

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

## Curriculum Vitae

Please attach your



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

1. Name : **Dr. P. A. Krishnan**
2. Designation : Professor
3. Office Address: Department of Civil Engineering,  
NIT, Trichy
4. Telephone (Direct) (Optional): 04312503158  
Telephone :                                  Extn (Optional):  
Mobile (Optional): 8129769531
5. Email (Primary): pak@nitt.edu                                  Email (Secondary)  
:p\_a\_krishnan@yahoo.com
6. Field(s) of Specialization: Applied Mechanics
7. Employment Profile

Job Title	Employer	From	To
REC ,Trichy	Lecturer	1990	1997
University of Liverpool, UK	SeniorResearch Assistant	1997	1998
NIT, Trichy	Assistant Professor	1999	2008
NIT, Trichy	Professor	2008	Till date

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

University/Board	Qualification	Year	Specialisation
Kerala State Educational Board	X	1976	All Subjects
Calicut University	Pre-Degree	1978	Physics, Chemistry and Maths Specialization
IIT, Delhi	B. Tech	1984	Civil Engineering
IIT, Madras	M. Tech	1986	Engineering Mechanics
IIT, Madras	Ph. D	1991	Applied Mechanics

9. Academic/Administrative Responsibilities within the University

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Position	Faculty/Department/Centre/Institution	From	To
M. Tech Structural Engineering Coordinator	Department of Civil Engineering		
Chairman of different class committees	Department of Civil Engineering		
Coordinator of M. Tech projects	Department of Civil Engineering		
Member PG Admissions Committee	Department of Civil Engineering		
Member, MS/Ph. D Admission Committee	Department of Civil Engineering		
Involved in purchase of equipment for Structural Engineering Lb., Strength of Materials lab and Survey Lab.	Department of Civil Engineering		
Staff Advisor , Civil Engineering Association	Department of Civil Engineering		
TEQIP Books purchase Committee	Department of Civil Engineering		
Arranged Class Seminars and Field visits for students	Department of Civil Engineering		
Acted as member, Scrutinizing Committee for Lecturer Selection in Civil Engineering Department	Department of Civil Engineering		
I year coordinator of Engineering Mechanics.	Department of Civil Engineering		
Resource person for SESTRAD organized by Department of Civil Engineering REC Trichy	Department of Civil Engineering		
Organized 2 day Workshop on Finite Element Methods for Engineers on 1 <sup>st</sup> and 2 <sup>nd</sup> February 2007 under TEQIP Community Service.	Department of Civil Engineering		
Currently guiding three Ph. D and one M.S candidate	Department of Civil Engineering		

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Was the QIP coordinator for one year	Institution		
Was the Hostel Warden	Institution		

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
1986	Student with the Best Academic Record in M. Tech in Engineering Mechanics	IIT, Madras

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
	FIE	Institution of Engineers, India		
	FIGS	Indian Geotechnical Society		

13. Details of Academic Work

(i) Curriculum Development

**(ii) Courses taught at Postgraduate and Undergraduate levels**

- a) Structural Analysis b) Advanced Strength of Materials c) Mechanics of Solids  
d) Experimental Stress Analysis e) Structural Dynamics f) Theory of Elasticity and Plasticity  
g) Theory of Plates h) Finite Element Methods i) Engineering Mechanics j) Basic Civil Engineering

**(iii) Projects guided at Postgraduate level**

- 1) “ Effect of Finite Sizes of Joints on Static and Dynamic Behaviour of Frames”

