CURRICULUM VITAE of Prof.T. Srinivasa Rao

- 1. Name in Full : **Prof.T. SRINIVASA RAO**
- 2. Father's Name : T. Narasimhulu
- 3. Present Postal Address : PROFESSOR (HAG) & Former Director, NIT Warangal NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI-620 015, Tamil Nadu State, India
- 4. Nationality : INDIAN
- 5. Date of Birth : 21-04-1960 Age as on date: 56 years
- 6. Educational Qualifications

Degree	Discipline	University	Class/Division	Year of Passing
B.Tech.	Metallurgical Engineering	R.E.C. <i>,</i> Warangal	First Class with Distinction	1982
M.Tech.	Foundry Engineering	I.I.T., Kharagpur	'A' Grade	1984
Ph.D.	Powder Metallurgy	Bharathidasan University	Thesis Highly Commended	1992

Post Doctoral Research --- University of Texas at Austin, USA (1995) under BOYSCAST Fellowship, DST, Govt. of India

- 7. Field of Specialization : Metallurgical and Materials Engineering
- 8. List of Previous Employment :

Organization	Designation	From	То	Scale of Pay
N.I.T. Warangal	DIRECTOR	27 th May 2011	30 th June 2016	Rs.75,000/- + Rs.5,000/- Administrative Allowance
N.I.T., Tiruchirappalli	Professor	June 1998	26 th May 2011	Rs.37,400 - 67,000 Basic Rs.53,440 AGP Rs.10,000
R. E. C., Tiruchirappalli	Assistant Professor	June 1992	May 1998	Rs.3,700 to Rs.5,700
R. E. C., Tiruchirappalli	Lecturer	July 1986	May 1991	Rs.2,200 to Rs.4,000
Praga Tools Ltd., Secunderabad	Management Trainee	July 1984	June 1986	Rs.1,900 (Stipend)

9. Details of Awards/Ph.D. Guidance/Publications/Projects/ Membership in Professional Societies:

(i) No. of Awards/Recognitions:

- 1. Greaves Foseco Award for the best project work in Foundry Engineering at I.I.T., Kharagpur.
- 2. BOYSCAST Fellowship by the Ministry of Science & Technology, Govt. of India, New Delhi.
- 3. Expert Member for Faculty Selection (P, AP & L) NIT, Warangal and NIT Calicut.
- 4. Panel Member for 2006 NMD Awards.
- 5. AICTE Expert Member for inspecting the Engineering Colleges.
- 6. Expert Member for DRDO Scientists Selection.
- 7. Expert Member for AICTE-NBA accreditation (NITK, Surathkal and VNIT, Nagpur).
- 8. Served as a Member, Board of Governors, NIT, Tiruchirappalli (2008-2009).
- 9. Best Teacher Award (2008-2009) by NIT, Tiruchirappalli.
- 10. Member, Governing Council, CBIT, Hyderabad.
- 11. Member, Governing Council, AP Society for Knowledge Networks (APSFKNW).
- 12. Member, Governing Council, Indian Institute of Metals, Kolkata.
- 13. National Award for Outstanding Contribution to Education (National Education Leadership) as Director, VNIT Nagpur by Dainik Bhaskar (23.10.2013).
- 14. NIT Warangal bagged Outstanding Engineering Institute-South (National Education Leadership) by Dainik Bhaskar (23.10.2013).
- 15. Expert Member, Personality Test for Civil Services, UPSC, New Delhi during 12-16 May 2014.
- 16. Member of the Site Selection Committee for NIT Andhra Pradesh, 19.09.2014.
- Member of the Committee constituted by MHRD for evolving a National Ranking Framework, 9th Oct. 2014 (F.No. 19-6/3013-TS.I, dated 9th Oct. 2014).
- 18. Distinguished Alumni Award from NIT Trichy, 2014.

(ii) No. of Ph.D. guided (Completed / In progress)

Completed (6):

1. Studies on Metastable and Stable Phases of Ti-Al-Nb-Cr/SiC Systems by Mechanical Alloying – S. Kumaran (Sole Guide).

- 2. Studies on AA6061-Fly Ash Composites Produced Through Powder Metallurgy and Extrusion P.R.S. Kumar (Sole Guide).
- 3. Studies on Duplex Stainless Steels Produced Through Powder Metallurgy Route R. Mariappan (Sole Guide).
- 4. Development of Aluminium-Silicon/Graphite Composite using Stir Casting Method G. Rajaram (Co-Guide).
- 5. Studies on Mechanical Behaviour of Rolled and Extruded ZM21 Magnesium Alloy M. Thirumurugan (Co-Guide).
- 6. Consolidation of Nanostructured γ TiAl Intermetallic Compounds by Spark Plasma Sintering S. Kennedy (Main Guide).

