SIVAPRASAD KATAKAM

Present Address:

Assistant Professor, Dept of MME,

NIT Trichy,

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Personal

Father's Name Mother's Name Date of Birth Gender Marital Status

Nationality

Permanent Address:

B3/13, New Avenue, 1st street, NIT Campus,

National Institute of Technology

Trichy-620015, Tamil Nadu, India. kspiitm13@gmail.com

: late K. Gurumurthy,

: Savitramma : 13th June, 1977

: Male : Married

: Indian



Academic Qualifications

- 2003 2007, Indian Institute of Technology Madras, Chennai, India, Doctor of Philosophy (Metallurgical & Materials Engineering). CGPA – 8.5 / 10.00
- 2000 2002, Indian Institute of Technology Madras, Chennai, India. Master of Technology (Metallurgical Engineering). CGPA 8.97 / 10.00
- 1997 1999 Indian Institute of Metals, Kolkata, India. AMIIM (equivalent to Graduation in Metallurgy, recognized by All India Council for Technical Education)
- 1993-1997 Government Polytechnic, Visakhapatnam, AP, India. Diploma in Metallurgical Engineering (D.Met.E.), Percentage 72.17

Industrial Training

- 1. 6 weeks: International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad, India
- 2. 6 months: Bharat Heavy Plate and Vessels (BHPV) Limited, Visakhapatnam, India
- 3. 6 months: Hindustan Zinc Limited (HZL), Visakhapatnam, India

Experience

- 1. Assistant Professor, Dept of Metallurgical & Materials Engg, NIT Trichy, since June 2007 (Appointed as Lecturer and later redesignated as Assistant Professor during the implementation of VI central pay).
- Visiting Scientist, Dept of Materials Science and Engineering, University of North Texas, Denton, USA during Feb' 2014 May 2014. (Host: Prof.Rajiv S Mishra)
- 3. Visiting Fellow, Dept of MME, IIT Madras, Chennai, India during May 25 to July 24, 2009. Selected for INAE fellowship to undergo mentoring with Prof.B.S.Murty, FNAE.
- 4. Visiting Researcher, National Institute for Materials Science (NIMS), Japan, June 1-30, 2008. (Host: Prof. K. Hono, NIMS Fellow)
- Project Officer, Research project at IIT Madras sponsored by Defence Research and Development Organisation (DRDO), India, Dec'2002 – Sep' 2006.

Administrative Roles:

- 1. Associate Dean (R&C), 2012-2015
- 2. Member, Department of Project Evaluation Committee, PG projects
- 3. Chairman, Class committee, UG 3rd year

Research Interests

- 1. Mechanical behavior of metallic materials and their weldments
- 2. Structure-Property correlations of superalloys
- 3. High temperature materials (superalloys and intermetallics)
- 4. Studies on welding aspects of novel materials for improved weld properties
- 5. Fatigue behavior of metallic materials
- 6. Wear of composites
- 7. Cryorolling of Cu and Al based alloys and composites

Projects done by me

- 1. Study on cryorolling of Cu based alloys (with Dr.V.S. Sarma, IIT Madras, after PhD)
- 2. Microstructure and Mechanical Properties of Gas Tungsten Arc and Electron Beam Welded Alloy 718 (Doctoral thesis)
- 3. Development of Functionally Graded Bioactive Materials by Microwave Processing (Master's Project)

Awards & Achievements

- 1. Elected as Senior Member, Society for Mechanical Engineers Hongkong, 2016 (SM20160401001)
- 2. Recipient of Sir Dorabji Tata T.R. Anantharaman Faculty Fellowship (SDT-TRA-FF) 2013-2014.
- 3. Member, Publications Committee, The Indian Institute of Metals, Kolkata 2015 onwards
- 4. Member, Board of Studies (BoS), Jawaharlal Nehru Technical University (JNTU), Kakinada, Andhra Pradesh, since 2016
- 5. Member, Board of Studies (BoS), College of Engineering, Andhra University, Visakhapatnam, Andhra Pradesh, since 2015
- 6. Elected as Member of the Sectional Committee, Section of Materials Science for 2012-13, The Indian Science Congress Association (ISCA)
- Invited to participate in Indo-German Frontiers of Engineering Symposium (INDOGFOE) 2010, held during June 24-27 2010, Potsdam, Germany, sponsored by DST, India and Alexander von Humboldt foundation, Germany.
- 8. Selected under INAE young faculty mentoring scheme-2009 to work with a fellow of INAE for two months.
- 9. Metallography award, NMD-ATM 2005.

Books and Book Chapters

1. Contributed to International Edition, "Mechanical Behavior of Materials" - N.A.Dowling. 2012

Honors

- 1. Best paper award, "Microstructure Mechanical Properties of Cu-7%Al alloy produced by ECAP with different routes, M China babu, K Sivaprasad, G Kondaiah and B Ravisankar, in IMME17, held in Trichy during March 10-12, 2017.
- Guest Editor, Special Issue "Emerging Trends in Materials and Manufacturing Engineering", Transactions of the Indian Institute of Metals (Springer), Vol 70, Issue 3, Pp 547-892
- 3. Guest Editor, Materials Today Proceedings (Elsevier), Special Issue IMME17, 2017
- Review Panel Member, FONDECYT Regular 2017 project grant competition, Chilean National Science and Technology Commission (CONICYT Chile)
- Review Panel Member, National Science Center (Narodowe Centrum Nauki NCN), Krakow, Poland. (http://www.ncn.gov.pl), since 2015.
- 6. Session Coordinator, Forming and Casting, NMD-ATM 2015, Coimbatore
- 7. Member, Technical Programme Committee, The 2nd International Conference on Advance Materials Research and Applications (AMRA2015), December 18-21, 2015, Shenzhen, China
- Session Chair, "Metal Matrix Composite Materials", International Conference on Advanced Materials, Manufacturing and Applications (AMMA2015), 9—11 April, 2015, Dept of Metallurgical & Materials Engg., NIT Trichy, India
- 9. Member, International Programme Committee, 3rd International Conference on Advanced Materials and Engineering Materials 2013 (3rd ICAMEM 2013), 14-15th December, 2013 in Singapore.
- 10. Session Chair, "Composites", International Conference on Advances in Design and Manufacturing (ICAD&M), Dept of Mechanical Engineering, National Institute of Technology Tiruchirappalli, India, December 5-7, 2014.
- 11. Chaired a session in International Mechanical Engineering Congress (IMEC-2014) organized by Dept of Mech. Engg., National Institute of Technology Tiruchirappalli during 13-15 June, 2014.
- 12. International program committee, 3rd International Conference on Advanced Materials and Engineering Materials, Singapore, December 14-15, 2013.
- 13. Associate Editor, Nanotechnology and Nanoscience, Bioinfo publications [ISSN: 0976–7630 & E-ISSN: 0976–7649] (since 2011 for 5 years)
- 14. Editorial Board Member, International Journal of Composite Materials, Scientific & Academic Publishing
- 15. Advisory Member, Editorial Board, World Research Journal of Applied Physics, Bioinfo Publications [ISSN: 0976-7673]
- Editorial Board Member, International Journal of General Engineering and Technology, IASET, ISSN (Print):2278-9928; ISSN (Online):2278-9936.
- 17. Session Chair, Nano-composites session, 8th International Conference on Composite Science and Technology (ICCST8), 2011, Universiti Putra Malaysia, Kuala Lumpur, Malaysia, March 22-24, 2011
- 18. Reviewer of the following journals:

Materials Chemistry and Physics (Elsevier)

Metallurgical & Materials Transactions A (Springer)

Materials Science and Engineering A (Elsevier),

Materials Characterization (Elsevier)

Materials and Design (Elsevier)

Journal of Alloys and Compounds (Elsevier),

Journal of Materials Science (Springer),

Journal of Materials Science and Technology (Elsevier),

Tribology International (Elsevier)

