Curriculum Vitae

Brief Profile: 1-2 paragraphs (not exceeding 500 words)

Please attach your recent
Photograph

in the form of softcopy/hardcopy (Optional)

1. Name: R.Jayasankar

2. Designation: Associate Professor

3. Office Address: Department of Civil Engineering, National Institute of Technology, Trichy.

4. Telephone (Direct) (Optional):0431-2503163
Telephone: Extn (Optional):

Mobile (Optional):

5. Email (Primary): rj@nitt.edu Email (Secondary) :

6. Field(s) of Specialization: Civil Engineering, Structural

Engineering.

7. Employment Profile

Job Title	Employer	From	To
Site Supervisor	Chidambaram Construction Company, Trichy	01.05.1977	08.11.1977
Engineer Trainee	Highways Department(NH), Coleroon Bridge Work, Trichy	09.11.1977	01.07.1978
Associate Lecturer	GCT, Coimbatore	10.07.1978	22.10.1983
Associate Lecturer	GCE, Salem	23.10.1983	29.12.1983
Lecturer	REC, Trichy	30.12.1983	31.12.1985
Lecturer Senior scale	REC, Trichy	01.01.1986	09.07.1992
Lecturer Selection Grade	REC, Trichy	10.07.1992	31.12.2005
Associate Professor	NIT, Trichy	01.01.2006	Till date.

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Master of Engineering	GCT, Coimbatore	1981	I	Structural Engineering
Bachelor of Engineering	REC, Trichy	1977	I	Civil Engineering

9. Academic/Administrative Responsibilities within the University

Position/Role	Faculty/Department/Centre/Institution	From	To
Estate Officer	NIT, Trichy	May 2011	May 2012
In-charge of Strength of Materials Laboratory	Department of Civil, NIT Trichy	1986	1993 and 2005 Onwards
In-charge of Soil Mechanics Laboratory	Department of Civil, NIT Trichy	1999	2003
In-charge of Geology Laboratory	Department of Civil, NIT Trichy	1997	2002
In-charge of Survey Laboratory	Department of Civil, NIT Trichy	1991	1991

Faculty Advisor, Civil Engineering Association	Department of Civil, NIT Trichy	2005	2006
Served as Warden of a Student Hostel	NIT, Trichy	1989, 2008 and 2009	
Served as N.S.S Programme officer for six and half years, with the responsibility of guiding the students in rural development projects.	NIT, Trichy	1985	1990
Hostel Convenor	NIT, Trichy		2010

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Officer In charge for AMIE Examinations	Tiruchirappalli center		
Chairman of the committee for inspection and taking over of the	mmittee for inspection and taking over of the		5
completed buildings constructed by CPWD	Control University of	201.	5
Member of Building Committee	Central University of Tamilnadu, Tiruvarur	201	6
Member of Selection committee for the post of Executive	Taiiiiiadu, Tiiuvaiui	201	6
Engineer		201	O

11. Awards, Associate ships etc.

Year of Award Name of the Award		Awarding Organization
	NIL	

12. Fellowships

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

13. Details of Academic Work

- (i) Curriculum Development-
 - (a) Associated with the revision of syllabus for the courses in the civil engineering (UG & PG).
 - (b) Member in Board of Studies for Civil Engineering.
 - (c) Member in Board of Studies for M.Tech. in Structural Engineering.
 - (d) Member in Board of Studies for M.Tech. in Transportation Engineering and Management.
- (ii) Framed Syllabus for the following subjects-
- (a) Prestressed Concrete Structures
- (b) Strength of Materials
- (c) Bridge Engineering
- (d) Advanced Strength o f Materials
- (e) Mechanics of Solid
- (f) Reinforced Concrete Structures I

- (iii) Courses taught at Postgraduate and Undergraduate levels
 - (1) Advanced strength of materials.
 - (2) Basic Civil Engineering.
 - (3) Bridge Engineering.
 - (4) Concrete Structures I.
 - (5) Design of Concrete Structures.
 - (6) Design of RCC Structures II.
 - (7) Design and Drawing (RCC & Steel)
 - (8) Prestressed Concrete Structures.
 - (9) Engineering Mechanics.
 - (10) Mechanics of Solids I & II.
 - (11) Hydraulics Laboratory.
 - (12) Strength of materials Laboratory.
 - (13) Surveying Laboratory I & II.
 - (14) Structural Engineering Laboratory.
- (iv) Projects guided at Postgraduate level

Total number of projects guided in Postgraduate level – 72 Total number of projects guided in Undergraduate level - 25

(v) Other contribution(s)

Developing learning resource material

- (a) Designed and added new experimental facilities in Strength of Materials Lab. for undergraduate programme.
- (b) Prepared Instruction material for UG for S.M.Lab.
- (c) Prepared Instruction material for PG programme for Structural Engg. Laboratory.