In Progress (1):

1. Influence of Thermal Conductivity on High Temperature Thermoelectric Materials (at NITW) – Raghavachary (Main Guide).

(iii) No. of Publications (National / International): 89 (List is given in Annexure – A)

- (iv) No. of Books published / under publication: NIL
- (v) No. of Projects (Completed / In progress)

Completed: 7

- 1. Development of High Performance Ti-Al Intermetallic Composites through Mechanical Alloying (2002) Sponsored by DRDO, **Rs.24.97** lakhs (Principal Investigator).
- 2. Studies on Sintering Behaviour of Nano Crystalline W-Ni-Fe Composite Powders produced by Mechanical Alloying (2003) Sponsored by MHRD, **Rs.9.00** lakhs (Principal Investigator).
- 3. Development of Iron based Multicomponent and Nano Dispersed Bulk Metallic Glasses through MA for industrial Applications (2007) Sponsored by DST, **Rs.24.65** lakhs (Co-Investigator).
- 4. Development of Magnesium-Scandium Alloys and their Structure-Property Correlation (2008) Sponsored by AR &DB (DRDO), **Rs.26.29** lakhs (Co-Investigator).
- 5. Development of Nano and Metastable Magnesium based Multicomponent Alloys through MA for Hydrogen Storage Applications (2008) Sponsored by the Ministry of New and Renewable Energy, **Rs.23.59** lakhs (Co-Investigator).
- Development of Nanostructure and Bimodal Nanostructured Aluminium Alloys by Severe Plastic Deformation (SPD) (2008) Sponsored by DRDO, Rs.25.85 lakhs -(Co-Investigator).

7. Synthesis and Characterization of Nanomaterials for Engineering Applications (2009) Sponsored by DST (Nano Mission) **Rs.5.72 Crore** - (Principal Investigator).

In Progress: 2

- 1. Development and Evaluation of Wear Properties of Boron Carbide and Chromium Diboride for control rod applications in Nuclear Reactor (2013) Sponsored by BRNS **Rs.46.655 lakhs** - (Co-Principal Investigator).
- 2. Enhancement of type IV cracking Resistance of Modified 9Cr-1Mo Ferritic Steel by Thermo Mechanical Treatment (August 2014) Sponsored by BRNS Rs.40.02 lakhs – (Principal Investigator).

(vi) Details of Memberships in Professional Societies

- 1. Life Member Powder Metallurgy Association of India (PMAI)
- 2. Life Member Indian Society for Technical Education (ISTE)
- 3. Life Member Materials Research Society of India (MRSI)
- 4. Life Member Indian Institute of Metals (IIM)
- 5. Life Member The Institution of Engineers (India) (FIE)
- 6. Life Member The Society for Failure Analysis (SFA)

10. Any other relevant information

Achievements at NIT Warangal

- > Partner in BRICS Networking University
- > Accreditation by NBA under Washington Accord for all UG and PG Programmes
- Establishment of Electronics & IT Academy with an out lay of Rs.25 crores
- > Participation in HERITAGE and EUPHRATES Indo-Europe Academic programs
- Establishment of Teaching Learning Centre with an outlay of Rs.9.68 crores under Pandit Madan Mohan Malaviya Scheme by MHRD)
- > Active participation in GIAN program of MHRD
- > Improving the research ambiance in the institute
- Establishment of Innovation Garage
- > Introduction of EPICS in the curriculum ;
- > International Internships to toppers of all UG programs

Additional Responsibilities held at National Level:

- Mentor Director, NIT Andhra Pradesh, May 2015 to 30th June 2016.
- Member, Committee on evolving a National Ranking Framework, 9th Oct. 2014.
- Mentor Director, NIT Delhi (27th May 2011 June 2012)
- **Director (Additional Charge), VNIT, Nagpur (8th July 2012 to 28th June 2013.**
- Member, Standing Committee for NIT Council (2011-12 and 2012-13)
- Member, JEE Apex Board (JAB), November 2012

- Member, NIT Transit House Management Committee (2011-12 and 2012-13)
- > Vice President, Society for Failure Analysis (SFA), Hyderabad (2013)
- > Chairman, NIMCET for two years (2012-13 and 2013-14)
- Member, Core committee for CCMT (2012-13, 2013-14 and 2014-15)
- Member, South-Central Regional Committee, AICTE (3 years from24th Sept.2013)
- > Chief Patron, NIT Warangal Alumni Association

Additional Responsibilities held in Institute

i)	Head, Dept. of MME	From 18 th Feb.	2004 to	1 st Jan.	2009
ii)	TEQIP - Nodal Officer (Academic)	From 7 th Oct.	2005 to	6 th March	2008
iii)	Head, Dept. of Training & Placement	From 24 th Nov.	2003 to	1 st Sept.	2005
iv)	Chairman, Hospital Committee	From 13 th Oct.	2003 to	6 th March	2008
v)	Dy. Controller of PG Examinations	From 23 rd April,	1996 to	30 th June,	1999
vi)	Controller of PG Examinations	From 31 st June,	1999 to	1 st March	2000