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- 2) “An Analytical Study on the Behaviour of SSRC Plate Under combine dInplan and Lateral Load”
- 3) “An Experimental Investigation on the Efficiency of Beam Column Joints”
- 4) “Analysis of Multistory Frames using Guyan reduction Procedure”
- 5) “Analysis of Plates Using Integral Equation Method”
- 6) ‘Base Isolation of Framed Structures”
- 7) “Vibration of Shell Panels Using Integral Equation Method”
- 8) “Static Analysis of Plates Using Three Noded Triangles”
- 9) “Analysis of thin Conical Shell panels Using Integral Equation Method”
- 10) “Vibration of Spherical panels Using Integral Equation Method”
- 11) “Static Analysis of Hybrid Laminated Beams using Shear Deformation Theories”
- 12) ‘Analysis of Stiffened Plates Using ANSYS 5.6”
- 13) “Static and Dynamic Analysis of Orthotropic Triangular Plates”
- 14) “Analysis of Laminated Composite Plates using Integral equation Method”
- 15) “Integral Equation Schemes of Laminated Beams”
- 16) “Static Analysis of Thick Plats Using Integral Equation Method”
- 17) “Buckling of Plates subjected to Compressive Inplane Loading”
- 18) “Static and Dynamic Analysis of Laminated Composite Plates”
- 19) “Static and Dynamic Analysis of Thin Plates by Finite Difference Method”
- 20) “Static Analysis of Steel and Laminated Composite Plates Using FE Method Based on Strain Approach”
- 21) “Buckling and Ultimate Load Carrying Capacity of Stiffened tapered Plates”
- 22) “Analysis of Laminated Plates”
- 23) “Performance based Seismic Design of moment resistant Frames”
- 24) ‘Earthquake Analysis of Visco-elastic Damped Multi-storied Building”
- 25) ‘Analysis of Cylindrical Shells using Integral equation Technique”
- 26) “Static and Dynamic Analysis of Homogeneous Isotropic Rectangular Plates using Finite Difference Method”
- 27) ‘Analysis of Beams and Plates due to Moving Loads”
- 28) “3-Dimensional Time History Analysis of Multi-Storey Buildings with ADAS Dampers”
- 29) ‘Analysis of Trapezoidal Corrugated Plates Using ANSYS-11”
- 30) “Seismic Analysis of High Rise Buildings Considering the Effect of Floor Slabs”
- 31) “Free Vibration Analysis of Bridge Trusses”
- 32) “Development of Plastic Hinges for Steel Concrete Composite Columns “
- 33) “Free Vibration Analysis of Clamped Laminated Cylindrical Panels using an Integral equation Method”
- 34) “Analysis of Laminated Plates subjected to Moving Load/mass”
- 35) “Analysis of Laminated Plates subjected to moving Oscillators”
- 36) “Analysis of Laminated Skew Plates Using Integral Equation Method”
- 37) “Three dimensional Vibration Analysis of Orthotropic Plates By using Radial Basis Functions”
- 38) “Study of Sandwich Beams with different Core Geometries Subjected to One point loading”
- 39) “Analysis of Thick Plates Using Integral Equation Method”

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- 40) “Interfacial Stress Analysis of Externally Plated Reinforced Concrete Beams”  
 41) “Free Vibration Analysis of Composite Skew Plates”  
 42) “Behaviour of Piles Under Static and Dynamic Loads”

### 14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed

### 15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
M. Asok Kumar	“Studies on Strength and Behaviour of Retrofitted RCC Beams”	Supervisor	2011

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

- Environmental Impact Analysis of Water Resources Projects , CWRDM, Kozhikkode 16<sup>th</sup> to 21<sup>st</sup> August 1993.
- AICTE Shortterm Course on Vibration Engineering, REC , Calicut 19<sup>th</sup> October to 1<sup>st</sup> November 1998.
- Recent Developments in Analysis and Design of Offshore Structures, REC Calicut 16<sup>th</sup> to 27<sup>th</sup> May 1994
- AICTE Shortterm Course on System Simulation with Digital Computer with Special Emphasis on Project Management ,REC Calicut,17<sup>th</sup> to 31<sup>st</sup> May 1995
- Random Vibration and Application to Earthquake Engineering,IIT Kharagpur,21<sup>st</sup> to 51<sup>st</sup> December 1999  
(Here I acted as Resource Person also in this Course)
- Probability Methods in Earthquake Engineering (PMEE 2005),IIT Madras, 11<sup>th</sup> to 15<sup>th</sup> July 2005
- Acted as a Resource person for SESTRAD organized by Department of Civil Engineering REC Trichy

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

Organized 2day Workshop on Finite Element Methods for Engineers on 1<sup>st</sup> and 2<sup>nd</sup> February 2007 under TEQIP Community Service.

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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
MIE	Institution of Engineers, India	
MISTE	Indian Society for Technical Education	

20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. **Publications**

(A) **Refereed Research Journals:**

1. R. S. Srinivasan and P. A. Krishnan “Vibration of Cylindrical Shell Panels”, Journal of Sound and Vibration 114(3), pp 583-587 (1987)
2. R. S. Srinivasan and P. A. Krishnan “Vibration of Conical Shell Panels”, Journal of Sound and Vibration 117(1), pp 153-160 (1987)

