

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Curriculum Vitae

Brief Profile: Dr.G.Swaminathan is a Professor in the Department of Civil Engineering, National Institute of Technology (NIT) Tiruchirappalli, Tamil Nadu, India. He started his carrier in NITT as a Lecturer in the year 1988 in department of civil engineering. He has put in 31 years of academic experience. During his tenure he has established two laboratories in Department of civil engineering (Environmental Engineering Lab under IIT- REC Network and Survey Laboratory under institute fund). He received his PhD in Environmental Engineering from Indian Institute of Technology Madras, India in 2000. His Research area of interest includes biological treatment of wastewater, wastewater treatment by adsorption, co processing technology, energy and energy storage, water supply distribution and network optimization.



1. Name : Dr.G.Swaminathan
2. Designation: Professor
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Telephone : :+91431 2503159 Extn (Optional):
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5. Email (Primary): gs@nitt.edu Email (Secondary) :
6. Field(s) of Specialization: Environmental Engineering
7. Employment Profile

Sl.No.	Employer	Period	Number of Years	Designation/Nature of assignment
1.	Public Works Department, Govt. Of Tamil Nadu	31.08.84 to 15.07.85	1 year	Assistant Engineer
2.	Auroservice D' Auroville Trust	25.05.87 to 02.07.88	1 year	Public Health Engineer
3.	National Institute of Technology, Tiruchirappalli	6.04.88 to 06.04.94	6 years	Lecturer
4.	National Institute of Technology, Tiruchirappalli	06.04.94 to 06.04.99	5 years	Lecturer(S.S)
5.	National Institute of Technology, Tiruchirappalli	06.04.99 to 01.07.2007	8 years	Assistant Professor

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

6.	National Institute of Technology, Tiruchirappalli	From 01.07.2007 onwards	8 year and 4 months	Professor Till date
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8. Academic Qualifications (From Highest Degree to High School):

Sl.No.	Course	Academic Institution	Period of study/ Research	Year of passing	Main Subject of Study/ Research
1.	B.E	College of Engineering, Guindy, Anna University	1979-1984	1984	Civil Engineering
2.	M.E	Centre for Environmental Studies, CEG, Anna University	1985-1987	1987	Environmental Engineering
3.	Ph.D.	I.I.T., Madras	1995-2000	2000	Environmental Engineering
4.	PUC	Arignar Anna Government arts College Karaikal	1978-79	1979	Maths, Physics, Chemistry and Languages
5.	Matriculation	St.Mary's High school Karaikal	1977-78	1978	Languages, Mathematics, science and social science

9. Academic/Administrative Responsibilities within the University

S. No	Post Held	Department/ Centre/Institute	Duration	
			From	To
1	TEQIP- Nodal Officer	TEQIP	07.05.2008	24.1.2010
2	TEQIP – Coordinator	TEQIP	25.01.2010	21.01.2014
3	HOD	DEE	30.01.2012	31.12.2014
4	Dean	Planning and development	18.09.2015	04.10.2017
5	Registrar (Officiating)	Office Administration	07.03.2012	13.08.2015
6	Coordinator	Legal Cell	01.02.2016	30.07.2018
7	Coordinator	NIT Puducherry	04.02.2011	22.12.2011
8	Centre in charge	Central counselling Board, NIT Puducherry	01.06.2011	22.12.2011

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

13. Details of Academic Work

- (i) Curriculum Development
- (ii) Courses taught at Postgraduate and Undergraduate levels
- (iii) Projects guided at Postgraduate level
- (iv) Other contribution(s)

14. Details of Major R&D Projects

Title of the Project	Funding Agency	Amount in Rs.	Duration		Responsibility Only PI/ PI/Co-PI	Status (Completed / Ongoing)
			From	To		
Survey of NC Habitation	RGNDW in Ministry of Rural Development. Govt. of India (L.Dis.No.18641/94/A1 Dt.5/5/94)	0.79 Lakhs	1994	1995	Co PI	Completed

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

Remote Sensing application in interpretation and monitoring of ambient air quality	MHRD - (DPAD/Thrust Areas/2001 Dt.09.04.2002)	Rs. 8.0 Lakhs	2002	2004	PI	Completed
Engineered study on solid waste management for systems for resource and energy recovery	MHRD - (DPAD/Thrust Areas/2002-03 Dt.12.05.2003)	Rs. 13.0 Lakhs	2003	2005	Co PI	Completed
Safe disposal of BRAHMOS missile canister after missile firing	DRDO - BrahMOS	DRDO - BrahMos	2014	2016	PI	Completed Extension studies on going