Additional Responsibilities at Department / Hostel Sector

- i) Chairman, Doctoral Committee for 4 Ph.D. students
- ii) Chairman, DPEC for 2nd Year M.Tech. Materials Science & Engg., 2009, 2010
- iii) PAC Chairman for 6th Semester B.Tech. MME (2008)
- iv) Coordinator for Ph.D. Scholars' compulsory course (MT801) (2006, 2007)
- v) Warden, Emerald Hostel (August 1993-September 1994)
- vi) Senate Member for ICE & Chemistry Depts. for their PAC Meetings (May & Dec. 2007)

Visit Abroad (for Professional Work)

- Had been to the University of Texas at Austin, Texas, **USA** under BOYSCAST fellowship sponsored by DST, New Delhi. (1995).
- Had been to the Nanyang Technological University (NTU), **Singapore** as a visiting scientist under TEQIP. (June 2006).
- Had been to **South Korea** (Jeju Island) to present a research paper in an International Conference (PRICM-6), November 2007.
- Had been to **Dubai** to be the Chief Guest for NIT W Alumni Association- Middle East Chapter Meeting, December, 2011.
- Had been to **France** (Nantes) to attend Progress Meeting under Heritage Programme, 26th Feb.2013 to 4th March 2013.
- Had been to **USA** to explore the possibilities of collaboration between NIT Warangal and US Universities, April 2013.
- Had been to **South Korea** (Seoul) to participate as a NBA delegate (representing India) in the International Alliance Education Meeting, 17-21 June, 2013.
- Had been to **Qatar** as a Chief Guest for PAN NIT meet during 30-31 January, 2015.
- Had been to Ekaterinburg, **Russia** to participate as Indian Delegate in the BRICS Networking University, April, 2016.

Programmes Attended

- 1. NBA Workshop at REC, Calicut during 7th to 8th February, 2000.
- 2. Assessors Training Workshop of NBA (AICTE) at NIT, Surathkal during 8-9 May, 2004.
- 3. Mr. Shiv Khera Seminar and Workshop **"Blue Print for Success**" at Tiruchirappalli-620015 from 4th to 6th February, 2005.
- 4. **"Management Capacity Development Training"** conducted by ERC & NPIU at Bangalore during 24th June to 3rd July, 2005.
- 5. Training Program **on "Preparing for Challenges Ahead"** organized by ASCI, Hyderabad, at Tiruchirappalli during 5th to 7th January, 2006.
- National workshop on "Industry-Institution-Interaction" organized by SPFU, Maharastra and College of Engineering, Pune at Pune during 27th and 28th April, 2006
- 7. **"Leadership Skills Development"** organized by ASCI, Hyderabad during 25-29 August 2008.
- 8. **"The 7 Habits of Highly Effective People Signature"** organized by M/s. Franklin Covey, Chennai during 2-4 October 2008 at Munnar.
- 9. **"Strategic Leadership for Higher Education"** organized by Indian School of Business (ISB), Hyderabad during 29-30 June, 2012.
- 10. **"Deconstructing Design Workshop"** organized by MHRD, IIT Mumbai and IIT Hyderabad at Hotel Metropolitan, New Delhi on 6.11.2013.
- 11. "Conference of Directors of NITs" Rastrapathi Bhavan, New Delhi, during 7-8 November 2013.
- 12. **"Knowledge and Innovation Management"** organized by National Productivity Council at Leh, Ladhak during 26-30 May, 2014.
- 13. "Design and Design Show 2014" organized by IDC, IIT Bombay, 27-29 June, 2014.
- 14. "Conference of Directors of NITs" Rastrapathi Bhavan, New Delhi, during 29-30 October 2014.
- 15. Workshop on **Good Governance** for all NIT Directors and Chairpersons of BOGs organized by World Bank, NPIU, MHRD at New Delhi during 4-5 May 2015.
- 16. "Conference of Directors/Vice Chancellors of NITs, IITs and Centrally Funded Universities" Rastrapathi Bhavan, New Delhi, during 4-6 November, 2015.

Conferences/ Symposium/Workshops Organized

- 1. Five day workshop on "Navigating New Frontiers in Materials" under TEQIP during 2-6 July, 2013.
- CEP on "Trends and Advances in Heat Treatment of Steels" under TEQIP Phase-II during 30 July to 3 August 2012 at NIT Warangal.
- 3. National symposium on "Powder Metallurgy of Refractory and Hard Metals-Processing and Prospect (PMRM-2006)" in association with HAPP, PMAI-8-9 Dec 2009.
- 4. National conference on "Emerging Materials and Technologies for India 2020" at NIT Trichy during 24-25 January, 2008.

- 5. Workshop on "Materials Thermodynamics" under TEQIP during 7-11 July 2008.
- 6. Workshop on "Nanomaterials: Science, Technology & Applications" under TEQIP during 5 6 March, 2008.
- 7. Workshop on "Trends in Nanomaterials Research" under TEQIP on 23rd Feb. 2008.
- One day workshop on "SWOT Analysis of Nanotechnology" under TEQIP on 2nd Feb. 2008.
- 9. Workshop on "Scanning Electron Microscopy (Theory and Demonstration)" under TEQIP during 14-15 February 2007.
- 10. Workshop on "Nano materials: Properties and Applications" under TEQIP during 2-3 December 2006.