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3. R. S. Srinivasan and P. A. Krishnan “Dynamic Analysis of Stiffened Shell Panels”, Computers and Structures, 33(3), pp 831-837 (1989)
4. R. S. Srinivasan and P. A. Krishnan “Dynamic Analysis of Layered Conical Shell Panel Using Integral Equation Technique”, Computers and Structures, 31(6), pp 897-905 (1989)
5. R. S. Srinivasan and P. A. Krishnan “Response of Orthogonally Stiffened Cylindrical Shell Panels”, AIAA Journal, 28(6), pp 1144-1145 (1990)
6. R. S. Srinivasan and P. A. Krishnan “Integral Equation Technique Using Normal Mode Method for Nonlinear Random Vibration of Clamped Rectangular Plates”, Probabilistic Engineering Mechanics, 3(4), pp 204-209 (1990)
7. R. S. Srinivasan and P. A. Krishnan “Application of Integral equation Technique to Nonlinear Stochastic Response of Rectangular Plates”, Journal of Acoustical Society of America, 88(5), pp 2277-2283 (1990)
8. R. S. Srinivasan and P. A. Krishnan “Random Response of Thick Laminated Rectangular Plates”, Journal of Vibration and Acoustics, ASME Transactions, 113(3), pp 286-291 (1991)
9. J. Blachut, L.S. Ramachandra, P. A. Krishnan “Experimental and Numerical Investigation of Plastic Loads for Internally Pressurized Vessel Heads”, Pressure Vessel and Piping Codes and Standards, Vol.360, pp 345-359 1998
10. P. A. Krishnan and Uma, ”Analysis of Rectangular Plates Using Integral equation Method”, Journal of Structural Engineering, SERC Journal, 27(4),pp283-285 (2001)
11. P. A. Krishnan and Senthil Kumar, ”Static Analysis of Hybrid Laminated Beams Using Shear Deformation Theories”, Journal of Structural Engineering, SERC Journal, 32(4),pp327-332 (2005)
12. P. A. Krishnan and Smitha George “ Forced Response of Angle Ply Laminates using Finite Difference Method” Institution of Engineers (India) Journal Vol. 88, pp 28-33 (2007).
13. P. A. Krishnan and Simi Gopalan “Static and Dynamic Analysis of Cylindrical Shells using Integral equation Method” The Icfai University Journal of Structural engineering Vol.I No.1 pp 76-81(2008)
14. P. A. Krishnan and Rajitha “ Static and Dynamic Analysis of Rectangular Plates with Linearly Varying Thickness” Institution of Engineers (India) Journal Vol. 89, pp 3-7 (2009).

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)

**(B) Conferences/Workshops/Symposia Proceedings**

1. J. Blachut, L.S. Ramachandra, P. A. Krishnan, ”Plastic and Shakedown Loads for Internally Pressurized Domes made from Strain hardenignMaterials” Proceeding, 9<sup>th</sup>

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- International Conference On Pressure Vessel Technology, Sydney Australia, April 2000
2. P.A. Krishnan , S. U. Mathangi and M. Asok Kumar” Effect of Damping in Base Isolated Framed Structures” 2<sup>nd</sup> National Conference on Recent Trends in Concrete Composites for Structural Systems, Kongu Engineering College, Perunthurai, 14<sup>th</sup> and 15<sup>th</sup> March 2007.
  3. E. Satheesh kumar, P.A. Krishnan and M. Asok Kumar,”Seismic Analysis of Visco-Elastic Damped Multi-storey Buildings”, International Conference in Emerging Technologies and Science, Amogh Siddhi Educational Society, Maharashtra, February 13<sup>th</sup> and 14<sup>th</sup> 2008.
  4. P.A. Krishnan, M. Asok Kumar and S. Damodharan, “ Base Isolation of Framed Structures”, National Conference of Emerging Technologies in Civil Engineering for Sustainable Development, SRKR College, Bhimavaram,27<sup>th</sup> to 29<sup>th</sup> December 2006.
  5. P.A. Krishnan and Smitha George,” Vibration of Laminated Composite Crss Ply Plates Using Finite Difference Method”, National Conference on Focus on Advances in Civil Engineering, TKM College of Engineering, Kollam,1<sup>st</sup> to 3<sup>rd</sup> Feb. 2007.
  6. P.A.Krishnan, ”Free Vibration of Skew Laminated Plates using Integral Equation Method”, ,24<sup>th</sup> and 25<sup>th</sup> February 2010,Technologia , MPC CET, Bhilai.
  7. P.A.Krishnan, ”Analysis of Laminated Plate Subjected to Moving Load” ,24<sup>th</sup> and 25<sup>th</sup> February 2010,Technologia , MPC CET, Bhilai.
  8. P.A. Krishnanand ,S. Parmar “ A Comparative Study of Loading Resistant to Sandwich Beam panel”, Recent Trends in Structural Engineering , 6<sup>th</sup> and 7<sup>th</sup> January 2012 VNR Vijnana Jyothi Institute of Engineering and TechnologyJNTU, Hyderabad.
  9. B Shushoban/Dr. P.A Krishnan ” Free vibration analysis of stiffened shells”, International Conference on Advances in Civil Engineering and Chemistry of Innovative Materials ACECIM ’14, 13<sup>th</sup> and 14<sup>th</sup> March 2014, SRM University Chennai.
  10. P.A.Krishnan and Fareed Kumar ” Free Vibration Analysis of Composite Skew Plates” National Conference on Sustainable Development NCS DCE’ 14, 28<sup>th</sup> March 2014, Hindustan University of Technology and Science, Chennai.
  11. N.S. Padmavathy, P.A.Krishnan and Bharath Reddy”Free Vibration Analysis of Pre-stressed Circular Cylindrical Shells using ABAQUS” National Conference on Advancements in Materials, Construction and Sustainable Environment (AMCSE-2014), 29<sup>th</sup> March 2014, Kalasalingam University.
  12. Aniruddh Maddi and P. A. Krishnan”Interfacial Stress Analysis of Externally Plated RC Beams” Futuristic Innovations and Emerging Trends in Civil Engineering FIETCE ’14 Department of Civil Engineering, B.S.Abdurahman University, Chennai 5<sup>th</sup> and 6<sup>th</sup> May 2014.

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year



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(C) Books & Monographs

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