

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

Curriculum Vitae



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

1. Name: **Dr. RAMASWAMY NARAYANASAMY,**
B.E., M.Tech., M.Engg., Ph.D.,(D.Sc.)

2. Designation: **Professor** (One of the Senior Most
Professors)

3. Office Address: MTB 201, Department of
Production Engineering,
NIT-Trichy – 620 015.

4. Telephone (Direct):
Telephone : 0431- 2503504

Mobile: 9443984160

5. Email (Primary): narayan@nitt.edu

Email (Secondary) :
narayan10455@yahoo.co.in

6. Field(s) of Specialization: Metal Forming(Bulk & Sheet Metal), Powder Metallurgy.

7. Employment Profile

Job Title	Employer	From	To
Professor	NIT-Trichy	2004	Till date
Assistant Professor	NIT-Trichy	1996	2004
Lecturer	NIT-Trichy	1986	1996
Engineer (Research)	Central Metal Forming Institute, HMT Limited, Hyderabad	1983	1986
Teaching Assistant	McMaster University, Ontario, CANADA	1981	1983

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

Assistant superintendent (R&D)	Tube Products of India, Avadi, Madras	1979	1981
Trainee (Forge Division)	H.A.L., Bangalore	1978	1979
In-plant training (Weekly 6 Hours)	P.S.G. Foundry, Coimbatore	1974	1977

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

Examination	Board / University	Year	Division/ Grade	Subjects
Post –Doctoral (Research)	NIT-Trichy	1993-2015		Sheet Metal Forming, CAD/CAM Extrusion, FEM Applications, Hot and Cold Forging of Powder Metallurgy. Nanocomposites, Diffusion welding, Wear mechanism, Workability studies.
D.Sc. (Research) Production Engineering	Bharathidasan University, Tiruchirappalli, Tamil Nadu.	1993-2001	Results Awaited	Upsetting of Powder Metallurgy Forging.
Ph.D. (Research) Production Engineering	Bharathidasan University, Tiruchirappalli, Tamil Nadu	1989-1992		Drawing behavior of sheet metals through Conical and Tractrix dies
M.Engg. (Research)	McMaster University, Ontario, CANADA	1981-1983	85%	Wrinkling behavior of various grades of sheet metals
M.Tech.	IIT, Madras	1977-1979	First Class, Second Rank	Metallurgy
B.E.	PSG College of Technology, Madras University	1972-1977	First Class, Third Rank	Metallurgical Engineering.

9. Academic/Administrative Responsibilities within the University

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

Position	Faculty/Department/Centre/Institution	From	To
Head of the Department	Production Engineering, NIT-Trichy	Feb. 2002	Nov. 2002

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Chairman	Standing Committee of Anna University, Trichy-620 024	Jan. 2012	Till date

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2015	Life Time Achievement Award	Indian Society for Technical Education (ISTE).
2008	Best Tamil Nadu Scientist Award	Tamil Nadu State Council for Science and Technology (TNSCST), Directorate of Technical Education Campus, Chennai - 25
2007	Best Teacher Award	National Institute of Technology, Tiruchirappalli – 15

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
1977-1979	Government of India stipend for M.Tech. Programme	IIT, Madras	1977	1979
1981 – 1983	Fellowship for M.Engg. (Research),	McMaster University, CANADA	Sep.1981	June 1983
2001	Post Doctoral Fellowship	McMaster University, CANADA	2001	2002
2006	Post Doctoral Fellowship	IGCAR, Kalpakkam, Tamil Nadu	2006 Summer 2 Months	

13. Details of Academic Work

- (i) Curriculum Development
- (ii) Courses taught at Postgraduate and Undergraduate levels

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

- a) Theory of Plasticity.
- b) Mechanics of Metal Forming.
- c) Sheet Metal Technology.
- d) Metal Forming technology.
- e) Mechanical behavior of metals.
- f) Materials Technology
- g) Foundry Technology.
- h) Welding Technology.
- i) Tool Engineering Design.
- j) Engineering Drawing.
- k) Machine Design Drawing.
- l) Value Engineering.
- m) Computer aided design and Manufacturing.
- n) Design for Manufacture and Assembly.