Superlattices and Microstructures (Elsevier)

Transactions of Indian Institute of Metals (Springer),

International Journal of Materials Research (formerly: Zeitschrift fuer Metallkunde)

Tribology - Materials, Surfaces & Interfaces,

Journal of Composite Materials (SAGE),

Indian Journal of Engineering & Materials Sciences

International Journal of Mechanical and Materials Engineering

Sponsored Research Projects

Completed projects:

- 1. DST Fast Track project on "Development of ultra high strength aluminium based in situ composites by cryorolling" funded with **Rs.** 12 lakhs for the period of 2009-2012.
- Naval Research Board project on "The effect of micro arc oxidation process on corrosion and fatigue properties of aluminium alloy and its weldments used in naval applications" funded with Rs. 19.056 lakhs for the period of 2010-2012.
- 3. UGC networking project along with IISc on "Development of metal-intermetallic laminates by diffusion bonding". Collaborator Dr. Karthikeyan, Asst Prof. Dept of Materials Engg., IISc, Bangalore. (Financial aspects from IISc side only).
- 4. Defence Research and Development Organization (DRDO) under ER & IPR scheme project on "Development of light weight in situ metal-intermetallic laminates for defence applications" funded with **Rs.56.15 lakhs** for the period of 2011-2013. Collaborator Dr. B. Ravisankar, Associate Professor, Dept of MME, NIT Trichy.

On-going projects:

 ISRO (Respond) project on "Strength Enhancement of AA2219 Aluminium Alloy Sheets/Plates by Cryo Rolling for Usage in Tankage Applications" funded with Rs.30.73 Lakhs for the period of 2017-2020.

Journal Publications and conference papers

International Journals:

2017

- Editorial on "Emerging Trends in Materials and Manufacturing Engineering", K Sivaprasad, V. Muthupandi, TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS, 70 (3), 2017, 547. (SCIE)
- "Enhanced relative slip distance in gas tungsten arc welded Al0.5CoCrFeNi high entropy alloy", Sokkalingam R, Sourav Mishra, Srinivasa Rakesh Cheethirala, V. Muthupandi, K.Sivaprasad, METALLURGICAL AND MATERIALS TRANSACTIONS A, 48 (8), 2017, 3630-3634 (SCI) ISSN: 1073-5623
- "Microstructural Characterization and Mechanical Properties of Diffusion Bonded Ti–Ni In Situ Metal Intermetallic Laminates", N. Thiyaneshwaran, M. Ashfaq, R. Sidharth, G. Saikiran, K. Sivaprasad, B. Ravisankar, TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS, 70 (3), 2017, 709-719. (SCIE) ISSN: 0972-2815

- "Improving corrosion properties of magnesium AZ31 alloy GTA weld metal using micro arc oxidation process", M. Siva Prasad, M. Ashfaq, N. Kishore Babu, A. Sreekanth, K. Sivaprasad, V. Muthupandi, INTERNATIONAL JOURNAL OF MINERALS, METALLURGY AND MATERIALS, 24 (5) 2017, 566–573
- "A Comparative Study on Microstructure and Mechanical Properties near Interface for Dissimilar Materials during Conventional V-Groove and Narrow Gap Welding", R. Nivas, Santosh, Ravi, Gowtham Das, Swapan Kumar, Das, K. Sivaprasad, K Jagan, B. Mahato, Suranjith, PK Singh, JOURNAL OF MANUFACTURING PROCESSES, 25, 2017, 274-283.
- "Effect of Stress Relieve Annealing on Microstructure & Mechanical Properties of Welded Joints Between Low Alloy Carbon Steel and Stainless steel", R. Nivas, G. Das, S.K. Das, B. Mahato, S. Kumar, K. Sivaprasad, P.K. Singh, and M. Ghosh METALLURGICAL AND MATERIALS TRANSACTIONS A 48, 2017, 230-245. (SCI) ISSN: 1073-5623 (Impact factor 1.627)
- "Work hardening behavior of Ti/Al-based metal intermetallic laminates", N. Thiyaneshwaran, K. Sivaprasad, B. Ravisankar, INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, 93 (1-4), 2017, 361-374. (DOI: 10.1007/s00170-016-8863-2) (SCI) ISSN: 0268-3768
- 8. "On Plastic Deformation Behavior of Cryorolled AA8090 Alloy", K.S.V.B.R. Krishna, M. Ashfaq, Sarma S.R. Akella, **K.Sivaprasad**, K. Venkateswarlu, Transactions of the Indian Institute of Metals, 70 (6), 2017, 1463-1475. (SCIE) *ISSN: 0972-2815*
- "Mechanical Behavior and Void Coalescence Analysis of Cryorolled AA8090 Alloy", K.S.V.B.R. Krishna, S. Vigneshwaran, K. Chandra Sekhar, Sarma S. R. Akella, K. Sivaprasad, R. Narayanasamy, K. Venkateswarlu, INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, 93 (1-4), 2017, 253-259. ISSN: 0268-3768 (DOI: 10.1007/s00170-016-8863-2)

<u>2016</u>

- "A study on work hardening and effect of triaxiality on fracture behaviour of some cryorolled aluminium alloys", S.Vigneshwaran, K.S.V.B.R. Krishna, K.Chandra Sekhar, K.Sivaprasad, K. Venkateswarlu, R.Narayanasamy, MATERIALS SCIENCE AND ENGINEERING A, 678, 2016. 165-177. (DOI:10.1016/j.msea.2016.09.104) ISSN: 0921-5093
- "Effect of Composition on Tensile and Impact Properties of Tungsten-Based Heavy Alloy", P.V.Satyanarayana, R.Sokkalingam, K.Sivaprasad, A.K.Mukherjee, MATERIALS SCIENCE FORUM, 863, 2016, 40-44. (doi:10.4028/www.scientific.net/MSF.863.40) ISSN:1662-9752.
- 12. "Analysis and Characterization of the Role of Ni Interlayer in the Friction Welding of Titanium and 304 Austenitic Stainless Steel", C.H. Muralimohan, M. Ashfaq, Rouholah Ashiri, V. Muthupandi, K. Sivaprasad, METALLURGICAL AND MATERIALS TRANSACTIONS A, 47, 2016, 347-359. (SCI) ISSN:1073-5623, (Impact factor 1.73) (DOI: 10.1007/s11661-015-3210-z)

2015

- "Mechanical Anisotropy and Microstructural Changes During Cryorolling of Al-Mg-Si Alloy", N. Naga Krishna, M. Ashfaq, P. Susila, K. Sivaprasad, K. Venkateswarlu, MATERIALS CHARACTERIZATION, 107, 2015, 302-308. (SCI) ISSN: 1044-5803 (Impact factor 1.845) (DOI:10.1016/j.matchar.2015.07.033)
- 14. "Effect of coarse grain matrix content on the mechanical behavior of trimodaled AA 6061-TiO2 nanocomposite prepared by mechanical alloying", S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, M. Saravanan, INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, 78, 2015, 385-394. (SCIE) ISSN: 0268-3768 (Impact factor 1.779) (DOI: 10.1007/s00170-014-6639-0)
- "Effect of Cryorolling on the Mechanical Properties of AA5083 alloy and the Portevin-Le Chatelier Phenomenon", K.S.V.B.R.Krishna, K.Chandra Sekhar, R.Tejas, N.Naga Krishna, K.Sivaprasad, R.Narayanasamy, K.Venkateswarlu, MATERIALS AND DESIGN, 67, 2015, 107-117. (SCIE) ISSN: 0261-3069 (Impact factor 3.171)
- 16. "Microstructural observation, consolidation and mechanical behavior of AA 6061 nanocomposites reinforced by γ-Al₂O₃ nanoparticles", D. Jeyasimman, K. Sivaprasad, S. Sivasankaran, R. Ponalagusamy, R. Narayanasamy, Vijayakumar Iyer, ADVANCED POWDER TECHNOLOGY, 26(1) 2015, 139-148. (SCIE) ISSN: 0921-8831 (Impact factor 1.642)