Establishment of Laboratories

Established Powder Metallurgy Laboratory as Co-ordinator of the project (Rs.22.5 Lakhs) sponsored by MHRD in 1989. Powder Metallurgy Lab was introduced with number of experiments in UG Metallurgical Engineering curriculum.

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ANNEXURE - A

LIST OF PAPERS PUBLISHED

PUBLISHED IN INTERNATIONAL JOURNALS:

- B. Bhatt, T.S.R.Ch. Murthy, P.K.Limaye, A. Nagaraj, K. Singh, J.K. Sonber, K. Sairam, A. Sashanka, G.V.S. Nageswara Rao, T. Srinivasa Rao, "Tribological studies of monolithic chromium diboride against cemented tungsten carbide (WC-Co) under dry condition" accepted for publication in Ceramics International (CERI-D-16-03022R2), June 2016.
- T. Sakthivel, P. Sruthi, P. Parameswaran, G.V.S. Nageswara Rao, K. Laha, T. Srinivasa Rao, "Enhancement in Creep Strength of Modified 9CR-1Mo Steel Through Thermo-Mechanical Treatment", Trans Indian Inst Met., Springer Publications, 26 May 2016 (Published online).
- Vidhyasagar Reddy, J.K. Sonber, K. Sairam, T.S.R.Ch. Murthy, Shankar Kumar, G.V.S. Nageswara Rao, T. Srinivasa Rao, J.K. Chakravartty, "Densification and Mechanical Properties of CrB₂+MoSi₂ based Novel Composites", Ceramics International, 41, pp7611-7617, 2015.
- B. Mahesh, K. Sairam, J.K. Sonber, T.S.R.Ch. Murthy, G.V.S. Nageswara Rao, T. Srinivasa Rao, J.K. Chakravartty, "Sinterability Studies of Monolithic Chromium Diboride (CrB₂) by Spark Plasma Sintering", Int. Journal of Refractory Metals and Hard Materials, 52, pp66-69, 2015.
- Shankar Kumar, K. Sairam, J.K. Sonber, T.S.R.Ch. Murthy, Vidhyasagar Reddy, G.V.S.Nageswara Rao, T. Srinivasa Rao, "Hot-Pressing of MoSi₂ reinforced B₄C Composites", Ceramics International, 40, pp16099-16105, 2014.
- S. Kennedy, S. Kumaran, T. Srinivasa Rao, "Effect of Milling on Sintering Behavior of γ-TiAl by Spark Plasma Sintering", Materials and Manufacturing Processes, 28: 928–932, 2013.
- Nishtha Gupta, B. Ravisankar, S. Kumaran, T. Srinivasa Rao, "Densification of Al-2024 and Al-2024/Al₂O₃ Powders by Conventional P/M Route and ECAP – A comparative Study" accepted for publication in Transactions of the Indian Institute of Metals (Springer Publications) on 30.5.2012 (TIIM-D-11-000891).
- Thirumurugan. M, Madhavan. R, Kumaran. S, Srinivasa Rao. T, Suwas Satyam, "Structure-Property Correlation of Study of the Microstructure, Texture and Tensile Properties in as Extruded AZ91 and ZM21 Magnesium Alloys", Materials Science Forum, (Trans Tech Publications, Switzerland), v 702-703; 659-662; 2012.
- 9. G. Rajaram, S. Kumaran, **T. Srinivasa Rao**, "Tensile behaviour of Al-Si alloy and Al-Si/graphite composites at elevated temperature", Materials Science Forum (Trans Tech Publications, Switzerland), 710; 457-462; 2012.
- 10. S. Kennedy, S. Kumaran, **T. Srinivasa Rao**, "Densification of y-TiAl Powders by Spark Plasma Sintering", Materials Science Forum (Trans Tech Publications, Switzerland), 710; 303-307; 2012.
- R. Selvaraj, M. Thirumurugan, S. Kumaran, T. Srinivasa Rao, "Synthesis and Characterization of Nanostructure Magnesium Base Alloy by Mechanical Alloying for Hydrogen Storage Applications", Materials Science Forum (Trans Tech Publications, Switzerland), 710; 332-337; 2012.

