Curriculum Vitae

Brief Profile:



Dr. P. Jayabalan is presently working as Professor of Civil Engineering at NIT Tiruchirappalli. He obtained his Ph.D. from IIT Madras in the year 1990. He has joined in this institute as lecturer in the year 1991 and elevated to Assistant Professor and Professor in the years 1996 and 2007, respectively. During the 25 years of service he held various administrative positions such as controller of examinations, Dean (Academic Programmes), Head of the Department of Civil Engineering. His major contributions during these tenures are implementing the credit system for UG and PG programs, Common Counselling and Admission for M.Tech Programs among all NITs, NBA accreditation for UG and PG programs in Civil Engineering and modernization of laboratories. He was the Nodal Officer for TEQIP Phase-I and successfully implemented many schemes and achieved 9.9 score in 10 point scale of TEQIP evaluation.

He is instrumental for bringing the user oriented M.Tech degree program in "Construction Technology and Management" sponsored by Larsen & Toubro under the Industry-Institute Interaction Program.

Name : P.Jayabalan
 Designation : Professor

3. Office Address: Department of Civil Engineering

4. Telephone (Direct) (Optional)

Telephone: 2503157 Ext(Optional):3157

Mobile (Optional): 9443173517

5. Email (Primary) :pjeya@nitt.edu Email (Secondary) :pjeya@yahoo.com

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

7. Employment Profile

Job Title	Employer	From	To
Lecturer	Regional Engineering College	28-11-1990	22-07-1996
Assistant Professor	istant Professor Regional Engineering College		22-04-2007
Professor National Institute of Technology		23-04-2007	Till Date

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D. Degree	Indian Institute of Technology, Madras	1990	-	Structural Engineering
Master's Degree	Madras University	1982	First Class	Structural Engineering
Bachelor's Degree	Annamalai University	1979	First Class	Civil Engineering

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То
Controller of Examinations(UG)	Regional Engineering College, Tiruchirappalli	Aug 1997	July 2000
TEQIP Coordinator	National Institute of Technology, Tiruchirappalli	Aug 2007	Aug 2010
Dean (Academic)	National Institute of Technology, Tiruchirappalli	Feb 2008	Feb 2010
Chairman, Library Committee	National Institute of Technology, Tiruchirappalli	Feb 2008	Feb 2010
Head of the Department (Civil Engineering)	National Institute of Technology, Tiruchirappalli	Feb 2012	Jan 2015
Chairman, Estate and Work Committee	National Institute of Technology, Tiruchirappalli		
Member, Quality Assurance Committee	National Institute of Technology, Tiruchirappalli		
Board of Governors Member	National Institute of Technology, Tiruchirappalli		

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	То
Subject expert	For the appointment committee for the selection of Faculty,		
	Gandhi gram Rural Institute, Gandhi gram	<u> </u>	
Subject expert	For the appointment committee for the selection of Faculty,		
	National Institute of Technology, Puducherry, Karaikal		
Subject expert	For the appointment committee for the selection of Faculty,	l	
	PSNA college of Engineering and Technology, Dindigul	<u> </u>	
Subject expert	For the appointment committee for the selection of Faculty at	l	
	PSG-ITAR Coimbatore	l	

Subject expert	For the appointment committee for the selection of Faculty at	
	Sona College of Technology Salem	

- 1. Member, Academic Council for faculty of Engineering, Periyar Maniammai University, Vallam, Tanjore.
- 2. Member, Board of Studies, Anna University, Chennai.
- 3. Member, Board of Studies, Thiagarajar College of Engineering, Madurai.
- 4. Member, Board of Studies, P.S.G.College of Technology, Coimbatore.
- 5. Chairman, Affiliation Committee, Anna University, Chennai.
- 6. Member, Governing Council, J.R.Polytechnic College, Tiruchirappalli.
- 7. Member, Board of Studies, Sastra University, Tanjore.

11. Awards, Associate ships etc.

Year of Award	Name of the Award	Awarding Organization
2006	Commendation Certificate award in recognition of the paper titled "Corrosion Evaluation of pre-stressing steel in pre-stressed concrete cantilever segmental block"	The Council of the Indian Roads Congress

12. Fellowships

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

13. Details of Academic Work

- a. Curriculum Development: M.Tech Structural Engineering B.Tech Civil Engineering
- b. Courses taught at Postgraduate and Undergraduate levels:
 UG: Structural Analysis, Design of Steel Structures Advanced Strength of Materials and Matrix Methods of Structural Analysis.
- c. PG: Stability of Structures, Advanced Steel Structures and Theory of Plates.
- d. Projects guided at Postgraduate level:
- e. Other contribution(s):