2014

- "Evaluation of Microstructures and Mechanical Properties of Dissimilar Materials by Friction Welding", C.H. Muralimohan, S. Haribabu, Y. Hariprasada Reddy, V. Muthupandi, K. Sivaprasad, PROCEDIA MATERIALS SCIENCE, 5 (2014) 1107-1113. ISSN: 2211-8128 (This paper is presented in AMME2014, organized by NITK Suratkal, held during March 27-29, 2014)
- "Properties of Friction Welding Titanium-stainless Steel Joints with a Nickel Interlayer", C.H. Muralimohan, V. Muthupandi, K. Sivaprasad, PROCEDIA MATERIALS SCIENCE, 5 (2014) 1120-1129. ISSN: 2211-8128 (This paper is presented in AMME2014, organized by NITK Suratkal, held during March 27-29, 2014)
- "Characterization of Nanocrystalline AlCoCrCuNiFeZn High Entropy Alloy Produced by Mechanical Alloying", C. Sajith Babu, K.Sivaprasad, V.Muthupandi, Jerzy A. Szpunar, PROCEDIA MATERIALS SCIENCE, 5 (2014) 1020-1026. ISSN: 2211-8128 (This paper is presented in AMME2014, organized by NITK Suratkal, held during March 27-29, 2014)
- 20. "Microstructural and Nanoindentation Studies Across Diffusion-Bonded Interfaces in Al/Cu Metal Intermetallic Laminates", S. S. M. Kartheeka, K.V. Vamsi, B. Ravisankar, K. Sivaprasad, S. Karthikeyan, PROCEDIA MATERIALS SCIENCE, 6 (2014) 709-715. ISSN: 2211-8128 (This paper is presented in ICMPC2014, Hyderabad, organized by Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Andhra Pradesh, India, held during March 8-9, 2014)
- 21. "Thermal Analysis and Nanoindentaion Studies on Nanocrystalline AlCrNiFeZn High Entropy Alloy", C.Sajith Babu, N.T.B.N.Koundinya, K.Sivaprasad, Jerzy A. Szpunar, PROCEDIA MATERIALS SCIENCE, 6 (2014) 641-647. ISSN: 2211-8128 (This paper is presented in ICMPC2014, Hyderabad, organized by Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Andhra Pradesh, India, held during March 8-9, 2014)
- "The influence of aluminium intermediate layer in dissimilar friction welds", Muralimohan Cheepu, V.Muthupandi, K.Sivaprasad, INTERNATIONAL JOURNAL OF MATERIALS RESEARCH (formerly: Zeitschrift fuer Metallkunde), 105(4), 2014, 350-357. (SCI) ISSN: 1862-5282 (Impact factor 0.69)
- 23. "Strengthening Contributions in Ultra High Strength Cryorolled AI-4wt%Cu-3wt%TiB2 in situ Composite", N. Naga Krishna, K. Sivaprasad, P. Susila, Transaction of Nonferrous Metal Society of China, 24(3), 2014, 641-647. (SCIE) *ISSN: 1003-6326* (Impact factor 0.917)
- "Fabrication and consolidation behavior of Al 6061 nanocomposite powders reinforced by multi-walled carbon nanotubes", D. Jeyasimman, K. Sivaprasad, S. Sivasankaran, R. Narayanasamy, POWDER TECHNOLOGY, 258, 2014, 189-197. (SCI) ISSN: 0032-5910 (Impact factor 2.02)
- "An investigation of the synthesis, consolidation and mechanical behaviour of Al 6061 nanocomposites reinforced by TiC via mechanical alloying", D. Jeyasimman, S. Sivasankaran, K. Sivaprasad, R. Narayanasamy, R.S. Kambali, MATERIALS AND DESIGN, 57, 2014, 394-404 (SCIE) ISSN: 0261-3069 (Impact factor 2.913)

"Mechanical properties and corrosion behavior of carbon nanotube reinforced AA4032 nanocomposites", M.S.Senthil Saravanan,
 K.Sivaprasad, S.P.Kumaresh Babu, EXPERIMENTAL TECHNIQUES, 38, 2014, 48-52. (SCIE) ISSN: 1747-1567 (Impact factor 0.378)

2013

- 27. "Phase Evolution and Thermal Analysis of Nanocrystalline AlCrCuFeNiZn High Entropy Alloy Produced by Mechanical Alloying", N.T.B.N.Koundinya, C.Sajith Babu, **K.Sivaprasad**, P.Susila, N.Kishore Babu, J.Baburao, *Journal of Materials Engineering AND Performance*, 22, 2013, 3077-3084. (SCIE) *ISSN: 1059-9495* (*Impact factor 0.981*)
- 28. "Tribological studies on laser surface melted Hastelloy C-276", M. Hashim, K. E. Sarath Raghavendra Babu, M. Duraiselvam, H. Natu, V. Muthupandi, **K. Sivaprasad** and K. R. Rajith, SURFACE ENGINEERING, 29 (7), 2013, 531-535. (SCI) ISSN: 0267-0844 (Impact factor 1.51)
- "Study on Cryorolled Al-Cu Alloy using X-ray Diffraction Line Profile Analysis and Evaluation of Strengthening Mechanisms", N.Naga Krishna, R.Tejas, K.Sivaprasad, K.Venkateswarulu, MATERIALS AND DESIGN, 52, 2013, 785–790. (SCIE) ISSN: 0261-3069 (Impact factor 2.913)
- 30. "Enhanced Mechanical Properties of AA5083 GTA Weldments with Current Pulsing and Addition of Scandium", N. Kishore Babu, P. Yogesh Bhikanrao, K. Sivaprasad, MATERIALS SCIENCE FORUM, 765, 2013, 716-720. ISSN: 1662-9752 (This paper is presented in LMT2013, Old Windsor, London, organized by Brunel University, held during 24-26 July, 2013)
- 31. "Improving Corrosion Resistance of AA2014 Welds with Micro Arc Oxidation", Roshan Jacob, S.A.Srinivasan, K.Sivaprasad, V.Muthupandi, MATERIALS SCIENCE FORUM, 765, 2013, 634-638. (This is presented in LMT2013, Old Windsor, London, organized by Brunel University, held during 24-26 July, 2013)
- 32. "Studies on Potentiodynamic Polarization Behavior of Cryorolled Al-Mg-Si Alloy", N. Naga Krishna, B.Gopi, K. Sivaprasad, V. Muthupandi, KEY ENGINEERING MATERIALS, 545, 2013, 153-157. ISSN: 1662-9795 (This paper is presented in ICMST2012, National Science and Technology Development Agency, Thailand, held during 07-08 June, 2012)
- 33. "Studies on Dissimilar Welding of AA5083 and AA6061 Alloys by Laser Beam Welding", B. Srinivas, K. Sivaprasad, N. Kishore Babu, V. Muthupandi, P.Susila, ADVANCED MATERIALS RESEARCH, 626, 2013, 701-705. ISSN: 1662-8985 (This paper is presented in ICAMET2012, Universiti Malaysia Perlis, Malaysia, held during 28-30 November, 2012)
- 34. "Carbon Nanotube Reinforced Aluminium Alloy Composites A Review", D. Jeyasimman, K. Sivaprasad, V. Senthilkumar, R. Narayanasamy, *Journal of Manufacturing Engineering*, 8 (2), 2013, 75-84. *ISSN: 0973-6867*
- "Dispersion and Thermal Analysis of Carbon Nanotubes reinforced AA 4032 alloy produced by High Energy Ball Milling", M.S.Senthil Saravanan, K.Sivaprasad, S.P.Kumaresh Babu, EXPERIMENTAL TECHNIQUES, 37 (2013) 14–18. (SCIE) ISSN: 1747-1567 (Impact factor 0.583)