(iii) Projects guided at Postgraduate level – More than 60.

(iv) Other contribution(s)

Doctoral Committee Member for various Universities.

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Wrinkling behaviour of different steels sheet metals when Deep Drawing through conical and Tractrix dies	Natural Sciences and Engineering Research council of CANADA , Government of Canada	1981	1983	USD 5000.00
Cold Extrusion of Bearing Races using AISI 5120 Steel	Central Metal Forming Institute, HMT Ltd., Hyderabad, Government of India Undertaking	1983	1986	Rs. 10.00 Lakhs.
Establishment of Metal Forming Laboratory	Government of India	1988	1990	Rs. 18.00 Lakhs.
Formability of Ultra light weight sheet metals	Government of India	1988	1991	Rs. 5.00 Lakhs.
Wrinkling behaviour of various stainless	U.G.C. Project, Govt. of India	1994	1996	Rs. 5.00 Lakhs

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

steel grades of sheet metals				
Hot forging of different P/M steels using different dies	U.G.C. Project, Govt. of India	1996	1996	Rs. 6.00 Lakhs
FLD(Forming Limit Diagram) and Wrinkling behavior of IF steels sheet metals	FORD India Limited, Chennai, India	2003	2003	
FLD(Forming Limit Diagram) and Wrinkling behavior of different automobile steels sheet metals	TATA IRON AND STEEL COMPANY, Jamshedpur, India	2006	2006	Rs. 13.00 Lakhs
FLD(Forming Limit Diagram) and Wrinkling behavior of different steels sheet metals	Tube Products of India, Chennai, India	2003	2003	
Finite element analysis of P/M metals and alloys during forging	U.G.C. project, Govt. of India	2003	2003	Rs. 3.4 Lakhs
FLD(Forming Limit Diagram) and Wrinkling behavior of different stainless steels sheet metals,	SALEM STEEL PLANT, SAIL, Salem, India,	2009	2009	Rs. 2.00 Lakhs
Synthesis, characterization and mechanical workability behavior of nanocrystalline AA 6061 Al alloy reinforced with Titania nanocomposites	Heavy Alloy Penetrator Project (HAPP), Ministry of Defense, Government of India	2011	2015	

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

prepared by mechanical alloying				
FLD(Forming Limit Diagram) and Wrinkling behavior of different stainless steels sheet metals,	SALEM STEEL PLANT, SAIL, Salem, India	2011	Ongoing	
Hole expansion test on various steel sheets	TATA Steels, India	2010	2010	Rs. 4.00 Lakhs
Formability and fracture analysis of Stainless steel 441 grade and other grades of Stainless steels	M/s. Jindal Steels, Hisar, India	2016	2016	
Nanocomposites and its workability	NIT, Trichy			
Powder Metallurgy composites and its workability	NIT, Trichy			
Natural fiber composites and its studies	NIT, Trichy			
Workability behavior of Aluminum and Magnesium alloys and composites	NIT, Trichy			
Friction Welding behavior of Magnesium alloys and composites	NIT, Trichy			
Wear studies on Aluminum and Magnesium alloys and composites	NIT, Trichy			
Forming limit diagrams for aluminum and its alloys - sheet metals	NIT, Trichy			
Cryorolling and	NIT, Trichy			

