physicochemical and Solid FluxParameters

for Paper and Pulp Mill Effluent Treatment using ASP including Microbial

Analysis.

Title of thesis in M.E. Degree: Study of Air Pollution due to Automobile Emission

Title of thesis in B.E. Degree: Experimental investigation on the strength characteristics of FRC under

compression loading and to analyze the beams with various percentage of

steel fiber.

Membership in Professional Body: ISTE Life Member

**ADDITIONAL INFORMATION:** 1) Passed in NCC 'A' certificate examination

2) Participated in NCC annual training camp

3) Active member of NSS in polytechnic

#### SUBJECT TAUGHT IN UG:

Water supply Engineering, Sanitary Engineering, Principles of Environmental Science and Engineering

Basic Civil Engineering,

Principles of Sustainable Development, Fluid Mechanics Lab,

Environmental Engineering Lab.

**PG**: Principles of Sustainable Development

Separation Processes in Environmental Engineering Design of Water and Wastewater Treatment Plants

Environmental Impact Assessment Industrial Pollution Prevention

Ecology and Ecosystem Management,

Environmental Microbiology Environmental Engineering Lab.

# DETAILS OF EXPERIENCE AS ON 01.01.2014

Name & Address of the	Post held	Scale of Pay /	Period o	f Service	Duration		
Institution/Organization	1 ost neta	Pay Band	From	To	Y	M	D
Coimbatore Institute of Technology, Coimbatore	Professor	Rs. 37,400 - 67,000 AGP Rs.10,000	01.06.2018	Till Date		03	
Coimbatore Institute of Technology, Coimbatore	Associate Professor	Rs. 37,400 - 67,000 AGP Rs.9,000	01.10.2013	31.05.2018	04	07	00
Coimbatore Institute of	Assistant Professor	Rs.15,600 - 39,100 AGP Rs.7,000	01.02.2012	30.09.2013	01	08	00
Technology, Coimbatore	Assistant Professor (Sr. Gr)	Rs.15,600 - 39,100 AGP Rs.7,000	01.01.2006	31.01.2012	06	01	00
Coimbatore Institute of Technology, Coimbatore	Lecturer	Rs. 8,000 - 275 - 13,500 Basic Rs. 9,650	18.08.2005	31.12.2005	00	04	20
Faculty of Engg, Avinashilingam Deemed Uty for Woman, Coimbatore.	Lecturer	Rs. 8,000 - 275 - 13,500	27.07.2001	17.08.2005	04	00	20
				Total	17	09	10

#### **JOURNAL PUBLICATIONS:**

### **INTERNATIONAL: 10**

- 1. Saraswathi, R. and Saseetharan, M.K. (July 2010) "Investigation on Microorganisms and their Degradation Efficiency in Paper and Pulp Mill Effluent", J. Water Resource and Protection, Vol.2, No.7, pp. 660-664, DOI: 10.4236/jwarp.2010.27076, ISSN Print: 1945-3094 (Impact Factor: 0.64).
- 2. Saraswathi, R. and Saseetharan, M.K. (Oct-Dec 2010) "Effects of temperature and pH on floc stability and biodegradation in paper and pulp mill effluent", Journal of Engineering Research and Studies, Vol. 1, No. 2, pp. 166-176, E-ISSN 0976-7916(Online).
- 3. Saraswathi, R., Saseetharan, M.K. and Suja, S. (May-June 2012) "ANN based predictive model for performance evaluation of paper and pulp effluent treatment plant", International Journal of Computer Applications in Technology, Vol. 45, No. 4, pp. 280-289, DOI: 10.1504/IJCAT.2012.051128, ISSN print: 0952-8091 (Impact Factor: 0.647). Annexure II-2014.2
- 4. Saraswathi, R. and Saseetharan, M.K. (June 2012 "Simultaneous optimization of multiple performance characteristics in coagulation-flocculation process for Indian paper industry wastewater", Water Science and Technology, Vol. 66, No 6, pp. 1231–1238, DOI: 10.2166/wst.2012.304, ISSN Print: 0273-1223 (Impact Factor: 1.212). Annexure I -2014.1