2012

- 36. "Microstructural characterization and grain refinement of AA6082 gas tungsten arc welds by scandium modified fillers", N. Kishore Babu, Mahesh Kumar Talari, D. Pan, Z. Sun, J. Wei, **K. Sivaprasad**, *MATERIALS CHEMISTRY AND PHYSICS*, 137, 2012, 543-551. (SCI) *ISSN: 0254-0584* (*Impact factor 2.072*)
- 37. "Localized corrosion of an ultrafine grained Al-4Zn-2Mg alloy produced by cryorolling", K.Gopala Krishna, K. Sivaprasad, T.S.N. Sankara Narayanan, K.C. Hari Kumar, Corrosion Science, 60, 2012, 82-89. (SCI) ISSN: 0010-938X (Impact factor 3.615)
- 38. "Influence of Titanium-Boron Additions on Grain Refinement of AA6082 Gas Tungsten Arc Welds", N. Kishore Babu, Mahesh Kumar Talari, Pan Dayou, Sun Zheng, Wei Jun, K. SivaPrasad", MATERIALS AND DESIGN, 40, 2012, 467-475. (SCIE) ISSN: 0261-3069 (Impact factor 2.913)
- 39. "Mechanical properties and microstructures of Al-1Fe-(0-1)Zr bulk nano-crystalline alloy processed by mechanical alloying and spark plasma sintering", C.L. Mendis, H.P. Jhawar, T.T. Sasaki, K Oh-ishi, **K. Sivaprasad**, E. Fleury, K. Hono, *MATERIALS SCIENCE AND ENGINEERING A* 541, 2012, 152–158. (SCI) *ISSN: 0921-5093* (*Impact factor 2.108*)
- 40. "Microstructural evolution and aging behavior of cryorolled Al-4Zn-2Mg alloy", K.Gopala Krishna, K.Sivaprasad, K.Venkateswarlu, K.C.Hari Kumar, *MATERIALS SCIENCE AND ENGINEERING A* 535, 2012, 129–135. (SCI) *ISSN: 0921-5093 (Impact factor 2.108)*
- 41. "Effect of Rolling Temperature on Microstructure and Mechanical Properties of Cryorolled Al-Mg-Si Alloy Reinforced with 3wt% TiB₂ in-situ Composite", <u>B. Gopi</u>, N. Naga Krishna, **K. Sivaprasad**, K. Venkateswarlu, *ADVANCED MATERIALS RESEARCH*, 584, 2012, 556-560. *ISSN:* 1662-8985 (This paper is presented in ICRAM, VIT, India, held during 20-22 February, 2012)
- 42. "Dry sliding wear behaviour of fly ash particles reinforced AA 2024 composites", J. Babu Rao, D. Venkata Rao, K. Siva Prasad and N.R.M.R. Bhargava, MATERIALS SCIENCE-POLAND, 30 (3), 2012, 204-211. (SCIE) ISSN 2083-1331 (Impact factor 0.258)

<u> 2011</u>

- 43. "Microstructure, cold workability and strain hardening behavior of Trimodaled AA 6061-TiO₂ nanocomposite prepared by mechanical alloying", S.Sivasankaran, K.Sivaprasad, R.Narayanasamy, MATERIALS SCIENCE AND ENGINEERING A 528, 2011, 6776–6787. (SCD) ISSN: 0921-5093 (Impact factor 2.108)
- 44. "X-ray peak broadening analysis of AA 6061_{100-x}-x wt.% Al₂O₃ nanocomposite prepared by mechanical alloying", S.Sivasankaran, **K.Sivaprasad**, R.Narayanasamy, P.V. Satyanarayana, *MATERIALS CHARACTERIZATION*, 62, 2011, 661–672. (SCI) *ISSN: 1044-5803* (Impact factor 1.88)
- 45. "Evaluation of compaction equations and prediction using adaptive neuro-fuzzy inference system on compressibility behavior of AA 6061_{100-x} x wt.% TiO₂ nanocomposites prepared by mechanical alloying", S.Sivasankaran, **K.Sivaprasad**, R.Narayanasamy, Vijay Kumar Iyer, *Powder Technology*, 209, 2011, 124–137. (SCI) *ISSN: 0032-5910* (*Impact factor 2.02*)
- 46. "High Temperature Tensile Properties of Cryorolled Al-4wt%Cu-3wt%TiB₂ in situ Composites", N.Naga Krishna, **K.Sivaprasad**, *TRANSACTIONS OF INDIAN INSTITUTE OF METALS*, 64 (1-2), 2011, 63-66. (SCIE) *ISSN: 0972-2815 (Impact factor 0.427)*
- 47. "Anisotropy models in precise crystallite size determination of mechanically alloyed powders", M.S.Senthil Saravanan, **K.Sivaprasad**, P.Susila, S.P.Kumaresh Babu, *Physica B: Condensed Matter*, 406, 2011, 165–168. (SCI) *ISSN: 0921-4526* (Impact factor 1.327)
- 48. "Consolidation of CNT reinforced AA4032 nanocomposites by ECAP", M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad, B.Ravisankar, P.Susila, B.S.Murty", INTERNATIONAL JOURNAL OF NANOSCIENCE, 10 (1&2), 2011, 233-236. (This paper is presented in ICANN2009, IIT Guwahati, India). ISSN: 0219-581X
- 49. "Influence of Crystallite Size on Consolidation of Carbon Nanotube Reinforced AA 4032 Composite Powders by Equal Channel Angular Pressing", M.S.Senthil Saravanan, K.Sivaprasad, S.P.Kumaresh Babu, KEY ENGINEERING MATERIALS, 471-472, 2011, 127-132. ISSN: 1662-9795 (This paper is presented in ICCST 22-24 March, 2011, Universiti Putra Malaysia, Malaysia)

- 50. "Effect of strengthening mechanisms on cold workability and instantaneous strain hardening behavior during grain refinement of AA6061-10wt.%TiO₂ composite prepared by mechanical alloying", S.Sivasankaran, K.Sivaprasad, R.Narayanasamy, Vijay Kumar Iyer, JOURNAL OF ALLOYS AND COMPOUNDS, 507, 2010, 236–244. (SCI) ISSN: 0925-8388 (Impact factor 2.39)
- 51. "An investigation on flowability and compressibility of 6061 AA_{100-x}-x wt. "TiO₂ composite powder prepared by blending and mechanical alloying", S.Sivasankaran, K.Sivaprasad, R.Narayanasamy, Vijay Kumar Iyer, *Powder Technology*, 201 (1), 2010, 70-82. (SCI) ISSN: 0032-5910 (Impact factor 2.02)
- "Studies on void coalescence analysis of nanocrystalline cryorolled commercially pure aluminium under different stress conditions", N.Naga Krishna, A.K.Akash, K.Sivaprasad, R.Narayanasamy, MATERIALS AND DESIGN, 31, 2010, 3578–3584 (SCIE) ISSN: 0261-3069 (Impact factor 2.913)
- 53. "Synthesis, structure and sinterability of 6061 AA_{100-x}-x wt.%TiO₂ composites prepared by high-energy ball milling", S.Sivasankaran, K.Sivaprasad, R.Narayanasamy, Vijay Kumar Iyer, *Journal of Alloys and Compounds*, 491 (1-2), 2010, 712-721. (SCI) ISSN: 0925-8388 (Impact factor 2.39)
- "Influence of short annealing treatment on corrosion behaviour of cryorolled commercially pure aluminium", K.Sivaprasad, V.Swarnalatha, V.V.Ravikumar and V.Muthupandi, ANTI-CORROSION METHODS AND MATERIALS, 57 (1), 2010, 18-20. (SCIE) ISSN: 0003-5599 (Impact factor 0.386)
- 55. "Dry sliding wear behaviour of AA 6351-ZrB2 in situ composite at room temperature", G. Naveen Kumar, R.Narayanasamy, S.Natarajan, S.P.Kumaresh Babu, K.Sivaprasad, S.Sivasankaran, MATERIALS AND DESIGN, 31(3), 2010, 1526-1532 (SCIE) ISSN: 0261-3069 (Impact factor 2.913)
- 56. "Mechanically alloyed Carbon nanotubes (CNT) reinforced Nanocrystalline AA 4032: Synthesis and Characterization", M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad, JOURNAL OF MINERALS & MATERIALS CHARACTERISATION & ENGINEERING, 9 (11), 2010, 1027-1035. ISSN: 2327-4077
- 57. "Thermal stability of nanostructured fly ash synthesized by high energy ball milling", J. Babu Rao, P. Narayanaswami, K. Siva Prasad, International Journal of Engineering Science and Technology, 2 (5), 2010, 284-299. ISSN 2141-2820.
- 58. "Techno-economics of carbon nanotubes produced by open air arc discharge method", M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad, M.Jagannatham, INTERNATIONAL JOURNAL OF ENGINEERING, SCIENCE AND TECHNOLOGY, 2 (5), 2010, 100-108 ISSN 2141-2820