- 12. M. Thirumurugan, T. Anka Rao, S. Kumaran, **T. Srinivasa Rao**, "Structure-Property Correlation of Rolled ZM21/Al Magnesium Macrocomposite", Materials Science Forum (Trans Tech Publications, Switzerland), 710; 516-520; 2012.
- 13. A.X. Amal Rebin, S. Kumaran, **T. Srinivasa Rao**, "Influence of Scandium on Magnesium and its Structure-Property Correlation", Materials Science Forum (Trans Tech Publications, Switzerland), 710; 132-136; 2012.
- Thirumurugan, M., Kumaran, S., Suwas, S., Rao, T.S., "Effect of Rolling Temperature and Reduction in Thickness on Microstructure and Mechanical Properties of ZM21 Magnesium alloy and its subsequent Annealing Treatment", Materials Science and Engineering-A 528, 29-30, 8460 – 8468; 2011.
- 15. G. Rajaram, S. Kumaran, **T. Srinivasa Rao**, "Effect of Graphite and Transition Elements (Cu, Ni) on High Temperature Tensile Behaviour of Al-Si Alloys" Materials Chemistry and Physics, 128: 62–69; 2011.
- 16. G. Rajaram, S. Kumaran, **T. Srinivasa Rao**, "Influence of Graphite and Copper in Mechanical Properties of Aluminum Silicon Alloy", Transactions of the Indian Institute of Metals, (Springer Publications), 64: 53-56; 2011.
- 17. G. Rajaram, S. Kumaran, T. Srinivasa Rao, "Fabrication of Al-Si / Graphite Composites and their Structure-Property Correlation", Journal of composite Materials (Sage Publications),45: 2743-2750;2011.
- R. Mariappan, S. Kumaran, T. Srinivasa Rao, S.B. Chandrasekhar, "Microstructure and Mechanical Properties of duplex Stainless Steels Sintered in Different Atmospheres", Powder Metallurgy (UK), Vol.54, No.3, pp236-241, July 2011.
- 19. G. Rajaram, S. Kumaran, **T. Srinivasa Rao**, "Sliding Wear Behaviour of Al-Si/Graphite Composite", Tribology Transactions, Vol.54, pp115-121, 2011.
- 20. G. Rajaram, S. Kumaran, **T. Srinivasa Rao**, "High Temperature Tensile and Wear behavior of Al-Si alloy", Materials Science and Engineering A, Vol.528, pp247-253, 2010.
- 21. G. Rajaram, S. Kumaran, **T. Srinivasa Rao**, M. Kamaraj, "Studies on High Temperature Wear and Its Mechanism of Al-Si/Graphite Composite under Dry Sliding Conditions", Tribology International, Vol.43, pp2152-2158, 2010.
- 22. P.R.S. Kumar, S. Kumaran, **T. Srinivasa Rao**, "Comparison Study of Fly Ash Reinforced AA6061 Composites Using Press-Sinter-Extrusion And Press-Extrusion Approaches", Powder Metallurgy (UK), Vol.53, No.2, pp163-168, June 2010.
- P.R.S. Kumar, S. Kumaran, T. Srinivasa Rao, S. Natarajan, "High Temperature Sliding Wear Behaviour of Press-Extruded AA6061 / Fly Ash composite", Materials Science and Engineering A, Vol.527, pp1501-1509, 2010.
- 24. P.R.S. Kumar, S. Kumaran, T. Srinivasa Rao and K. Siva Prasad, "Microstructure and Mechanical Properties of Fly Ash Particle Reinforced AA6061 Composites Produced by Press and Extrusion", Transactions of the Indian Institute of Metals, Vol.62, No.6, pp559-566, December, 2009.
- 25. S. Kumaran, **T. Srinivasa Rao**, "Formation of Nano-intermetallic Compounds and their stability during Mechanical Alloying of Ti-48Al-12Nb-1Cr System", Advanced Materials Research, Trans Tech Publications, Switzerland, Vol.67, pp283-288, 2009.
- 26. R. Mariappan, S. Kumaran, **T. Srinivasa Rao**, "Effect of Sintering Atmosphere on Structure and Properties of Austeno-Ferritic Stainless Steels", Materials Science and Engineering A, Vol.515, No.1-2, pp328-333, August 2009.