- 5. Saraswathi, R. and Raggul N. (2014) "Performance enhancement of effluent treatment plant in an Indian paper industry: A case study", International Journal of Advanced Engineering Applications, Vol.7, No.4, pp.41-43, ISSN: 2321-7723 (Online).
- 6. Raggul N and Saraswathi, R."Microbial Analysis and Parametric Optimization of Activated Sludge Process in Paper and Pulp Mill Effluent Plant: A Case Study", Desalination and Water Treatment, http://dx.doi.org/10.1080/19443994.2015.1054889. Annexure I-2014.2
- 7. Raggul N and Saraswathi, R. "Design and Development of Operational Diagram for Controlling the Performance of ASP with a Case Study", Journal of Environmental Engineering, accepted. Annexure I-2014.2
- 8. Karthiga Devi M, Mohammed Siraj Ansari A, and Saraswathi R. "Comparative study of bacterial degradation efficiency in Pulp and Paper Mill Effluent," International Journal for Scientific Research and Development, Volume 5(2), 1605-1607,2017.
- 9. Abinaya S., Saraswathi R., Rajamohan S., Mohammed Siraj Ansari A., Phyto -Remediation of total dissolved solids (TDS) by Eichhornia crassipes, Pistia stratiotes and Chrysopogan zizanioides from second stage RO brine solution, Research Journal of Chemistry and Environment. Volume 22 (5), 39-41, May 2018.
- 10. Manikandan S., Saraswathi R., and Mohammed Siraj Ansari A., Effect of pH and Electrolysis Time on Removal of Reactive Black B dye by Electrochemical Treatment, Asian Journal of Engineering and Applied Technology, Volume 7 No.SI 2018, pp.45 -47.

#### **NATIONAL: 4**

- 1. **Saraswathi, R.** and Meenambal, T. (June 2002) "Air pollution due to Automobile Emission in Coimbatore", *Indian Journal of Environmental Protection*, Vol. 22, No. 6, pp. 705-707, **ISSN Print**: **0253-7141**.
- 2. **Saraswathi, R.** and Saseetharan, M.K. (Dec 2011) "Physicochemical parametric analysis of paper mill effluent using mixed cultures of bacteria and fungi", *Journal of Scientific & Industrial Research*, Vol. 70, No. 12, pp. 1070-1078, http://www.niscair.res.in, **ISSN Print: 0022-4456.**
- 3. **Raggul, N.** and **Saraswathi, R**. "Design and Development of Secondary Clarifier for Paper and Pulp Industry with a Case Study", *Indian Journal of Science and Technology*, Vol. 7, No. 12, 2014, http://www.indjst.org, **Print ISSN: 0974-6846.**
- 4. Raggul, N. and Saraswathi, R. (Feb 2015) "Optimization of physiochemical parameters for floc stability and biodegradation in paper and pulp mill effluent using response surface methodology: A statistical approach", *International Journal of Applied Engineering Research (IJAER)*, ISSN 0973-4562, Online ISSN 1087—1090, Vol. 10, No. 4, pp. 10547-10567.

#### **CONFERENCES: 8**

- 1. Saraswathi, R. and Saseetharan, M.K. "An investigation on air quality indices and its variation: A case study", *International Interdisciplinary Conference on Sustainable Technologies for Environmental Protection (ICSTEP 2006)* "*Probing the boundaries*", organized by Coimbatore Institute of Technology, Coimbatore jointly with University of TOLEDO, OHIO, USA during 7 9 January 2006
- **2. Saraswathi, R.** "Studies on Physical and Biochemical Parameters in paper mill effluent with Micrbial Flocs", 3<sup>rd</sup> National Conference on Emerging Trends and Innovations in Chemical Engineering, Sponsored by Defence Research and Development Organization and organized by St. Peters Engineering College during 27 to 28 March, 2009.
- **3. Saraswathi, R.** "Effect of Ph and Chemical Parameters on Settlability of Activated Sludge Flocs using Microorganisms", *National Conference on Innovations in Civil Engineering*, organized by Kumaraguru College of Technology during 21<sup>st</sup> April, 2009.

- **4. Saraswathi, R.** and Saseetharan, M.K. "A study on bioremediation of paper mill effluent", *Fifth Indian Environment Congress (IEC)*, The World Water Resource Day, March 22-23, 2010, P.A. Aziz College of Engineering and Technology, Thiruvananthapuram, Kerala.
- **5. Saraswathi, R.** "Optimization of Process Parameters for Coagulation Process in Water Treatment", International on Applications Electrical, Electronics, Computer, Civil and Mechanical Engineering, ICAEECCME-2015, organized by Applications of Engineering Technology and Science (AETS Forum) Coimbatore during 5<sup>th</sup> December, 2015.
- 6. Joselin Zibia J., Dr. R. Saraswathi, Mohammed Siraj Ansari A., Performance Evaluation of upflow Anerobic Reactor in Treatment of water Contaminated with Pesticides., First International Conference on Energy and Environmental Global Changes, NIT, Calicut. 9 to 10 March 2018.
- 7. Sam Chellasamy., Mohammed Siraj Ansari A., Dr. R. Saraswathi, Removal of Malathion from Aqueous Solution by Advanced Oxidation Fenton Process with Ferrous Sulphate and Iron Swarf, First International Conference on Energy and Environmental Global Changes, NIT, Calicut. 9 to 10 March 2018.
- 8. Balaji R., Dr. R. Saraswathi, Mohammed Siraj Ansari A., Performance Assessment of Aerobic Anerobic Treatment of Tannery Wastewater Based on Aeration Rate using Sequential Batch Reactor, First International Conference on Energy and Environmental Global Changes, NIT, Calicut, 9 to 10 March 2018.