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

formability studies on aluminum and its alloys				
Bending analysis of IF steel grades sheet metals	NIT, Trichy			
Shrink Flanging of sheet metals	NIT, Trichy			
Stretch flanging of sheet metals	NIT, Trichy			
Cold extrusion of aluminum and copper alloys	NIT, Trichy			
Diffusion welding of various metals and alloys	NIT, Trichy			
Optimization of blank layout for blanking operation	NIT, Trichy			
Expert system for cold extrusion of metals	NIT, Trichy			
Curve fitting of stress-strain data using computer software	NIT, Trichy			
Processing of Strain Data using optimization algorithm (CAD)	NIT, Trichy			
Computer aided design of progressive die for sheet metal blanking	NIT, Trichy			
Drawability of all grades of Low Nickel Grades Stainless Steels and other sheets	NIT, Trichy			
Drawability of various automobile grades of steel sheet metals	NIT, Trichy			
Forging of P/M	NIT, Trichy			

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

composite materials				
Cold forging of all ductile metals	NIT, Trichy			
Yield behaviour for Powder metallurgy components	NIT, Trichy			
Study of barreling aspects during forging	NIT, Trichy			
Deep drawing of cups with radial pressure	NIT, Trichy			
Ductile fracture criteria	NIT, Trichy			
Grain growth in low carbon steels	NIT, Trichy			
Processing of Al, Ti and Boron killed EDD quality steels	NIT, Trichy			
Theoretical analysis of wrinkling	NIT, Trichy			
Theoretical analysis of Tube bending and wrinkling	NIT, Trichy			

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
Dr. V. Pakkirisamy	Wrinkling behaviour of various Low Nickel Grades Stainless Steels	Supervisor	2001
Dr.S.Sathiyarayanan	Barrelling behaviour of some metals during upsetting	Supervisor	2001
Mr. K.R. Subramaniam	Theoretical aspects of forging of powder metallurgy components and sheet metal	Supervisor	2003

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

	forming		
Mr.P.Srinivasan	CAD/CAM extrusion – Upper bound solution	Supervisor	2004
Mr.S.Raghuraman	Some theoretical aspects on deep drawing of sheet metals	Supervisor	2004
Mr. S. Malayappan	Barrelling behaviour of some non ferrous metals during cold forging	Supervisor	2005
Mr.Syed Abu	Barrelling aspects during cold forging of truncated cone solids	Supervisor	2004
Mr. S. Venkatesan	Advances in CAD/CAM extrusion – Upper bound solution	Supervisor	2005
Mr. K.Manisekar	Cold forging of non axi-symmetric cylinders	Supervisor	2005
Mr. N. Selvakumar	Cold forging of Aluminium – Iron composites	Supervisor	2005
Mr. C. Loganathan	Wrinkling behavior of different grades of Aluminum sheets	Supervisor	2005
Mr. C. Sathiya Narayanan	Formability analysis and its evaluation of sheet metals of various Indian steel grades	Supervisor	2008
Mr. T. Ramesh	Workability of some powder metallurgy composites during cold upsetting	Supervisor	2006
Mr. V.Senthilkumar	Workability studies on powder metallurgy pure iron and iron – titanium carbide composite steels	Supervisor	2007
Mr. K.Baskaran	Some studies on forging behavior of elliptical shaped	Supervisor	2008

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

	billets during cold upsetting		
Mr. M.Ravichandran	Forming and fracture behavior of some aluminium and its alloy sheets at room Temperature	Supervisor	2008
Mr. J.Satheesh	Wrinkling behavior of some aluminium alloy sheet metal when drawn through conical and tractrix dies	Supervisor	2009
Mr. V.Anandkrishnan	Pore closure and workability on Powder Metallurgy of Carbon Steels	Supervisor	2010
Mr. P.Padmanabhan	Air bending of L.F steels sheet metals	Supervisor	2009
Mr. M. Prabhakar	Workability and Pore closure behavior on powder metallurgy of Al-SiC metal matrix Composite	Supervisor	2010
Mrs. N.V. Anbarasi	Mathematical analysis on Formability of sheet metals	Supervisor	2010
Mr. S.Sivasankaran	Study on synthesis, characterization and workability behavior of nanocrystalline AA 6061 alloy reinforced with TiO ₂ composite	Supervisor	2011
Mr. S.Sathiyamurthy	Studies on mechanical behaviors of filler added coir polyester composites	Supervisor	2012
Mr. K.Chandra Sekhar	Formability, Void Coalescence and Texture analysis of cryorolled aluminum	Supervisor	2015