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- "Microstructure and mechanical properties of fly ash particle reinforced AA6061 composites produced by press and extrusion",
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- 60. "Sliding wear behaviour of Al 6063/TiB₂ in situ composites at elevated temperatures", S.Natarajan, R.Narayanasamy, S.P.Kumaresh Babu, K.Sivaprasad, G.Dinesh, B.Anil Kumar, MATERIALS AND DESIGN, 30 (7) 2009, 2521-2531 (SCIE) ISSN: 0261-3069 (Impact factor 2.913)

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- 61. "Study on abrasive and erosive wear behaviour of Al 6063/TiB₂ in situ composites", **K.Sivaprasad**, S.Natarajan, S.P.Kumaresh Babu, B.Anil Kumar, G.Dinesh, R.Narayanasamy, *MATERIALS SCIENCE AND ENGINEERING A* 498 (2008) 495–500. (SCI) *ISSN:* 0921-5093 (Impact factor 2.108)
- 62. "Microstructure and mechanical properties of ultra fine grained Cu-Zn and Cu-Al alloys produced by cryorolling and annealing", V.Subramanya Sarma, K.Sivaprasad, D.Sturm and M.Heilmaier, MATERIALS SCIENCE AND ENGINEERING A489 (2008) 253-258. (SCI) ISSN: 0921-5093 (Impact factor 2.108)
- 63. "Influence of weld cooling rate on microstructure and mechanical properties of Alloy 718 welds", **K.Sivaprasad** and S.Ganesh Sundara Raman, *METALLURGICAL AND MATERIALS TRANSACTIONS A* 39 (2008) 9, 2115-2127. (SCI) *ISSN: 1073-5623* (Impact factor 1.627)
- 64. "A novel method of estimating Laves phase in electron beam welded Alloy 718", **K.Sivaprasad**, S.Ganesh Sundara Raman and A.Sambasiva Rao, *Practical Metallography* 45 (2008) 6, 271-282. (SCIE) *ISSN: 0032-678X* (*Impact factor 0.27*)

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65. "Influence of magnetic arc oscillation and current pulsing on fatigue behavior of Alloy 718 TIG weldments", **K.Sivprasad** and S.Ganesh Sundara Raman, *MATERIALS SCIENCE AND ENGINEERING A*, 448, 2007, 120-127. (SCI) *ISSN: 0921-5093* (*Impact factor 2.108*)

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- 66. "Influence of magnetic arc oscillation and current pulsing on microstructure and high temperature tensile strength of alloy 718 TIG weldments", K.Sivaprasad, S.Ganesh Sundara Raman, P.Mastanaiah and G.Madhusudhan Reddy, MATERIALS SCIENCE AND ENGINEERING A 428, 2006, 327-331. (SCI) ISSN: 0921-5093 (Impact factor 2.108)
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- 68. "Microwave Processing of Functionally Graded Bioactive Materials", **Sivaprasad Katakam**, D.Sivaramakrishna and T.S.Sampath Kumar, *MATERIALS LETTERS*, 57, 2003, 2716-2721. (SCI) *ISSN: 0167-577X* (Impact factor 2.224)

National Journals

- "Synthesis and characterization of CNT reinforced Al-based composite powders by high energy ball milling", M.S. Senthil Savaranan, S.P. Kumaresh Babu and K. Sivaprasad, Transactions of Powder Metallurgy Association of India, 35, 2009, 5-8.
- 2. "Influence of carbon content on workability behavior of powder metallurgy steels", R. Narayanasamy, V. Anandakrishnan, S. Sivasankaran, K. Sivaprasad, K.S. Pandey, *Transactions of Powder Metallurgy Association of India*, 35, 2009, 26-31.
- "Processing of calcium phosphate based Functionally Graded Bioceramics using Microwaves", Sivaprasad Katakam, D. Sivarama Krishna, R. Murugan and T.S. Sampath Kumar, TRENDS IN BIOMATERIALS AND ARTIFICIAL ORGANS, 17, 2003, 24-27.

International Conferences:

- "Effect of Micro Arc Oxidation on Corrosion Behavior of Mg AZ31 Alloy GTA Welds", M. Siva Prasad, M. Ashfaq, N. Kishore Babu, A. Sreekanth, K. Sivaprasad, V. Muthupandi, Proceedings of International Conference on Advances in Design and Manufacturing, National Institute of Technology Tiruchirappalli, India, December 5-7, 2014, pp.670-674.
- "Microstructural Characterization and Mechanical Properties of Cryorolled AA8090 Alloy", K.S.V.B.R. Krishna, M.Ashfaq, V. Varun, K. Sivaprasad, K. Venkateswarlu, Sarma SR. Akella, Proceedings of International Conference on Advances in Design and Manufacturing, National Institute of Technology Tiruchirappalli, India, December 5-7, 2014, pp.675-678.