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor / Co-Supervisor)	Year of Award
D. Siva kumar	Studies on contaminant transport of sugarcane effluent through porous soil medium	Supervisor	August.2008
R.Sowmeyan	Performance evaluation of inverse anaerobic fluidized bed reactor in treating high strength organic wastewater	Supervisor	November 2008
G. Venkatesan	comparative studies on clay liner with an without microsilica, in permeation of municipal solid waste leachate	Supervisor	February 2010
R. Jayanthi	Ground water contamination assessment in a tannery belt	Co Supervisor	November2010
PVS Giribabu	Synergetic Degradation of a Reactive Dye Acid Red1 By Simultaneous adsorption and Photocatalysis Using different Fly Ashes Under UV-C Light and Solar Light	Supervisor	April 2017
Aswin Sriram G.	Removal of Rose Bengal dye from aqueous solution using activated carbon and biosorbent	Supervisor	January 2019 Thesis submitted

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc.
(mentioning the role)

Date (s)	Title of Activity	Level of Event (International / National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
January 27-29, 2000	Comparative study of toxicity reduction using anaerobic and aerobic rotating biological contactor – <i>Swaminathan and Ramanujam</i>	International	Speaker	Centre for Environmental Studies, Anna University & Gesellschaft Fuer Technische Zusammenarbeit (German Technical Cooperation)	Chennai
March 15-17, 2003	Studies on conservation of water in REC Campus - <i>Swaminathan and Palanichamy</i>	International	Speaker	International Conference on Sustainable Development and Management of Natural Resources March 15- 17, 2003	trichy
March, 26 - 29, 2006	GIS integration for ground water quality and health effects, a case study. <i>Samson Mathew, Swaminathan and Venkat Kumar</i>	International	Speaker	Middle East 2006 Technical Committee for an Oral presentation Map Middle East 2006, Dubai	Dubai
July 2017	Removal Rose Bengal dye using low cost adsorbent material	International	Speaker	Global Civil Engineering Conference	Malaysia
July 2017	A Novel Hybridized Grey Wolf Optimzation for a Cost Optimal	International	Speaker	Computing Conference	London

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

	Design of Water Distribution Network				
2017	Soft sensor based estimation of process parameters and states with Hybridized Grey Wolf Optimizer	International	Speaker	Proceedings of the American Control Conference	USA
1998	Biodegradation of 2,4-Dichlorophenolic waste using rotating biological contactors <i>Swaminathan and Ramanujam</i>	National	Speaker	CHEMCON – 98 Department of Chemical Engineering	Visakhapatnam
2000	Studies on treatment of salicylic acid waste by anaerobic rotating biological contactor and aerobic rotating biological contactor, pp bio 69-72 Vol. II <i>-Swaminathan and Ramanujam</i>	National	Speaker	CHEMCON - 2000 Jadavpur University	Kolkatta
2002	Performance of Anaerobic culture in degrading 2, 4 dichlorophenol <i>- Swaminathan and Ramanujam</i>	National	Speaker	NCIPCEM – 2002 Department of Civil Engineering Sri Venkateswara University	Tirupati
2002	Studies on soil behavioural changes due to sugarcane effluent discharge <i>- Sivakumar and Swaminathan</i>	National	Speaker	NCIPCEM – 2002 Department of Civil Engineering Sri Venkateswara University	Tirupati
2002	Quality changes in	National	Speaker	NCIPCEM –	Tirupati

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

	ground water due to spent wash discharge - <i>Sivakumar and Swaminathan</i>			2002 Department of Civil Engineering Sri Venkateswara University	
February 10 – 11, 2003	Ground water quality: A case study on Impact of Town Planning - <i>Sivakumar, Swaminathan and Shobana</i>	National	Speaker	NSUEM	
February 10 – 11, 2003	Strategies for urban storm water management - <i>Ramachandran, Swaminathan and Sowmeyan</i>	National	Speaker	NSUEM	
Feb 15-16, 2003	Vehicle emission model using Caline 4 for Petrol Vehicle- <i>Swaminathan and Anantharaj</i>	National	Speaker	National Conference on Advances in Civil Engineering Perspective of Developing countries	
July 5, 2003	Measurement – adaptation to environmental engineering applications – <i>Swaminathan</i>	National	Speaker	RTFMT Shri Angalamman College of Engineering and Technology.	Trichy
August 2003	Application of Microbiology in Waste Water Treatment – <i>Swaminathan</i>	National	Speaker	Department of Civil Engineering, Periyar Maniammai College of Technology for Women, Vallam	Thanjavur
Dec29-30, 2003	Noise level in Truchirappalli city <i>Swaminathan and Sailaja</i>	National	Speaker	National Seminar on Environmental and Health	
March29-30, 2004	GIS for Ground	National	Speaker	UGC SAP	