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

	alloys		
Mr. D.Jeyasimman	Effect of various reinforcements on synthesis, Characterization, Workability and dry sliding wear behavior of AA 6061nanocomposites prepared by mechanical alloying	Supervisor	2015
Mr. S.Vigneshwaran	Cryorolling and Formability of sheet metals of Al alloy and SS 304 grades	Supervisor	Ongoing, Since 2015
Mr. C.Chinthanai Selvan	Cryorolling and Formability of sheet metals of Al alloys and Cu alloys	Supervisor	Ongoing, Since 2016

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
November 1996	Computer Graphics	National	Participant	NIT, Trichy	NIT, Trichy
July 1991	Advance welding processes and Q.C.	National	Participant	NIT, Trichy	NIT, Trichy
May 1988	Advance welding science and technology	National	Participant	NIT, Trichy	NIT, Trichy
Dec. 1986	Alloy steels	National	Participant	NIT, Trichy	NIT, Trichy
June 1978	Effective speaking	National	Participant	Indo American Society, Madras	Chennai
June – July, 1990	Professional Development	National	Participant	TTTI, Madras	Chennai

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

	Course				
2002	Recent trends in modeling of Manufacturing Systems	National	Participant	NIT, Trichy	NIT, Trichy
Dec. 2004	Emerging Trends in CAD/CAM – Theory and Practice	National	Participant	NIT, Trichy	NIT, Trichy
Mar. 1997	Industry Institute Partnership	National	Participant	NIT, Trichy	NIT, Trichy
Jan. 1997	Performance Appraisal and Development System	National	Participant	NIT, Trichy	NIT, Trichy
Dec. 2010	Joining of Materials	National	Participant	IISC, Bangalore	IISC, Bangalore
Nov. 2009	Characterization of Materials	National	Participant	NIT, Trichy	NIT, 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)	Role	Venue
National conference on Metal Forming	National	2001	Organizer	NIT-Trichy
National conference on Powder Metallurgy	National	1993	Organizer	NIT-Trichy

18. Invited Talks delivered

Topic	Date	Inviting Organization
Workshop on Sheet Metal Forming	Oct. 1, 2016	IIT, Madras
Delivered Lectures in various Universities		

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

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Fellow member	Indian Institute of Metals	46681, 2011
Fellow member	Institution of Engineers	
Life member	Indian Society for Technical Education	LM31312, 2001
Life Member	Powder Metallurgy Association of India(PMAI)	
Life Member	Welding Society of India (WSI)	

20. Academic Foreign Visits

Country	Duration of Visit	Programme
United Kingdom	2 Months	University of East London
Canada	2 years	McMaster University – M.Engg. Student
Canada	1 year	Post Doctoral Fellow
Singapore	1 Month	Attended two conferences
Dubai	1.5 Months	Visited Universities

21. Publications

(A) Refereed Research Journals:

Number of international Publications: 260

Elsevier: 135

Springer: 30

Indian Journals: 50 (Partial Number)

Scopus: 221

Impact Factor of Elsevier Journals: Average 3.5

(B) Conferences/Workshops/Symposia Proceedings

Number of Publications in International/National Conferences: 67 (Partial Number)

Total Number of publications: > 420 Publications.

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

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Dr.R.Narayanasamy, Dr.A.Noorul Haq	Metal Forming Technology	Ahuja Book Publisher, New Delhi	2000	
Dr.R.Narayanasamy	Theory of Plasticity	Ahuja Book Publisher, New Delhi	2001	
Dr.R.Narayanasamy	Extrusion Technology	Ahuja Book Publisher, New Delhi	2001	
Dr.R.Narayanasamy	Mechanical Behavior of Materials	Pearson International, U.S.A.	2013	