- 3. "Low Melting and High Strength Bulk Nanocrystalline Lead Free Sn-07Cu Solder Alloy by Mechanical Alloying", I. Narasimha Murthy, K. Sivaprasad, J. Baburao, Proceedings of International Conference on Advances in Design and Manufacturing, National Institute of Technology Tiruchirappalli, India, December 5-7, 2014, pp.718-723.
- 4. "Evaluation of Microstructures and Mechanical Properties of Dissimilar Materials by Friction Welding", <u>C.H. Muralimohan</u>, S. Haribabu, Y. Hariprasada Reddy, V. Muthupandi, **K. Sivaprasad**, International Conference on Advances in Manufacturing and Materials Engineering (AMME), organized by NITK Suratkal, held during March 27-29, 2014.
- "Properties of Friction Welding Titanium-stainless Steel Joints with a Nickel Interlayer", <u>C.H. Muralimohan</u>, V. Muthupandi, **K. Sivaprasad**, International Conference on Advances in Manufacturing and Materials Engineering (AMME), organized by NITK Suratkal, held during March 27-29, 2014.
- "Characterization of Nanocrystalline AlCoCrCuNiFeZn High Entropy Alloy Produced by Mechanical Alloying", <u>C. Sajith Babu</u>,
 K.Sivaprasad, V.Muthupandi, Jerzy A. Szpunar, International Conference on Advances in Manufacturing and Materials Engineering (AMME), organized by NITK Suratkal, held during March 27-29, 2014.
- 7. "Microstructural and Nanoindentation Studies Across Diffusion-Bonded Interfaces in Al/Cu Metal Intermetallic Laminates", <u>S.S.M. Kartheek</u>, K.V. Vamsi, B. Ravisankar, **K. Sivaprasad**, S. Karthikeyan, 3rd International Conference on Materials Processing and Characterization (ICMPC 2014), Hyderabad, organized by Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Andhra Pradesh, India, held during March 8-9, 2014)
- 8. "Thermal Analysis and Nanoindentaion Studies on Nanocrystalline AlCrNiFeZn High Entropy Alloy", <u>C.Sajith Babu</u>, N.T.B.N.Koundinya, **K.Sivaprasad**, Jerzy A. Szpunar, 3rd International Conference on Materials Processing and Characterization (ICMPC 2014), organized by Gokaraju Rangaraju Institute of Engineering and Technolog, Hyderabad, Andhra Pradesh, India, held during March 08-09, 2014.
- "Joining of AISI 1040 Steel to 6082-T6 Aluminium Alloy by Friction Welding", CH. Muralimohan, <u>S.Haribabu</u>, Y. Hariprasada Reddy, V. Muthupandi, **K. Sivaprasad**, Proceedings of International Conference on Recent Advances in Mechanical Engineering and Interdisciplinary Developments (ICRAMID 2014), Ponjesly College of Engineering, Nagercoil, India, held during March 7-8, 2014, pp1344-1348. [ISBN 978-93-80609-17-1]
- Enhanced Mechanical Properties of AA5083 GTA Weldments with Current Pulsing and Addition of Scandium", N. Kishore Babu, P. Yogesh Bhikanrao, K.Sivaprasad, 6th International Conference on Light Metal Technology 2013, Old Windsor, London, organized by Brunel University, held during 24-26 July, 2013 (proceedings in Journal)
- "Improving Corrosion Resistance of AA2014 Welds with Micro Arc Oxidation", Roshan Jacob, S.A.Srinivasan, <u>K.Sivaprasad</u>, V.Muthupandi, 6th International Conference on Light Metal Technology 2013, Old Windsor, London, organized by Brunel University, held during 24-26 July, 2013 (*proceedings in Journal*)
- 12. "Wear behaviour of carbon nanotubes reinforced nanocrystalline AA 4032 composites", M. S. Senthil Saravanan, <u>S.P.Kumaresh Babu</u>, **K. Sivaprasad**, S. Natarajan, 26th International Conference on Surface Modification Technologies, June 20-22, 2012, Ecole CentraleLyon, France.
- "Bimodal AA4032 alloy produced by ball milling: compressive deformation studies", M.S.Senthil Saravanan, <u>M.GaneshKumar</u>, S.P.Kumaresh Babu, **K.Sivaprasad**, "Proceedings of the 3rd Asian Symposium on Materials and Processing (ASMP2012), Indian Institute of Technology Madras, Chennai, 30-31, August 2012.
- "Studies on Potentiodynamic Polarization Behavior of Cryorolled Al-Mg-Si Alloy", N. Naga Krishna, B.Gopi, K. Sivaprasad, V. Muthupandi, International Conference on Materials Science and Technology, 2012, National Science and Technology Development Agency, Thailand, held during 07-08 June, 2012.
- "Effect of rolling orientation on the mechanical properties of cryorolled Al-Mg-Si alloy", N. Naga Krishna, B. Gopi, K. Venkateswarulu, K. Sivaprasad. International Conference on Recent Trends in Advanced Materials (ICRAM), February 20-22, 2012, VIT University, Vellore, India.
- "Effect of rolling temperature on microstructure and mechanical properties of cryorolled Al-Mg-Si alloy reinforced with 3wt% TiB₂ insitu composite", B. Gopi, N. Naga Krishna, K. Sivaprasad, K. Venkateswarulu. International Conference on Recent Trends in Advanced Materials (ICRAM), February 20-22, 2012, VIT University, Vellore, India.
- 17. "Influence of rolling temperature on microstructure and mechanical properties of cryorolled Al-Mg-Si alloy", B.Gopi, N. Naga Krishna, K. Venkateswarulu, <u>K. Sivaprasad</u>, Proceedings of International Conference on Aerospace, Mechanical, Automotive and Materials Engineering (ICAMAME) January 29-31, 2012, Dubai, United Arabian Emirates, organized by World Academy of Science Engineering and Technology (WASET). Vol 61, 2012, pp731-735.
- "Influence of Crystallite Size on Consolidation of Carbon Nanotube Reinforced AA 4032 Composite Powders by Equal Channel Angular Pressing", M.S. Senthil Saravanan, <u>K.Sivaprasad</u>, S.P. Kumaresh Babu, 8th International Conference on Composite Science and Technology (ICCST8), Universiti Putra Malaysia, Malaysia, March 22-24, 2011.
- 19. "High Temperature Tensile Properties of Cryorolled Al-4wt%Cu-3wt%TiB₂ in situ Composites", N.NagaKrishna, K.Sivaprasad, International Symposium of Research Students 2010, December, IIT Madras.
- "Functionally gradient bioactive materials by EPO process", K.Sivaprasad, Indo-German Frontiers of Engineering Symposium (INDOGFOE) 2010, held during 24-27 June 2010, Potsdam, Germany, sponsored by DST and Alexander von Humboldt foundation, Germany. (Invited participant)
- "Synthesis and Characterization of CNT Reinforced AA4032 Nanocomposites by High Energy Ball Milling", M.S. Senthil Saravanan, <u>K.Sivaprasad</u>, S.P. Kumaresh Babu, P. Susila, B.S. Murty, AIP Proceedings, 1276 (1), 2010, 82-87. (This paper is presented in ICANN2009, IIT Guwahati, India).
- 22. "Tribological behaviour of multi-walled carbon nanotubes reinforced AA7075 nanocomposites", <u>M.Jagannatham</u>, M.S.Senthil Saravanan, S.P.Kumaresh Babu, **K.Sivaprasad**, International Conference on Synthesis Characterization Consolidation and Modeling of Nanomaterials (ICON-2010), Department of Metallurgical Engineering, PSG College of Technology, Coimbatore, India.
- "Effect of grain refinement on workability of Al6061 alloy reinforced with 10wt% TiO₂ composite", <u>S.Sivasankaran</u>, K.Sivaprasad, R.Narayanasamy, Vijay Kumar Iyer, International Conference & Exhibition on Powder Metallurgy in processing of particulate materials and products 2010 (PM10), Jaipur, January 28-30, 2010.
- 24. "Isotropic and anisotropic X-ray peak broadening models of AA6061-12wt% Al₂O₃ nanocomposites", S.Sivasankaran, <u>K.Sivaprasad</u>, R.Narayanasamy, International Conference & Exhibition on Powder Metallurgy in processing of particulate materials and products 2010 (PM10), Jaipur, January 28-30, 2010.
- "Synthesis and characterization of CNT reinforced AA4032 nanocomposites by high energy ball milling", M.S.Senthil Saravanan, S.P.Kumaresh Babu, <u>K.Sivaprasad</u>, P.Susila, B.S.Murty, Proceedings of International Conference on Advanced Nanomaterials and Nanotechnology (ICANN 2009), IIT Guwahati, December 09-11, 2009, pp
- 26. "Consolidation of CNT reinforced AA4032 nanocomposites by ECAP", M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad, B.Ravisankar, P.Susila, B.S.Murty", Proceedings of International Conference on Advanced Nanomaterials and Nanotechnology (ICANN 2009), IIT Guwahati, December 09-11, 2009, pp
- "Mechanical Alloying of Aluminium based-metal matrix composites: A Review", <u>R.Narayanasamy</u>, **K.Sivaprasad**, V.Anandakrishnan, S.Sivasankaran, 2nd International conference on Recent Advances in Material Processing Technology (RAMPT 2009), February 25-27, 2009, Society for Manufacturing Engineers (SME), National Engineering College, Kovilpatti, 2009, pp 164-170