Carried out Structural design of

- (a) Acetic Anhydride Plant for Trichy distilleries and Chemicals, Trichy.
- (b) New Bus Stand for Tirunelveli corporation- (Rs. 5.4 Crores Project)
- (c) TASMAC godown at Thanjavur and Thiruvarur (1crore)
- (d) Two Wheeler stand for Orathanadu Town Panchayat.
- (e) Shopping Complexes for Peravoorani, Perambalur, and Orathanadu Town Panchayat
- (f) Kalyanamandapam for Peravoorani and Perambalur Town Panchayat
- (g) Velankanni Railway Station.
- (h) Auditorium for Bishop Heber Higher Secondary School, Trichy. (50lakhs)
- (i) Checked the stability of 250+ buildings of Cordite Factory, Aruvangadu.
- (j) Involved in Proof Checking of Structural design of Bridges (Southern Railways) and also number of designs for bridges for Rural Development Department, Government of Tamilnadu.
- (k) Design of waiting hall and store for Sri Rangam Temple.

Consultancy work carried with institute lab facility

- (a) Involved in the regular testing of Construction Materials like Concrete, Cement, Brick, Steel Rods, Tiles, etc.
- (b) Involved in the soil testing for finding the Safe Bearing Capacity of Soil.
- (c) Involved in the materials development project for the industrial flooring at H.A.P.P., Trichy, which is a unique one.

- (d) Non destructive testing of concrete in the existing structures
- (e) Rehabilitation of old buildings
- (f) Rehabilitation of water tanks of Tiruchirappalli, Tirunelveli Corporations and Thuraiyur Municipality.

Books and Course materials prepared

- (a) Quality control in cement and concrete
- (b) Quality control and quality assurance in concrete constructions

Faculty interaction with other organizations

Sl No.	Name of the faculty	Name of the organization	Type of interaction
1.	R.Jayasankar & Dr. Samson Mathew	National Rural Roads Development Agency, Government of India	As member, State Technical Agency (STA), Pradhan Mantri Grama Sadak Yojana (PMGSY) Scheme, NRRDA, GoI, responsible for scrutinizing rural road proposals worth hundreds of crores of rupees every year in Tamilnadu since 2000
2.	R.Jayasankar & Dr. Samson Mathew	Directorate of Rural Development, Government of Tamil Nadu	Assisting the DRD at the state level for the past 13 years through PMGSY phase1 to 8 and Bharat Nirman phase 1 to 3

14. Details of Major R&D Projects

		Duration		Status
Title of Project	Funding Agency	From	То	Ongoing/ Completed
Polymer-Fibre reinforced concrete	Ministry of Science and			Completed
beams subjected to bending and torsion	Technology, Govt. of India			Completed
One of the Co-ordinators of the Energy	Ministry of Non-conventional			
Plantation Project	Energy Sources,			Completed
	Govt. of India			
Rural Road Traffic Volume Study in	National Rural Roads Development			Completed
Tamilnadu	Agency, Government of India			Completed
Rural Road Pavement Performance	Pavement Performance National Rural Roads Development			Completed
Study(RRPPS)	Agency, Government of India			Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
	NIL		

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
4 th to 16 th June 1984	Analysis and Design of Offshore Structures		Participant	I.I.T., Chennai	Chennai
10 th to 22 nd December 1984	Construction Management		Participant	R.E.C., Surathkal	Surathkal
12 th to 23 rd May 1986	Cost Reduction in Rural Housing		Participant	College of Engg., Trivandrum	Trivandrum
16 th to 19 th Dec. 1987	International Symposium of Fiber-Reinforced Concrete	International	Paper presenter	SERC, Chennai	Chennai
7 th May-8 th June 1990	Professional Development		Participant	T.T.T.I., Chennai	Chennai
3 rd to 14 th June 1991	Advanced Bridge Deck Analysis and Design		Participant	I.I.T., Chennai	Chennai
20 th to 24 th January 1992	Design of Wind Sensitive Structures		Participant	S.E.R.C., Chennai	Chennai
16 th to 29 th November 1992	Computer Aided Design of Shell Structures		Participant	G.C.T., Coimbatore	Coimbatore
8 th and 9 th July 1993	Cement Concrete Pavements		Participant	R.E.C., Trichy	Trichy
20 th to 25 th January 1997	Performance Appraisal and Development System		Participant	R.E.C., Trichy	Trichy
3 rd to 6 th June 1998	Fuzzy System modeling in Civil Engineering		Participant	I.I.T., Chennai	Chennai
26 th March	Workshop on		Participant	College of	Chennai