- 27. T.T. Saravanan, S. Kumaran, **T. Srinivasa Rao**, "Structural Evolution and Magnetic Properties of Mechanically Alloyed Metastable Fe-Ni-Zr-B System", Materials Letters, Vol.6, pp780-782, 2009.
- 28. S. Kumaran, T. Sasikumar, R. Arockiakumar, **T. Srinivasa Rao**, "Nanostructured Titanium Aluminides Prepared By Mechanical Alloying and Subsequent Thermal Treatment", Powder Technology, Vol.185, pp124-130, 2008.
- 29. S. Kumaran, B. Chantaiah, **T. Srinivasa Rao**, "Effect of Niobium and Aluminium Additions in TiAl Prealloyed Powders during High Energy Ball Milling", Materials Chemistry and Physics, Vol.108, Mar 15, pp97-101, 2008.
- 30. S. Kumaran, B. Chantaiah, **T. Srinivasa Rao**, "Development of Amorphous and TiAl-Nb₂Al Intermetallic Nanocomposite Powders by Mechanical Alloying", Materials Science Forum, Trans Tech Publications, Switzerland, Vols. 561-565, pp1429-1432, 2007.
- 31. S. Kumaran, **T. Srinivasa Rao**, R. Subramanian, P. Angelo, "Nanocrystalline and Amorphous Structure formation in Ti-Al system during High Energy Ball Milling", Powder Metallurgy Journal (UK), Vo.48, No.4, pp354-357, 2005.
- 32. S. Premkumar, S. Kumaran, **T. Srinivasa Rao**, "Structure-Property Correlation of Precipitation Hardened AZ91 Magnesium Alloy", Journal of Materials Science and Technology (UK), Vol.20, pp835-838, July 2004.
- 33. G. Venkatasubramanian, **T. Srinivasa Rao**, "Age Hardening Behaviour of Sintered and Hot Extruded Al+Cu Preforms", International Journal of Powder Metallurgy Science and Technology, Vol.6, No.4, pp19-24, 1995.
- 34. **T. Srinivasa Rao**, K.S. Pandey, "Material Behaviour during Cold Upsetting of Sintered Al and Al-Cu Ring Preforms", International Journal of Powder Metallurgy Science and Technology, Vol.5, No.2, pp13-24, 1994.
- 35. P. Sridhar, K.V.D. Murthy, **T. Srinivasa Rao**, "Hot Upset Forming of Sintered Al(2024)+SiC MMCs", International Journal of Powder Metallurgy Science and Technology, Vol.4, No.4, pp47-52, 1993.
- T. Srinivasa Rao, K.S. Pandey, "Axial Cold Compression of Sintered Al-4Cu Disc and Ring Preforms", Journal of Material Processing and Technology, Elsevier, Vol.39, pp319-326, 1993.
- 37. **T. Srinivasa Rao**, K.S. Pandey, "Behaviour of Aluminium and Aluminium-Copper P/M Ring Preforms under Radial Crushing Test", International Journal of Powder Metallurgy Science and Technology, Vol.4, No.2, pp49-56, 1993.
- 38. T. Srinivasa Rao, K.S. Pandey, "Effect of Copper Addition to Aluminium on the Mechanical Properties of Sintered but Cold Formed Preforms", Advances in Powder Metallurgy & Particulate Materials-1992, Published by Metal Powder Industries Federation, Princeton, N.J., Vol.6, 1992.
- 39. **T. Srinivasa Rao**, K.S. Pandey, "Some Aspects of Cold Forming of Sintered Aluminium-Copper Alloys", International Journal of Powder Metallurgy Science and Technology, Vol.3, No.2, pp36-47, 1992.
- 40. Tanuj Kumar Das, **T. Srinivasa Rao**, K.S. Pandey, "Some Wear Resistance Studies on Iron-Copper Sintered Preforms", International Journal of Powder Metallurgy Science and Technology, Vol.3, No.1, pp35-42, 1991.
- 41. G.P. Maheshwari, **T. Srinivasa Rao**, K.S. Pandey, "Oxidation Behaviour of Sintered Deformed Copper and Aluminium Admixed Copper Preforms in Air", International Journal of Powder Metallurgy Science and Technology, Vol.2, No.2, pp43-52, 1991.

42. **T. Srinivasa Rao**, K.S. Pandey, "Aluminium Powder ring Preforms Deformation Behaviour and Rupture Test", Key Engineering Materials, Vol.29-32, pp351-364, 1989.

PUBLISHED IN NATIONAL JOURNALS:

- 1. R. Mariappan, S. Kumaran, **T. Srinivasa Rao**, S.B. Chandrasekhar, "Studies on Microstructure and Mechanical Properties of Vacuum Sintered Stainless Steels", Transactions of PMAI, Vol.35, pp32-37, December, 2009.
- R. Mariappan, S. Kumaran, T. Srinivasa Rao, V. Muthupandi, "Effect of Composition and Sintering Atmosphere on Phase Balance of P/M Duplex Stainless Steels, Transactions of PMAI, Vol.35, pp21-25, December, 2009.
- 3. P.R.S. Kumar, S. Kumaran, **T. Srinivasa Rao**, "Studies on AA6061-Fly Ash Composites Produced by Press Extrusion Approach", Transactions of PMAI, Vol.35, pp47-53, December, 2009.
- R. Mariappan, S. Venu Kumar, P.R.S. Kumar, S. Kumaran, T. Srinivasa Rao, "Sintered Properties of Duplex Stainless Steels in Nitrogen Atmosphere", Transactions of PMAI, Vol.34, pp23-27, December, 2008.
- 5. P.R.S. Kumar, S. Jerome, S. Kumaran, **T. Srinivasa Rao**, "Friction Welding of Fly Ash Reinforced AA6061 (P/M) Composite and Wrought Alloy", Journal of Manufacturing Engineering, Vol.3, No.4, pp272-277, December 2008.
- M. Nandhakumaran, S. Kumaran, B. Ravisankar, T. Srinivasa Rao, "Synthesis and Characterization of Fe-Based Multicomponent Bulk Metallic Glasses by High Energy Ball Milling", Transactions of PMAI, Vol.33, pp14-17, December, 2007.
- 7. **T. Srinivasa Rao**, D.L. Bourell, "Selective Laser Sintering- A Promising Method of Producing Composite Parts", Transactions of PMAI, Vol.24, pp22-28, 1997.
- 8. Rajan Subramanian, **T. Srinivasa Rao**, K.S. Pandey, "Densification Behaviour and Electrical conductivity Measurements of Cu-2Al Sintered Alloy Preforms during Cold Upsetting", Transactions of PMAI, Vol.19, pp80-84, 1992.
- 9. H.H. Kumar, **T. Srinivasa Rao**, K.S. Pandey, "Cold Working of Sintered C-335 Alloy", Transactions of PMAI, Vol.18, pp47-51, 1991.
- 10. **T. Srinivasa Rao**, K.S. Pandey, "Development of Theoretical Relations during Deformations of Disc and Ring Shape Powder Preforms", Transactions of PMAI, Vol.15, pp15-22, 1988.
- 11. **T. Srinivasa Rao**, G.L. Dutta, M.S.S.K. Naidu, "Assessment of Nodularity and Mechanical Properties of S.G.Iron using Ultrasonic and Electrical Resistivity" Journal of Indian Institute of Foundrymen, Vol.34, pp222-226, 1985.