- 28. "Influence of carbon content on workability behavior of powder metallurgy steels", R.Narayanasamy, V.Anandakrishnan, S.Sivasankaran, K.Sivaprasad, K.S.Pandey. 5th International Conference on Powder Metallurgy 2009 (PM09), Goa, February 16-18, 2009
- 29. "Synthesis and characterization of carbon nanotube reinforced AA4032 Al-alloy composite by high energy ball milling", <u>M.S.Senthil Saravanan</u>, **K.Sivaprasad**, S.P.Kumaresh Babu, 5th International Conference on Powder Metallurgy (PM09), Goa, February 16-18, 2009.
- "Studies on hot corrosion behavior of Cr-Mo boiler FCA weldments in Na₂SO₄ NaCl Environment", <u>A.Appala Naidu</u>, K.Pulla Rao, K.Sivaprasad, S.Jerome, S.P.Kumaresh Babu and Arivazhagan, Proceedings of International Conference on Symposium of Joining of Materials (SOJOM), July 2008, Indian Welding Society, Welding Research Institute, BHEL, Tiruchirappalli, India
- "Development of Al-ZrB₂ in situ Composites and its High Temperature Wear Behaviour", <u>K.Siva Prasad</u>, S.P.Kumaresh Babu, S.Senthil Kumaran and S.Natarajan, International Conference of Advanced Tribology, National University of Singapore, December 3-5, 2008, pp 19-20
- "Sliding Wear Behaviour of WC-Coated Al-ZrB₂ in situ Composite", S.P.Kumaresh Babu, <u>K. Siva Prasad</u>, S.Senthil Kumaran, S.Jerome and S.Natarajan, International Conference of Advanced Tribology, National University of Singapore, December 3-5, 2008, pp 215-216
 "Fatigue behavior of alloy 718 TIG welds made using pulsed current and magnetic arc oscillation", K.Sivaprasad, <u>S.Ganesh</u>
- "Fatigue behavior of alloy 718 TIG welds made using pulsed current and magnetic arc oscillation", K.Sivaprasad, S.Ganesh Sundara Raman, P.Mastanaiah and G.Madhusudhan Reddy, Proceedings of 9th International Fatigue Congress 2006, Atlanta, Georgia, USA.
- 34. "Fretting Fatigue Behaviour of AISI 304 Steel", <u>M.Jayaprakash</u>, **Sivaprasad Katakam** and S.Ganesh Sundara Raman, ISRS 2004, IIT Madras, Chennai.

National Conferences

- Sidharth R, Saikiran G, Thiyaneshwaran N, Siva Prasad K, "Development of lightweight in-situ Metal Intermetallic Nickel-Titanium Laminates for ballistic applications" NCAMPC-2016 organized by Department of Metallurgical and Materials Engineering, NIT Warangal from 4 th – 6 th January 2016.
- 2. "Friction welding of austenitic stainless steel to Cp-titanim with aluminium inserts", CH Muralimohan, V Muthupandi, K Sivaprasad, M Ashfaq, National Conference on Advances in Naval Materials, ADNAM-2013, National Institute of Ocean Technology, IIT Madras.
- 3. "Studies of AI 4032/CNT composite and study of its microwave sintering behavior", M.S. Senthil Saravanan, S.P. Kumaresh Babu, K. Sivaprasad, M. Jagannatham, Eighth ISAMPE National Conference on Composites, Thiruvananthapuram, December 4-5, 2009.
- "Joining of AISI 304 to Alloy 718 by Pulsed Gas Tungsten Arc Welding", G. Sudheer and K. Siva Prasad, NMD-ATM 2008, Greater Noida / New Delhi, November 14-16, 2008.
- "Preparation and PbS and PbFe_xS_{1-x} thin Films by chemical bath deposition", <u>E.Gomathi</u>, G.Gobi, M.C.Santhoshkumar, T.Prasadarao, **K.Siva Prasad**, National Conference on emerging materials and Technologies for India – 2020, January 24-25, 2008, Dept. of Metallurgical and Materials engineering, NIT Trichy, 52.
- "Influence of Laves Phase on Fatigue Lives of IN 718 Welds", <u>Sivaprasad Katakam</u> and S. Ganesh Sundara Raman, NMD-ATM 2005, IIT Madras, India
- "Fatigue of IN718 weldments", <u>Sivaprasad Katakam</u>, C.V.S. Murthy, G. Madhusudhan Reddy and S. Ganesh Sundara Raman, NMD ATM 2004, Trivandrum.
- 8. "Fabrication of bioactive FGM by microwave processing", <u>Sivaprasad Katakam</u>, D. Sivaramakrishna, Sushant K. Manwatkar and T.S. Sampath Kumar, National Conference on Medical Materials—2001, IIT Madras, Chennai, India.
- "Processing of calcium phosphate based Functionally Graded Bioceramics using Microwaves", <u>Sivaprasad Katakam</u>, D. Siva Rama Krishna, R. Murugan and T.S. Sampath Kumar, National Symposium of Research Scholars – 2002, IIT Madras, Chennai, India.

Research group

Present members:

- 1. Mr. N. THIYANESHWARAN PhD Scholar: "Al-Ti based In situ metal intermetallic laminates (MILs) for defence applications", registered in 2013 (under DRDO project) Submitted his thesis on 09.05.2017
- MR. M.P. SHANKER PhD Scholar, "Weldment corrosion", registered in 2013 (Regular Scholar)
- 3. MR. G.V. SARATH KUMAR PhD Scholar, "Surface coatings for automobile applications", registered in Jan.2015 (External registration M/s.Ashokleyland, Chennai)
- 4. MR. R. SOKKALINGAM PhD Scholar: "Joining of High Entropy Alloys", registered in 2015 (Regular Scholar)
- 5. MR. P.V. SATYANARAYANA PhD external registration, "Nanocrystalline heavy alloys for penetrator applications", registered in August 2015 (External registration Heavy Alloy Penetration Project, Tiruchirappalli)

Past members

- DR. M.S. SENTHIL SARAVANAN Doctoral Student: "Development of CNT reinforced AI-alloys and their workability and mechanical property" along with Dr. S.P. Kumaresh Babu, MME (Thesis defended on 27-03-2012) – Awarded in 2012. Presently working as a faculty member in self-financing engineering college.
- 2. DR. S. SIVASANKARAN Doctoral Student: "Workability studies of nanocrystalline Al-alloy composites" along with Prof. R. Narayanasamy, Dept of Production Engg. (Awarded in 2011) Presently working as Associate Professor in Saudi Arabia.
- 3. DR. N. NAGA KRISHNA Doctoral Student: "Development of ultra high strength ultrafine grained Al-alloy composites by cryorolling", Awarded in 2014. Presently working as a faculty member in self-financing engineering college
- DR. SAJITH BABU Doctoral Student: "Studies on Structural Aspects and Corrosion Behaviour of Nanocrystalline High Entropy Alloys", (under QIP registration) – (Thesis defended on 14-08-2015) – Degree awarded in 2015.
- 5. Mr. S.S. Kartheek, MS student, "In situ metal intermetallic laminates" (MILs) by diffusion bonding", degree awarded in 2014. Presently with Dr Karthikeyan's group as project staff in IISc.
- 6. MR. S. V. B. RAMAKRISHNA KOORELLA PhD Scholar: "Cryorolling behavior of Al-Mg and Al-Li alloys", registered in 2012 (External registration M/s.Ashokleyland, Chennai)

UG & PG Students

M.Tech student projects – total **31** completed + **04** students (On-going) B.Tech student projects – total **10** completed + **00** students (On-going)

Professional memberships

- 1. Senior Member, Society for Mechanical Engineers Hongkong (SMEHK), 2016 (SM20160401001)
- 2. Life Member of The Indian Institute of Metals, Kolkata, India (LM46517)
- 3. Life Member of Indian Welding Society, New Delhi (L00177)

- 4. Life Member of Materials Research Society of India (LMB985)
- 5. Life Member of Powder Metallurgy Association of India (LM64407)
- 6. Life Member of Indian Society for Technical Education, New Delhi (LM58516)
- Life Member of The Indian Science Congress Association, Kolkata (LM14343)