14. Details of Major R&D Projects

Title of Project	***	Duration		Status ````
Title of Project		From	То	Ongoing/ Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
K.SaravanaRajamohan	Static and Dynamic Response Evaluation on Fly Ash Concrete Composites	Supervisor	2005
R. Manoharan	Studies on Effect of Chemical Admixtures on Corrosion Resistance of Rebar's in Concrete	Supervisor	2010
P.V. Premalatha	Effect of Tie Road Anchors on the Behavior of Berthing Structure Under Lateral Loads	Supervisor	2012
G. Niranjana	Effect of Fiber Reinforcement in Cement Concrete Pavements	Supervisor	2012
J.Ronald Aseer	Experimental Investigation on Mechanical and Thermal Properties of Composite Panel Made from Municipal Solid Waste- Banana Fiber	Supervisor	2014
G.Vani	Buckling Characteristics of Cold Formed Steel Plain Angle Compression Members Strengthened Using CFRP	Supervisor	2015
M.Ashok	Flexural Behavior of Cold Formed Steel Hat Sections	Supervisor	ongoing
R.Vijayasarathy Mechanical properties of ultra-fit ground granulated blast furnace s and copper slag based geopolym concrete.		Supervisor	ongoing
R.Deepha	Experimental and analytical behavior of castellated beam section	Supervisor	ongoing
Shameem Banu	Experimental study on concrete material	Supervisor	ongoing
M.Divya	Flexural behavior of steel concrete composite beam	Supervisor	Ongoing

15. 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
June 3-14 1991	Advanced bridge deck analysis and design	National	Participant	Department of Civil Engineering	Indian Institute of Technology Madras
May 18-22 1992	Expert system in Civil Engineering	National	Participant	Department of Civil Engineering under Ministry of HRD	PSG College of technology
Dc 13-25 1993	Innovative applications of steel in the construction of industrial structures	National	Participant	Department of Civil Engineering	Karnataka Regional Engineering college Surathkal
November21- December 4 1994	Recent trends in strength and stability of plated structures	National	Participant	Department of Civil Engineering	Coimbatore Institute of technology
March 10-15 1997	Industry Institute partnership	National	Participant	Regional Engineering College	Regional Engineering College Tiruchirappalli
November 30-December 11 1998	Advanced computer applications in transportation Engineering	National	Participant	Regional Engineering College	Regional Engineering College Tiruchirappalli
December 16-18 1998	Design of steel skeletal structures	National	Participant	Structural Engineering Research Centre	CSIR Campus Chennai
January 29 2000	Curriculum issues in Structural steel design	National	Participant	Department of Civil Engineering	Mepco Schlenk Engineering college Sivakasi

November 13-18 2000	Structural Steel design for university faculty	National	Participant	IIT Madrass,Anna University Chennai,SERC Madrass	Indian Institute of Technology Madras
March 26 2004	Computer aided design	National	Participant	Department of Civil Engineering	Anna University Chennai
April 22-23 2004	Proposed revision of IS 800	National	Participant	Institute for steel development and growth	Kongu Engineering college Erode
December 20-31 2004	Emerging trends in CAD/CAM – Theory and practice	National	Participant	Department of Production Engineering	National Institute of Technology Tiruchirappalli
January 19- 20 2006	India- Australia workshop on Cold-Formed Steel Structures	National	Participant	IIT Madras and University of Sydney ,Australia	Indian Institute of Technology Madras
January 17- 19 2007	Non- Destructive testing and evaluation of concrete structures	National	Participant	Structural Engineering Research Centre	CSIR Campus Chennai
December 17 2007	Background to limit state design of cold formed steel members	National	Participant	SERC Chennai and IIT Madras	Indian Institute of Technology Madras
November 17-19 2009	Achieving Excellence in Engineering Education	National	Participant	Institution of Engineers	Engineering staff college of India
January 4-6 2014	Advance developments in beam and plate theories and structural dynamics	National	Participant	National center for disaster mitigation and management	Malaviya National Institute of Technology Jaipur

June 13-15 2014	International Mechanical Engineering Congress	National	Chairperson	National Institute of Technology	National Institute of Technology Tiruchirappalli
April 28-29 2015	Conclave on academic reforms	National	Participant	National Institute of Technology	National Institute of Technology Tiruchirappalli

16. 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
Symposium on Tall structures	National	February	Coordinator	National Institute of Technology- Tiruchirappalli

17. Invited Talks delivered

Topic	Date	Inviting Organization

18. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date	
Life	Indian Society for Technical Education	LM 12401, Year-1982	
Fellow	The Institution of Engineers(India)	016014, Year-1983	
Life	Indian Geotechnical Society	LF 0508, Year-2014	