LIST OF PAPERS PRESENTED

PRESENTED IN INTERNATIONAL CONFERENCES:

- G. Rajaram, S. Kumaran, T. Srinivasa Rao, M. Kamaraj, "High Temperature Dry Sliding Wear Behaviour of Al-Si/Graphite Composites Processed By Stir Casting" TMS Annual Meeting, Vol.2, pp191-198, 2011, /TMS 2011 – 140th Annual Meeting and Exhibition, Supplemental Proceedings.
- G. Sailaja, S. Kumaran, T. Srinivasa Rao, "Synthesis and Characterization of Nanostructured Mg-Ti Binary Alloy by Mechanical Alloying for Hydrogen Storage Applications", Int. Conf. on Nanoscience and Technology at PSG College of Technology, Coimbatore, 5-6 March, 2010.
- 3. M. Mariappan, S. Kumaran, **T. Srinivasa Rao**, "Hot Forging Characteristics of Sintered Duplex Stainless Steels", Int. Conf. on Powder Metallurgy in Processing of Particulate Materials and Products at Jaipur, 28-30 January, 2010.
- 4. M. Mariappan, S. Kumaran, **T. Srinivasa Rao**, "Corrosion Behaviour of Hot forged Sintered Duplex Stainless Steels", Int. Conf. on Powder Metallurgy in Processing of Particulate Materials and Products at Jaipur, 28-30 January, 2010.
- Naresh Nalajala, S. Kumaran, T. Srinivasa Rao, "Synthesis and Characterization of Nanostructured Mg Based Multicomponent Alloys for Hydrogen Storage through Mechanical Alloying, Int. Symposium on Hydrogen and Energy Storage at IIT, Kanpur, 14th January, 2010.
- G. Rajaram, S. Kumaran, T. Srinivasa Rao, "Mechanical Behaviour and Wear Studies of Hyper Eutectic Al-Si Alloy/ Graphite Particulate Reinforced Composites" ICMAT & IUMRS-ICA 2009 conference, Singapore, 28th June to 3rd July 2009.
- M. Mariappan, P.R.S. Kumar, S. Kumaran, T. Srinivasa Rao, "Mechanical and Metallurgical properties of Duplex Stainless Steel Produced through Powder Metallurgy: An Overview", presented in the International Symposium on Advances in Stainless Steels at IGCAR, 9-11 April, 2007.
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- M. Nandhakumaran, S. Kumaran, B. Ravisankar, T. Srinivasa Rao, "Synthesis and Characterization of Fe-Based Multicomponent Bulk Metallic Glasses by High Energy Ball Milling", presented in the International Conference PM-07 at Noida, 9-11 February. 2007.
- K. Sureshkumar, M. Nandhakumaran, C. Priya Meenatchi, S. Kumaran, T. Srinivasa Rao, "Development of TiAl Dispersed Aluminium/Aluminium Alloy Composites through Powder Metallurgy", International Conference on Recent Advances in Materials & Processing (RAMP-2006), PSG College of Tech., Coimbatore, 29th November, 2006.
- 11. R. Balaji, S. Kumaran, **T. Srinivasa Rao**, "Effect of Cold Deformation on Age Hardening Behaviour of AZ91 Magnesium Alloy", presented in the International Conference on Heat Treatment of Industrial Components (International Heat Treat 2004), held at Chennai, January, 2004.

- K. Sundari, T. Srinivasa Rao, "Age Hardening Behaviour & Mechanical Properties of Sintered - Hot Extruded 2121 Al+ SiC_p Composite", presented in the Int. Conf. on Advances in Powder Materials Processing (POWMAT-99) held at Hyderabad, 23-25 March, 1999.
- T. Srinivasa Rao, D.L. Bourell, H.L. Marcus, "Densification Behaviour of SLS Processed Al₂O₃/Al Composite", Proceedings of the 1995 SFF Symposium, Ed. By H.L. Marcus, J.J. Beaman, J.W. Barlow, D.L. Bourell and R.H. Crawford, The University of Texas at Austin, TX 78712, USA, 1995.
- D.K. Sharma, T. Srinivasa Rao, K.S. Pandey, "Hot Extrusion of Sintered Al-Fe Powder Composites", Proceedings of the 2nd International Conference on Die and Mould Technology (ICDMT) – Forging Ahead Towards Modern Die & Mould Technology, pp529-536, Sept. 1992.