2004	Computer aided design			Engineering, Guindy Anna University, Chennai	
22 nd and 23 rd October 2005	Seismic Structural Analysis and Design (SESTRAD)		Participant	National Institute of Technology, Tiruchirappalli	Trichy
1 st -2 nd Feb 2007	Finite Element Method for Engineers		Participant	National Institute of Technology, Tiruchirappalli	Trichy
4 th July-13 th July 2007	Faculty Development Training Programme on ANSYS		Participant	National Institute of Technology, Tiruchirappalli	Trichy
17 th July 2010	Regional Awareness Conference on IWWA-Chennai Water convention 2011		Participant	Indian Water Works Association (IWWA) Mumbai	Trichy
9 th -10 th September 2011	Mordern Construction Methods and Materials	National	Participant	The Institution of Engineers (India)	Trichy
28 th -29 th April 2015	Conclave on Academic Reforms (CAR 2015)		Participant	National Institute of Technology, Tiruchirappalli, TEQIP II	Trichy

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)	Venue
"Design, construction, quality and maintenance of bridges" (Training programme conducted for Engineers of rural development department, Tamil Nadu.	Local	28 th June – 3 rd July, 2010. 8 th Feb – 13 th Feb, 2010. 31 st May – 5 th June, 2010. 21 st June – 25 th June, 2010.	N.I.T. Trichy
PMGSY Training program for Assistant Engineers of Rural Development Department	National	20 th to 25 th September 2004 4 th to 9 th October 2004 25 th to 30 th October 2004 1 st to 6 th November 2004 17 th to 19 th September 2003 18 th to 23 rd May 2009 23 rd to 25 th June 2009 13 th to 18 th July 2009	N.R.R.D.A. New Delhi
Quality control in cement and concrete	National	27 th to 31 st January 2004 30 th August to 03 rd September 2004	I.M.T.I., Trichy
Refresher course on "Quality control of PMGSY roads" for state quality monitors.		9 th May, 2013	N.I.T. Trichy
Short term course on Quality Control and Quality Assurance in Concrete Constructions	National	13 th to 24 th May 2002	I.M.T.I., Trichy
Short term course on Quality Control and Testing in Concrete Constructions	National	4 th to 8 th March 2002	I.M.T.I., Trichy
Work shop on Concrete Technology	National	12 th March 1992	R.E.C., Trichy

18. Invited Talks delivered

Topic	Date	Inviting Organization
Quality of Water	12 th March 1992	Department of Civil Engineering, R.E.C. Trichy
Physical Test on Cement	4 th to 8 th march 2002 13 th to 24 th May 2002 27th to 31st January 2004 30th August 2004 to 03rd September 2004	R.E.C. Trichy
Test on Fresh Concrete	4 th to 8 th march 2002 13 th to 24 th May 2002	R.E.C. Trichy
Destructive Test on Hardened Concrete	4 th to 8 th march 2002	R.E.C. Trichy
Non-Destructive Test on Hardened Concrete	13 th to 24 th May 2002	R.E.C. Trichy
Test on Hardened Concrete	13 th to 24 th May 2002	R.E.C. Trichy
Cross Drainage Structures	17 th to 19 th September 2003 4 th to 9 th October 2004 25 th to 30 th October 2004 1 st to 6 th November 2004	R.E.C. Trichy
Structural Analysis, Structural Design of both Steel and RCC and Construction Equipments	(12 Times)	Public Works Department, Govt. of Tamil Nadu
Testing of Pipes & Testing of Cement and Concrete	(2 times)	TAWD Board

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary	Organization	Membership No.	
Member / Life Member)		with date	
Life Member	Institution of Engineers	M-048718-4	
	(India)		
Life Member	Indian Society for Technical	LM7594 (18.09.1990)	
	Education		
Life Member	Indian Geotechnical Society		

20. Academic Foreign Visits

Country	Duration of Visit	Programme
	NIL	

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
R.Jayasankar S.Sreenivasulu, and Dr. S. Jeyalekshmi	Effect of thickness and addition of fly ash and rice husk ash on temperature differential and warping stresses in rigid pavement	International journal of Engineering studies	Volume.4	Pp 99- 112	2012	