19. Academic Foreign Visits

Country Duration of Visit		Programme		

20. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page number	Year	Impact Factor of the Journal (Optional)
Manoharan.R, Jayabalan.P, Palanisamy.K	Effect of Chemical Admixture on Corrosion Resistance of Reinforced Steel Rods in Concrete.	ARPN Journal of Engineering and Applied Sciences	Vol.4		2009	
Manoharan.R, Jayabalan.P, Palanisamy.K.	Experimental Evaluation of Corrosion Rate of Rebars in M25 Concrete with Water Proofing Admixture.	International Journal of Applied Engineering Research	Vol.4	1045- 1061	2009	
P.V.Premalatha, K.Muthukumaran, P.Jayabalan.	Effect of dredging and tierod anchor on the behavior of berthing structure.	International Journal of Engineering Science and Technology,	Vol.3	5099- 5115	2011	
Saravana Raja Mohan. K, P.Jayabalan, A.Rajaraman.	Properties of Fly Ash Based Coconut Fiber Composite.	American Journal of Engineering and Applied Sciences	Vol.5	29-34	2012	
J. Ronald Aseer, K.Sankaranarayana samy, P.Jayabalan, R.Natarajan, Priya.K.Dasan.	Morphological, physical and thermal properties of chemically treated banana fiber.	Journal of Natural Fibers	Vol.10	365-380	2013	
J. Ronald Aseer, K.Sankaranarayana samy, P.Jayabalan.	Effect of chemical treatment on mechanical properties of municipal solid waste and banana fiber reinforced polymer composites.	Advanced Materials Research	Vol.871	253-258	2013	
J. Ronald Aseer, K.Sankaranarayana samy, P.Jayabalan	Morphological, PhysicoMechanical and Thermal properties of banana plant fibers (Musa sapientum)	Applied Polymer Composites	Vol.1(3)	125-134	2013	
J. Ronald Aseer, K.Sankaranarayana samy, P.Jayabalan, R.Natarajan, Priya.K.Dasan	Morphological and mechanical properties of chemically treated municipal solid waste (MSW)/ banana fiber and their reinforcement in polymer composites.	Science and Engineering of Composite Materials	DOI 10.1515/ secm2013 - 0203		2013	

	T					1
J. Ronald Aseer, K.Sankaranarayana samy, P.Jayabalan, R.Natarajan, Priya.K.Dasan	Mechanical and water absorption properties of municipal solid waste and banana fiber reinforced urea formaldehyde composites.	Environmental Progress and Sustainable Energy	DOI 10.1002/ ep.11966		2013	
G.Vani, P.Jayabalan, Jikhil Joseph.	Numerical Analysis of Cold Formed Steel Plain Angle Compression Members	International Journal of Emerging Technology and Advanced Engineering	Vol.3	22-29	2013	
V.Innasi Raja, M.Suneel Kumar and P.Jayabalan	Ultimate strength of uniaxially compressed mild steel plate at elevated temperatures	Journal of Structural Fire Engineering	Vol.4		2013	
Nivethitha.A.P, Jayabalan.P, Vani.G.	Numerical Analysis of Eccentrically Loaded Cold Formed Plain Channel Columns	Journal of Structures – Hindawi Publications			2014	
G.Vani, P.Jayabalan.	Codal comparisons for the behaviour of unstiffened cold formed angle compression member	International Journal of Earth Sciences and Engineering (Under Publication)				
V.Kalyanaraman, N.B.Vijayakumar, B.V.Vijay and P.Jayabalan	Local and Post buckling behaviour of fibre composite plates	Journal of Aero society of India	Vol.41		1989	
Saravanarajamohan. K, Jayabalan.P, Rajaraman.A	Studies on fly ash concrete composites	ICI Technical Volum			2003	
Umesha.P.K, Kavitha.R, Jayabalan.P.	HEMTAAD: A Computer software for analysis and design of Microwave tower	New Building Materials and Construction World	Vol.10		2004	
Rajaraman.A, Natarajan.C, Jayabalan.P, Almas Begum.N.	Corrosion evaluation of prestressed steel in prestressed concrete cantilever segmental block	Journal of the Indian Road Congress	Vol.66-2	427 – 434	2005	
Natarajan.C, Jayabalan.P, Almas Begum.N, Rajaraman.A	Corrosion protection by coatings on prestressed steel	The Journal of Science and Engineering Corrosion	Vol.61	1189 - 1193	2005	
Krishnaswami.B.N, Dattatreya.J.K, Jayabalan.P, Neelamegam.M	Durability Aspect of High Performance Concrete	ICI Journal	Vol.7		2007	