#### **ADMINISTRATIVE RESPONSIBILITIES:**

- ✓ Time Table In-charge from 2005-2008,
- ✓ Staff Advisor for civil Engineering Association from June 2013 to 2015
- ✓ NAAC Coordinator for Civil Engineering Department
- ✓ NBA Coordinator for PG Environmental Engineering and Management

M.E Thesis: Completed: 25

Articles reviewed: Desalination and Water Treatment, Process Biochemistry, Malaysian Journal of Microbiology, Ecological Engineering, African Journal of Environmental Science and Technology, Journal of Environmental Science and Water Resources and International Journal of Computer Applications in Technology

PhD Scholars supervising details: 7 Candidates

# PROGRAMME ORGANISED: 11 TRAINING PROGRAMME ATTENDED: 31

I do hereby declare that the informations given above are true to the best of my knowledge

Signature

Date:

Place: Coimbatore -13. (R.SARASWATHI)

# ANNEXURE-1 TRAINING COURSES ATTENDED: 31

CI	TRAINING COURSES ATTEMPED. 31						
Sl. No	Programme Title	Duration	Programme Name	Organiser & Place			
1	Clean Technologies for Industries	3, October 2002	Workshop	Centre for Water & Environmental studies, Kumaraguru College of Technology, Cbe.			
2	Recent Trends in Environmental Activities on Protection of Water Resources	12, March 2003	ENVO CARE 2003	GCT & Environmental Cell Division WRO, PWD, Coimbatore			
3	Emerging Trends in Engineering and Science	19 <sup>th</sup> May –1 <sup>st</sup> June 2003	Summer School on Emerging Trends in Engineering and Science	Dept of Civil Engg, Government College of Technology, Coimbatore			
4	Design Trends in Interiors and Exteriors	23, February 2005	Design Forum 2005	Dept of Designing Interiors and Exteriors, ADU, Coimbatore			
5	An Investigation on Air Quality Indices and its Variation: A Case study at Neyveli	7 – 9, January 2006	International Interdisciplinary Conference on sustainable Technologies for Environmental Protection (ICSTEP 2006) – Probing the boundaries	Coimbatore institute of Technology and University of TOLEDO, OHIO, U.S.A			
6	Foundation Problems and Remedial Measures	13, March 2006	Building Expertise through Knowledge of Materials and Technology	DR. FIXIT Institute & Coimbatore Institute of Technology, Coimbatore .			
7	Innovation Technologies in Civil Engineering – ITCE 2006	20 – 21, March 2006	National Conference, ITCE 2006	Department of Civil Engg., Coimbatore institute of Technology, Coimbatore			
8	Aerator Selection & Energy saving in Waste Treatment Plants	24, March 2006	Workshop	Department of Applied Mechanics, Amrita School of Engineering, Cbe.			
9	Thinking for Design: Conceptual and Pedagogical Tools for Teaching Design	29 – 30, Dec 2006	Faculty Development Programme	IISc, Bangalore, IIT Madras, TCS & CIT, Coimbatore			
10	Seismic Design of RCC Structures	13 – 14, March 2007	National Workshop	Dept. of Civil Engg, CIT & Association of Consulting Civil Engineers (I), Cbe Centre.			
11	Earthquake Resistant Design of Masonry Structures	11, March 2009	National Workshop	Dept of Civil Engineering, CIT, Cbe.			
12	Studies on Physical and Biochemical Parameters in Paper mill Effluent with Microbial Flocs	27-28, March 2009	3 <sup>rd</sup> National conference on Emerging Trends and Innovation in Chemical Engg	Dept of Chemical Engineering, St. Peter's Engineering College, Avadi, Chennai-54			
13	Effect of Ph and Chemical Parameters on Settlability of Activated Sludge Flocs using Microorganisms	21, April 2009	Innovations in Civil Engineering – ICE'09	Department of Civil Engineering, Kumaraguru College of Technology, Cbe			
14	High Impact Teaching Skills	6-7, July 2009	Dale Carnegie Training	Dale Carnegie & Associates, Inc. Trainer and Wipro			
15	Mission 10X	6 – 10, July 2009	Mission 10X Workshop	Coimbatore institute of Technology, Cbe			
16	A Study of Bioremediation of Paper Mill effluent	22-23, March 2010	Fifth Indian Environmental Congress	P.A. Aziz College of Engg and Technology, Thiruvananthapuram			
17	India's flagship event on green buildings	7 – 9, October 2010	8 <sup>th</sup> Edtn of Green Building Congress 2010	Indian Green Building Council, Chennai			
18	Technology Roadmap for Sustainable Waste Water Treatment	18, February 2011	National Workshop	Department of Civil Engineering, CIT & IIPC			
19	Modern Concreting Techniques	24, February 2011	National Workshop	Dept of Civil Engg, CIT, IIPC & RMC Ready Mix India, Coimbatore			
20	Nanotechnology and its Applications	9 – 22 May 2011	ISTE Short Term Training Programme	Dept of Elect & Electro Engg, CIT, Cbe.			