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

	water quality and health management <i>Samson Mathew, Swaminathan, Porselvan and Venkat Kumar</i>			Sponsored National Seminar on GIS development	
11 th March 2005	Site selection and safe disposal of solid waste landfills. <i>Swaminathan and Venkatesan</i>	National	Speaker	National seminar on Solid Waste and Waste water management and Treatment technologies	
24 th and 25 th March 2005	Water Management study for rice crop using staggered growing season <i>Swaminathan and venkatesan</i>	National	Speaker	National seminar on Innovative Techniques for sustainable development of water resources- ISWR-2005	
24 th and 25 th March 2005	Monitoring of Ground Water quality using GIS <i>Samson Mathew, Swaminathan and Venkat Kumar</i>	National	Speaker	National seminar on Innovative Techniques for sustainable development of water resources- ISWR-2005	
9 th and 10 th April 2005	Integrated selection of Waste dumps and landfills <i>Swaminathan and Venkatesan</i>	National	Speaker	National Conference on Geotechnics in environment protection- GEN-2005	
9 th and 10 th April 2005	Integrated GIS for Ground water quality and health effects in Arcot area <i>Samson Mathew, Swaminathan and Venkat Kumar</i>	National	Speaker	National conference on Geotechnics in environment protection- GEN-2005 organized	
9 th and 10 th April 2005	Swell and consolidation characteristics of	National	Speaker	National conference on	

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

	lime stabilized kalolinite in sulphate <i>Jayanthi, Swaminathan, Palanichamy and Srinivasaraghavan</i>			Geotechnics in environment protection- GEN-2005	
12 th and 13 th November 2005	Institutional Solid waste Management-A case study of National Institute of Technology Tiruchirappalli Campus <i>Palanichamy, Swaminathan and Venkatesan</i>	National	Speaker	National seminar on Role of Environmental Engineers in Sustainable Development organized by local centre.	Trichy
12 th and 13 th November 2005	Stabilization of Contaminated Solis <i>Jayanthi, Palanichamy and Swaminathan</i>	National	Speaker	National seminar on Role of Environmental Engineers in Sustainable Development organized by local centre.	Trichy
12 th and 13 th November 2005	Evaluation of Inverse Anaerobic Fluidized bed reactor for treating high strength organic waste water <i>Swaminathan and Sowmeyan</i>	National	Speaker	National seminar on Role of Environmental Engineers in Sustainable Development organized by local centre	Trichy

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Six day workshop on “Waste Management”	National	09.05.2016- 14.05.2016	Coordinator	DEE - NITT
Five day workshop on “Waste Management”	National	24.09.2018- 28.09.2018	Coordinator	DEE - NITT

18. Invited Talks delivered

Topic	Date	Inviting Organization

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Fellow	The institution of engineers	F-114028-7 (May 2009)
Life Fellow	Institution of Public health Engineers, India	LF-667 (28.04.2014)
Life Member	The Indian Society for Technical Education	LM 7595

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	26.11.2007 – 26.12.2007	Training in Division of Environmental science and Engineering, National University of Singapore.

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.) Page numbers	Year	Impact Factor of the Journal (Optional)
Sowmeyan, R. and Swaminathan, G.	Performance of inverse anaerobic fluidized bed reactor for treating high strength organic wastewater during start-up phase	Bioresource Technology	99(14), pp. 6280–6284. doi: 10.1016/j.biortec h.2007.12.001.	2008	
Sowmeyan, R. and Swaminathan, G.	Evaluation of inverse anaerobic fluidized bed reactor for treating high strength organic wastewater	Bioresource Technology	99(9), pp. 3877– 3880. doi: 10.1016/j.biortec h.2007.08.021.	2008	
Sivakumar, D., Swaminathan, G	Physico-chemical characteristic of ground water in and around sugar industry-A case study	Indian Journal of Environmental Protection		2008	
Kumar, N.V., Mathew, S., Swaminathan, G	Fuzzy information processing for assessment of groundwater quality	International Journal of Soft Computing		2008	
Venkatesan, G. and Swaminathan, G.	Review of chloride and sulphate attenuation in ground water nearby solid-waste landfill sites	Journal of Environmental Engineering and Landscape Management	17(1), pp. 1–7. doi: 10.3846/1648- 6897.2009.17.Ia -Ig.	2009	
Venkatesan, G.,	Assessment of microsilica as a	International Journal of	10(2/3), p. 321. doi:	2012	