Suneel Kumar.M, Jayabalan.P, Natarajan.C	Effect of Intra Planar Differential Settlement Analysis of Boiler Supporting Structure –A Case Study	Institution of Engineers	Vol.68		2007	
Jayabalan.P	Interaction Curves for Stiffened Plates Subjected to Axial and Lateral Loads	INSDAG'S Steel in Construction	Vol.8		2007	
Jayabalan.P	Neural Network Model for Torsional Flexural Buckling of Innovative Cold Formed Steel Compression Members	INSDAG'S Steel in Construction	Vol.8		2007	
Jayabalan.P, Krishnaswami.B.N	High Performance Concrete Using Fumed Silica	New Building Materials and Construction World	Vol.13		2008	
Niranjana.G, Samson Mathew, Jayabalan.P.	Structural Strength Enhancement of Rigid Pavement using Scrap Steel Fibre Reinforcement	New Building Materials and Construction World	Vol.13		2008	
Saravanarajamohan. K, Rajaraman.A, Jayabalan.P, Lakshmiprabha.T.	Role of Fly Ash Concrete Composites in Resisting Seismic Damage	The IUP Journal of Structural Engineering	Vol.IV	18-26	2011	
Premalatha PV, Muthukumaran K, Jayabalan.P.	Experimental Study on behaviour of Piles in a berthing structure	Maritime Engineering Journal				

B. Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Nivethitha.A.P, Jayabalan.P, Vani.G	Finite element analysis of eccentrically loaded cold formed plain channel sections	International conference on Innovations and Advances in Civil Engineering Towards Green and Sustainable Systems (INACES 2014)			Coimbatore, Tamil Nadu, India	April 2014
A.Subbulakshmi, P. Jayabalan	Nonlinear analysis of square concrete filled steel tubes under constant axial load and monotonic lateral loading	International Conference on Structural Engineering and Mechanics (ICSEM 2013)			Rourkela, India	Decem ber 2013
J. Ronald Aseer, K.Sankaranarayan asamy, P.Jayabalan	Effect of Chemical Treatment on Mechanical Properties of Municipal Solid Waste and Banana Fiber Reinforced Polymer Composites	International Conference on Applied Mechanics, Fluid and Solid Mechanics(A MFSM 2013)			Singapore	Novem ber 2013
G.Vani, P.Jayabalan, Jikhil Joseph	Numerical Analysis of Cold Formed Steel Plain Angle Compression Members	International Conference on Modern Trends in science, Engineering and Technology 2013			Dubai	Septem ber 2013
J. Ronald Aseer, K.Sankaranarayan asamy, P.Jayabalan	Morphologcal, PhysicalMechanic al and Thermal properties of banana fibers (Musa sapientum)	Third International Conference on Natural Polymers (ICNP 2012)			Mahatma Gandhi University, Kottayam, Kerala, India	Octobe r 2012
P V Premalatha, K.Muthukumaran, P.Jayabalan	Behavoiur of piles supported berthing structure under lateral loads	Pan-Am CGS Geotechnical Conference (14th PanAmerican Conference on Soil Mechanics and Geotechnical Engineering)			Toronto, Ontario, Canada	Octobe r 2011

Premalatha.P.V, Sandeep.G, Jayabalan.P, Muthukumaran.K	Numerical Modelling and Analysis of a Berthing Structure with Tie Rod	Proceedings of the International Conference in Ocean Engineering, ICOE 2009		IIT Madras, Chennai, India	Februar y 2009
Niranjana.G, Samson Mathew, Jayabalan.P.	Fiber Reinforced Concrete for Seismic Strength Enhancement of Rigid Pavements	Proceedings of the International Conference on Earthquake Engineering		SoCE, SASTRA, Thanjavur	Februar y 2006
Samson Mathew, Jayabalan.P, Niranjana.G, Sankar.K.	Optimization of Fibers and Study on the Mechanical Characteristics of the Fiber Reinforced Concrete	Proceedings of the International Conference on Recent Advances in Concrete and Construction Technology		SRMIST, Chennai	Decem ber 2005
Saravanarajamoha n.K, Jayabalan.P, Rajaraman.A, Lakshmiprabha.T	Role of Flyash Based Fibre Concrete Composites in Resisting Seismic Damage	Proceeding of International Conference on Structural and Foundation failures		Singapore	August 2004
N.Krishnamoorthy, P.Jayabalan.	High Performance Concrete Using Fumec Silica	International Conference on Advances in Concrete Construction – ICACC – 2004		Hyderabad	Decem ber 2004
Saravanarajamohan. K, Jayabalan.P, Rajaraman.A.	Performance Enhancement in Concrete Composites Using Local Materials	Proceeding of 28th International Conference on Our World of Concrete and Structures	413-420		August 2003
Saravanarajamohan. K, Jayabalan.P, Rajaraman.A.	Studies on fly ash concrete composites	Proceeding of International Conference on Innovative World of Concrete	102-105		2003
Kamatchi.P, Jayabalan.P, Natarajan.C, Kuppusamy.K.A.	Rehabilitation of Overhead water tank-A case study	Proceedings of the International conference on 'Maintenance and Durability of Concrete structures		Hyderabad	March 1997