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- G. Rajaram, M. Thirumurugan, S. Kumaran, T. Srinivasa Rao "Mechanical and Tribological Behaviour of Al-Si Alloy/Graphite Composite" National Metallurgist Day-Annual Technical Meeting (NMD-ATM 2010), Indian Institute of Metals & Indian Institute of Science Bangalore, 14th Nov to 16th Nov 2010.
- M. Thirumurugan, G. Rajaram, S. Kumaran, T. Srinivasa Rao "Effect of rolling parameters on structure and properties of Zm21alloy" National Metallurgist Day-Annual Technical Meeting (NMD-ATM 2009), Indian Institute of Metals 14th Nov to 17th Nov 2009.
- G. Rajaram, S. Kumaran, T. Srinivasa Rao, "Mechanical Behaviour and Wear Studies of Hyper Eutectic Al-Si Alloy/ Graphite Particulate Reinforced Composites" ICMAT & IUMRS-ICA 2009 conference, Singapore, 28th June to 3rd July 2009.
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- R. Jithendra Kumar, T. Anitha, H. Shaikh, R.K. Dayal, H.S. Khatak, T.S. Rao, "Effect of Heat Input on the Pitting Corrosion Behaviour of AISI Type 316N Stainless Steel Weld Metal", presented in the National Welding Seminar 2006 at Chennai, 24-26 November, 2006.
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- R. Arockia Kumar, S. Kumaran, T. Srinivasa Rao, "Nanostructured Materials through Mechanical Alloying: Opportunities and Problems – An Overview", presented in the 12th National Convention of Electrochemists (NCE-12) at Madurai, 18-19 February. 2005 – Got the best paper award.

- 9. **T. Srinivasa Rao**, "Characterization of Light Metals: Case Studies", Proceedings of the National Conference on Fabrication and Processing of Composites and Light Materials (FPCL-2004) at Annamalai University, pp30-36, January 2-3, 2004.
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- 11. P. Chakravarthy, S. Kumaran, T. Srinivasa Rao, R. Subramanian and P.C. Angelo, "Grain Refinement and Microstructural Studies of Mechanically Alloyed Al-Ni-Zr Powders", proceedings of the second National Conference on Quality Control in Metallurgical Industries, Coimbatore, pp 197-202, 5-6th December, 2003.
- 12. S. Varalakshmi, S. Kumaran, T. Srinivasa Rao, "Age Hardening Behaviour of Vacuum Hot Pressed 2121Al Control alloy and 2124Al/30 v.% SiC_p Composite" presented in the 29th National PM Conference held at Goa during January 30-31, 2003.
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- 19. S.B.N. Ramamurthy, **T. Srinivasa Rao**, "Studies on Sintered 304L Steel Preforms", presented in the Annual Technical meeting of PMAI held at Jaipur during 21-23, February, 2000.
- 20. S. Sunderajan, K. Mathrubootham, **T. Srinivasa Rao**, S. Ram Narayanan, R.S. Stephan Rathinaraj, V. Suriyanarayanan, "Effect of Porosity Sealing on Corrosion Control of ZM21 Cast Alloy", presented in the IIM Conference, 1995.
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- 23. A.K. Garg, **T. Srinivasa Rao**, K.S. Pandey, "Salient Features of Cold Forming Sintered Ring Preforms of 601AB and 602AB Alloys", presented in the 15th AIMTDR Conference held at Coimbatore, 3-5 Dec. 1992.
- 24. B. Dutta, T. Srinivasa Rao, K.S. Pandey, "Some Studies on Electrical Conductivity of Sintered 201AB and 202AB alloy Preforms during Cold Upsetting", presented in the 18th National P/M conference at Pune, February. 1992.
- 25. Ajay Singhal, **T. Srinivasa Rao**, K.S. Pandey, "Cold Formability of Sintered Cu-Cu₂O Composites", presented in the 17th National P/M conference at Thiruvananthapuram, 28th Feb.- 2nd March 1991.
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- 27. G. Vijaya Bhanu, M.K. Gaur, **T. Srinivasa Rao**, K. Mathrubootham, K.S. Pandey, "Densification Behaviour of Sintered Al-Fe Composites during Cold Upsetting", presented in the 15th National P/M Conference at Srinagar, May 1989.
- 28. M.K. Gaur, G. Vijaya Bhanu, T. Srinivasa Rao, K. Mathrubootham, K.S. Pandey, "Effect of Graphite on the Wear Behaviour of Iron-10Cu Sintered Preforms", presented in the 15th National P/M Conference at Srinagar, May 1989.
- 29. **T. Srinivasa Rao**, K. Mathrubootham, K.S. Pandey, "Pollution Control-Fighting A Loosing Battle", Proceedings of the National Seminar on Status and Allied Industries (NA-SAGSOCAAI-86), pp57-60, 1986.