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
R.Jayasankar, Samson Mathew and B.Jayanthi	GIS based bridge management system	Advances in Road Transportation (ART-2005)	189 – 195	Advances in Road Transportation	N.I.T., Rourkela, Orissa	2005
R.Jayasankar, T.Hemalatha, K.Palanichamy and S.Moses Santhakumar	Influence of fly ash and VMA on properties of self compacting concrete	2 nd National Conference on Advances in Materials and Mechanics of Concrete Structures	89 – 98	Advances in Materials and Mechanics of Concrete Structures	I.I.T.M, Chennai	2005
R.Jayasankar, T.Hemalatha and K.Palanichamy	Effects of Super Plasticizers and VAA on the properties of Self Compacting Concrete	National Conference on Concrete Technology for the future		Concrete Technology for the future	Kongu Engineering College, Erode	21 st - 22 nd April 2006
Samson Mathew, R.Jayasankar and KS.Suresh kumar	Effect of Silica fume on properties of Standard Pavement Quality Concrete	The 10 th East Asia Pacific Conference on Structural Engineering and Construction (International)		Structural Engineering and Construction	Bangkok	3 rd -5 th August 2006

R.Jayasankar, P.Jayabalan and R.Manoharan K Palanichamy and R.Jayasankar R.Jayasankar, P.Jayabalan and R.Manoharan	Effects of Chemical Admixtures on Corrosion of Reinforced Concrete Investigation on the Use of Quarry Dust in Concrete Effect of Fly Ash and Blast Furnace slag in Concrete	National Conference on Advances and Innovations in Civil Engineering		Advances and Innovations in Civil Engineering	MEPCO SCHLENIK Engineering College, Sivakasi	24 th March 2007
R.Jayasankar, Samson Mathew, S.Abdul Rasheed and A.Siddique	Economic Evaluation of Grade Separation at a Signalised Intersection	National Seminar on ROADS 2007 organized by "The Institution of Engineers"		ROADS 2007	Institution of Engineers, India, Belgaum, Karnataka	1 st -2 nd March 2007
R.Jayasankar, V.Sunitha, S.Abdul Rasheed and A.Siddique	A Study on Cost Effectiveness of Stabilized Fly Ash for Rural Road construction	National Conference, Workshop and Exposition on trends in Road Making Materials, Methods and Machines for Quality, Ecnomy and Speed		Trends in Road Making Materials, Methods and Machines for Quality, Ecnomy and Speed	Lakshmi Narain College of Technology, Bhopal	21 st - 24 th May 2007
S.Moses Santhakumar, Samson Mathew, R.Jayasankar and V.Sunitha	Impact of PMGSY on Travel Characteristics of Tamil Nadu Rural Population	National Conference on Rural Roads organized by NRRDA		Rural Roads	New Delhi	22 nd - 24 th May 2007
R.Jayasankar, S.Sreenivasulu and S.Moses Santhakumar	Effect of Thickness and addition of fly ash and rice husk on temperature	Student symposium on Research in Civil Engineering	191-192		IIT, Madras	March 2009

	differential and					
	warping					
	stresses in rigid					
	pavement Experimental					
	Investigation on					
R.Jayasankar,	Self					
P.Antony	compactiong					
Vimal, Chavan	Concrete and		81-82			
Ganesh Shankar	Glass Fibre Reinforced Self					
Silalikai	Compacting					
	concrete					
	Strength and					
R.Jayasankar	durability					
&	studies on		131-134			
M.K.	concrete using crushed clinker	National	131-134		Alagappachettiar	
Haridharan	brick as coarse	conference on		Improvement	college of	9 th
	aggregate	improvement techniques in		Techniques in Civil	Engineering and	April
R.Jayasankar,	Experimental	Civil		Engineering	Technology,	2010
P. Antony Vimal, Chavan	investigation of self compacting	engineering			Karaikudi	
Ganesh	glass fibre		411-416			
Shankar and	reinforced self		111 110			
M.K.	compacting					
Haridharan	concrete					
	Influence of Length of	Colloquium on		Colloquium on		
	Polypropylene	Transportation		Transportation		12 th -
Pavani D and	Fibre on	Systems		Systems	NUT Calland	13 th
R.Jayasankar	Fatigue	Engineering		Engineering	NIT, Calicut	May
	Behaviour of	and		and		2014
	Concrete Pavement	Management		Management		
	Experimental					
	Investigation on					
	Fatigue	2 nd Conference				
Arun Kumar S	Behaviour of	on		Transportation		
and R	Concrete Bridge Slabs by	Transportation		Systems		1^{st} - 2^{nd}
Jayasankar	using GFRP	Systems		Engineering	NIT, Trichy	May
	Bars with	Engineering		and Management		2015
	Polupropylene	and Management		Management		
Dhammir	Fibre					
Dhanunjaya Eturi and R	Strength Assessment of					
Dian and K	1 Ibbebbillett Of			l		

Jayasankar	Rigid			
	Pavements with			
	Fly Ash and			
	Steel Fibres			

(C) Books & Monographs

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