21	Green Engineering Concepts for Process Design and Industrial Operations	07 – 13, Nov, 2011	AICTE Sponsored Staff Development Programme	Department of Chemical Engg, CIT, Coimbatore.
22	Power Management and Energy Security Initiatives for Socio Economic Development in India	13 – 27, Nov 2011	AICTE Sponsored Staff Development Programme	Department of Elect and Electronics Engg, Coimbatore Institute of Technology, Cbe.
23	Ground Improvement Techniques for Weak Soils	17 – 23, Sept 2012	TEQIP sponsored FDP	Dept of Civil Engineering, GCT, Cbe.
24	Integrated Approaches for Impact Assessment, Climate Change and Mitigation	17 – 23, Oct 2013	TEQIP sponsored FDP	Department of Civil Engineering, Coimbatore Institute of Technology, Cbe.
25	Limit State Design of Steel Structures	7 – 13, Nov 2013	TEQIP sponsored FDP	Dept of Civil Engg, CIT, Cbe.
26	Corporate Information Security and Policies for Chemical and Allied Industries	17 – 21, Dec 2013	TEQIP sponsored FDP	Department of Chemical Engineering, Coimbatore Institute of Technology, Cbe.
27	Environmental Management Framework	21 <sup>st</sup> August, 2014	TEQIP & SPFU sponsored Workshop	Govt. College of Technology, Coimbatore
28	Water Resources Engineering	13-17 <sup>th</sup> October, 2014	UGC sponsored FDP	Department of Civil Engineering, Coimbatore Institute of Technology, Cbe.
29	Environmental Issues in Sustainable Development	14-20, December 2015	AICTE Sponsored Quality Improvement Programme	Department of Civil Engineering, Coimbatore Institute of Technology, Cbe.
30.	Faculty Development Programme on Monitoring Environmental Quality	6-11,AUGUST 2018	TEQIP sponsored FDP	Department of Civil Engineering,NIT- Calicut.
31.	Deliberations on AICTE Model Curriculum -2018	29, June 2018.	TLC workshop (PMMMNMTT) Scheme	Teaching Learning Centre, CIT- Coimbatore.

# TRAINING PROGRAMME ORGANISED: 11

Sl.	Coming on / Wouleds on / Comformage / EDD	Duo guornas Titlo	Date	
No	Seminar/ Workshop/ Conference/ FDP	Programme Title	From	То
1	Coordinator of National Workshop	Technology Road for Sustainable Waste Water Treatment	18.02.2011	
2	Coordinator of National Workshop	Awareness Programme on Green Building	05.08.2011	
3	Coordinator of Training Programme	Awareness on Green Building GRIHA	10.10.2012	12.10.2012
4	Coordinator of TEQIP II Sponsored Workshop	Green Buildings and Sustainable Energy Efficient Systems – Challenges in India	06.09.2013	
5	Coordinator of TEQIP II Sponsored FDP	Integrated Approaches for Impact Assessment, Climate Change and Mitigation	07.10.2013	13.10.2013
6	Coordinator of TEQIP II Sponsored National Conference	Frontier Applications in Civil and Environmental Engineering	24.02.2014	25.02.2014
7	Coordinator of TEQIP II Sponsored Workshop	Utilization of Mineral Admixtures in Sustainable Concrete	18.7.2014	
8	Coordinator of TEQIP II Sponsored Workshop	Application of Effective Technologies for Green Construction and Management	22.7.2014	
9	Coordinator of TEQIP II Sponsored FDP	Mechanics of Solids	25.7.2014	31.7.2014
10.	Coordinator of TEQIP III Sponsored FDP	RECENT ENVIRONMENTAL CHALLENGES, SOLUTION AND MANAGEMENT FOR SUSTAINABILITY	29.11.2017	05.12.2018
11.	Convener for SERB sponsored Two Days Workshop	CARBON CAPTURE AND SEQUESTRATION	04.01.2018	05.01.2018