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

Swaminathan, G. and Srihari, V	value-added material for municipal solid waste clay liner system	Environment and Waste Management	10.1504/IJEWMM .2012.048321.		
Giribabu, P. V. S. and Swaminathan, G.	Photo degradation of reactive dye Acid Red 1 under UV-C radiation using fly ash from different thermal power plants	International Journal of Earth Sciences and Engineering		2016	
Giribabu, P. V. S. and Swaminathan, G.	Synergetic degradation of reactive dye Acid Red 1 by cobalt-doped lignite fly ash	Desalination and Water Treatment	57(36), pp. 16955–16962. doi: 10.1080/194439 94.2015.108250 9	2016	
Giribabu, P. V. S. and Swaminathan, G.	Comparative Study on Synergetic Degradation of a Reactive Dye Using Different Types of Fly Ash in Combined Adsorption and Photocatalysis	Journal of The Institution of Engineers		2016	
Sriram, A., G. Swaminathan	Pyrolysis of Musa balbisiana flower petal using thermogravimetric studies	Bioresource. Technology.	265, 236–246.	2018	
Sriram, A., G. Swaminathan	Utilization of dye loaded activated carbon as a potential alternative fuel source: A feasibility study through thermogravimetric and calorific studies	Environmental Science and Pollution Research	DOI: 10.1007/s11356-018-3279-1	2018	
Sriram, A., G. Swaminathan	Removal of Rose Bengal Dye Using Low-Cost	Lecture Notes in Civil Engineering,.	vol 9, DOI:10.1007/97 8-981-10-8016-	2018	

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

	Adsorbent Material	Springer, Singapore	6_85		
Sriram, A., G. Swaminathan	Removal of Rose Bengal dye from aqueous solutions using chitosan coated activated carbon prepared from Prosopis juliflora	Indian Journal of Environmental Protection	38, 827-835	2018	
Senthilkumar, S., Swaminathan, G. et al.	Biodecolorization of a persistent organic dye from model wastewater using <i>Curvularia</i> spp	Desalination and Water Treatment	46(1-3), pp. 272-277. doi: 10.1080/19443994.2012.677505.	2012	
Senthilkumar, S., Swaminathan, G. et al.	Box Behnken design based optimization of solar induced photo catalytic decolourization of textile dye effluent	Central European Journal of Engineering		2013	
Senthilkumar, S., Swaminathan, G. et al.	Degradation potential of free and immobilized cells of white rot fungus <i>Phanerochaete chrysosporium</i> on synthetic dyes	International Journal of ChemTech Research		2013	
Rajagopalan V, Venkatesan. G and G. Swaminathan.	Removal of Copper Using Clay Admixed with Quarry Fines as Landfill Liners	Polish Journal of Environmental Studies	Vol. 25, No. 1 (2016), 377-384. (DOI: 10.15244/pjoes/59500, ISBN: 1230-1485	2016	
Narayanan, S.L., Venkatesan, G., Swaminathan, G.	Experimental studies on adsorption of Chromium (VI) and Arsenic (III) using residue red mud in effective manner, Ecology	Environment and Conservation	Vol 23, Sept. Suppl. Issue 2017; Page No.(32-40)	2017	

**National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members**

Sankaranarayan, S., Sivakumaran, N., Swaminathan, G., Radhakrishnan, T.K	Metaheuristic-based approach for state and process parameter prediction using hybrid grey wolf optimization	Asia-Pacific Journal of Chemical Engineering		2018	
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(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Aswin Sriram and Ganapathiraman Swaminathan	Removal of Rose Bengal dye using low cost adsorbent material	Global Civil Engineering Conference	pp 1223-1234	Civil Infrastructure	Malaysia	July 2017
Sankaranarayanan, S Swaminathan, G. et al.	A Novel Hybridized Grey Wolf Optimization for a Cost Optimal Design of Water Distribution Network	Computing Conference	pp. 1–10.	Computing	London	July 2017
Sankaranarayanan, S Swaminathan, G. et al.	Soft sensor based estimation of process parameters and states with Hybridized Grey Wolf Optimizer	Proceedings of the American Control Conference	pp. 1892–1897.	Infrastructure development	USA	2017

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number