S.Ravindra Bharathi.K, Sakthi, P.Jayabalan	Object oriented programming applications in the design of RCC Beams	International Conference on Computing and Information Technology for Architecture, Engineering and Construction		Singapore	May 1996
V.Kalyanraman, P.Jayabalan	Local buckling of stiffened & Unstiffened elements, under Nonuniform compression	12th International specialty conference on Cold formed steel structures		St.Louis, Missouri, USA	Oct 1994
G.Vani, P.Jayabalan.	Codal comparisons for the behaviour of unstiffened cold formed compression members	Proceedings of the National Conference on Advancement s in Materials, Construction & Sustainable Environment (AMCSE 2014)		Krishnanko vil, Tamilnadu, India	March 2014
Premalatha.P,V, Muthukumaran.K, Jayabalan.P.	Analysing the Optimum Length of Tie Rod Anchor for a Berthing Structure	Proceedings of Indian Geotechnical Conference – Geotechnics in Infrastructur e Development (GEOTIDE)	127-130	IGC 2009, GUNTUR, Andra Pradesh, India	Feb 2010
Sandeep.G, Premalatha.P.V, Jayabalan.P, Muthukumaran.K	Strengtheni ng of Berthing Structure	Proceedings of the National Conference on Failure Studies and Remedial Measures to Concrete Structures	190-199	KSR College of Engg, Tiruchengo de with AICTE New Delhi	Dec 2008
Jayashankar.R, Jayabalan.P, Manoharan.R.	Effect of Chemical Admixtures on Corrosion of Reinforced Concrete	Proceeding of National Conference on Advances and Innovations in Civil Engineering		Sivakasi	March 2007
Jayashankar.R, Jayabalan.P, Manoharan.R.	Effect of Flyash and Blast Furnace Slag in Concrete	Proceeding of National Conference on Advances and Innovations in Civil Engineering		Sivakasi	March 2007

Natarajan.C, Jayabalan.P, Dhanalakshmi.G	Behaviour of cement – flyash blocks and masonry prisms	Accepted and presented in National Conference on New Perspectives and Paradigm in Materials, Design and Construction of Civil Engineering Systems (NPPCES – 2005)		Coimbatore Institute of Technology, Coimbatore	January 2005
Saravanarajamohan K, Jayabalan.P, Rajaraman.A.	Properties of Jute fibre reinforced concrete	Proceeding of National Seminar on Recent Trends Building Materials	194-202	CSIR Bhopal	2004
Kamatchi.P, Jayabalan.P, Natarajan.C, Kaleel Rahman, Sakthi.K.	Design of Structural Steel Frames using Object - Oriented Programming Approach	Proceedings of the National Conference on Computer Aided Structural Analysis & Design		Hyderabad	January 1996
Kaleel Rahman, Jayabalan P Natarajan.C, Kamatchi.P, Sakthi.K.	Design of R.C.C. Framed Structures using Object — Oriented Programming Approach	Proceedings of the National Conference on Computer Aided Structural Analysis & Design		Hyderabad	January 1996
Vanathy.K, Natarajan.C, Jayabalan.P, Sakthi.K.	Knowledge Based Expert System for Structural floor Systems	Proceedings of the National Symposium on 'Tall Structures		Tiruchirapp alli	Februar y 1995
P. Jayabalan V.Kalyanaraman,	Local buckling of Nonuniformly compressed stiffended and unstiffened elements	National Symposium on Advance in steel structures		Chennai	Februar y 1990
H.B.Arvind, P.Jayabalan, R.Balasubramanian, V.Kalyanaraman C.S.Krishnamorthy	Analysis of Guyed Masts	Second International Conference on Computer Aided Analysis and Design in Engineering		Roorkee	Februar y 198

M.Divya, R.SentilKumar P.Jayabalan	Prediction of flexural capacity of cold formed steel concrete composite beam	Proceeding of 11 th Structural Engineering convention			Kolkata	
--	--	--	--	--	---------	--

C. Books & Monographs

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