Invited Lectures

- Delivered an Invited Lecture on "Metal Intermetallic Laminates for High Strain Rate Deformation Applications", in One Week TEQIP Sponsored Workshop on "Advances in Manufacturing Technology", during 26th September to 1st October, 2016, organized by Dept of Production Engg., National Institute of Technology Tiruchirappalli.
- 2. Delivered an Invited Lecture on "High Temperature Materials and Characterization", in Two Day TEQIP Sponsored Workshop on "High Temperature Materials, Processing and Applications", during 8-9 March, 2016, organized by Anna University Tiruchirappalli.
- 3. Delivered an Invited Lecture on "Advanced Materials Through Simple Processing Methods", in TEQIP funded National Workshop on Advanced Materials and Processes, organized by College of Engineering, Andhra University, Visakhapatnam during July, 2015
- Delivered an Invited Lecture on "CNT reinforced high entropy alloys" in "National Workshop on High Entropy Alloys", organized by Dept of Metallurgical & Materials Engg., IIT Madras, Chennai, India, 29-30, March, 2015
- Lecture on "Electron Microscopy". Short term course on Microscopic Techniques in Materials Characterization, October 10, 2014, Dept of MME, NIT Trichy.
- Lecture on "Electron Microscopy", Short Term Course on Engineering Materials and Manufacturing Processes (EMMP-2013), December 16-21, 2013
- Lecture on "Mechanical Testing of Materials", Short Term Course on Engineering Materials and Manufacturing Processes (EMMP-2013), December 16-21, 2013
- Lecture on "Advanced Materials Processing", Short Term Course on Engineering Materials and Manufacturing Processes (EMMP-2013), December 16-21, 2013
- Invited lecture on "Advanced Manufacturing Methods", Short-term course on "Production Processes for defence applications" during 27-30 May, 2013
- Invited lecture on "Materials for Defence Applications", Short-term course on "Production Processes for defence applications" during 27-30 May, 2013
- 11. Lecture on "X-ray diffraction analysis", Short Term Course on Engineering Materials and Manufacturing Methods (EM3-2012), June 25-30, 2012.
- 12. Lecture on "Electron Microscopy", Short Term Course on Engineering Materials and Manufacturing Methods (EM3-2012), June 25-30, 2012.
- 13. Lecture on "Mechanical Behavior of Materials", Short Term Course on Engineering Materials and Manufacturing Methods (EM3-2012), June 25-30, 2012.
- 14. Invited lectures on "synthesis and characterization of nanocrystalline and tri-modal Al-CNT nanocomposites", Two days workshop on "Recent trends in composite materials and its processing" October 7-8, 2011, KPR Institute of Engineering and Technology, Coimbatore, India.
- 15. Invited Lectures on "synthesis and characterization of nanocrystalline and trimodal Al6061-TiO₂ nanocomposites", AlCTE sponsored SDP on "Recent Advancements in Nanotechnology and its Applications RAINTA'11", October 19 November 02, 2011, Pondicherry Engineering College, Pondicherry, India.
- 16. Invited lecture on "Nanocomposites: Synthesis and fabrication by novel routes", Universiti Technologi Mara, Kuala Lumpur, Malaysia, March 25, 2011
- 17. Invited lecture on "Cryorolling: an overview", The Institute of Engineers, Tiruchirappalli Chapter, August 04, 2010.
- 18. Invited lecture on "Advanced High Temperature Materials and Thermal Barrier Coatings", AICTE-QIP program on Advanced Materials and Processing", June 1-15, 2009, organized by Dept of MME, NIT Trichy, India
- 19. Lecture on "Introduction to Smart Processing of Materials", AICTE-QIP short-term course on Smart Processing of Materials", August 10-14, 2009, organized by Dept of MME, NIT Trichy, India
- 20. Invited lecture on "High Temperature Materials An overview", AICTE-QIP program on Metallurgy and Materials", February 11-15, 2008, organized by Dept of MME, NIT Trichy, India

Workshops, summer schools and AICTE-MHRD programmes attended

- Attended a two day workshop on "ThermoCalc", organized by Dept of Metallurgical & Materials Engg., National Institute of Technology Tiruchirappalli.
- 2. Attended a National Workshop on "High Entropy Alloys", organized by Dept of Metallurgical & Materials Engg., IIT Madras, Chennai, India, 29-30, March, 2015.
- 3. Attended workshop on "Heat Transfer", November 29 December 10, 2011 held at NIT Trichy, organized by Dept of Mechanical Engineering and sponsored by ICT, IIT Bombay.
- Attended workshop on "Computational Materials Science", March 6-8, 2009 held at IISc, Bangalore, organized and sponsored by UGC under NRC-M programme.
- 5. Attended "DST-SERC School on Texture and Microstructure", organized by IISc, Bangalore, India, March 24-28, 2008.
- Attended AICTE-MHRD sponsored Faculty Development Programme on "Recent Advances in Modeling and Simulation of Joining of Materials", 29th December 2008 to 10th January 2009, Dept of Mech Engg., NIT Trichy.
- 7. Undergone "One week training on TEM and other advanced characterization tools", IÍT Madras, May 17-25, 2008.
- Attended Induction Training Programme on "Instructional Design and Delivery" conducted by National Institute of Technical Teacher Training and Research, Chennai during 07th July – 12th July, 2008.
- Theme meeting on "Structure and Thermodynamics of Emerging Materials (STEM-2008)", April 17-18, 2008, Convention Centre, Anupuram, organised by Indira Gandhi Centre for Atomic Research, Kalpakkam and The Indian Institute of Metals, Kalpakkam Chapter
- 10. Attended "World Foundry Congress" at Chennai in February 7-10, 2008 organized by IIF.
- 11. Attended a national seminar on "Special Purpose, Strategic and Futuristic Materials for High Technology Sectors", organized by IIM Trivandrum chapter, October 16-17, 2008, Tiruvananthapuram.
- 12. Attended the AICTE sponsored Certificate course on "Design and Delivery systems in Technical Education" organized by National Institute of Technical Teacher Training and Research, Chennai during 19th November 1st December, 2007.

Workshops/Conferences organized / part of organization team

- 1. Principal Coordinator and main teacher, "Self supported short term course on Engineering Materials and Manufacturing Processes (EMMP-2013)", during December 16-21, 2013, NIT Trichy. (along with Dr.N. Ramesh Babu)
- 2. Principal Coordinator, "National Workshop on Surface Modification of Structural Materials (SMSM)", sponsored by Naval Research Board (NRB) as a part of NRB sponsored research project, during May 27-28, 2013, in NITT. (along with Dr.V.Muthupandi)

- 3. Principal Coordinator and main teacher, "Self supported short term course on Engineering Materials and Manufacturing Methods (EM3-2012)", during June 25-30, 2012, NIT Trichy. (along with Dr.N. Ramesh Babu)
- Coordinator, AICTE-QIP short term course on "Smart Processing of Materials", August 10-14, 2009, organized by Dept of MME, NITT. (along with Dr.B.Ravisankar)
- 5. Coordinator, one day workshop on "Advances in Biomaterials" organized by Dept of MME, NITT, under TEQIP community services, on March 15, 2008 (along with Dr.N. Ramesh Babu)
- Coordinator, one day workshop on "Structure and Properties of Advanced Engineering Materials" at NIT Trichy, organized under TEQIP community services, on 24th February, 2008. (along with Dr.N. Ramesh Babu & Dr.M.Ashfaq)
- Coordinator, one day workshop on "Materials Science for Engineers (MSE-2007)" at NIT Trichy, organized under TEQIP community services, on 4th November, 2007. (along with Dr.N. Ramesh Babu & Dr.M.Ashfaq)
- 8. Coordinator, three days "Training Program on Servo Hydraulic Testing machine", organized under TEQIP faculty development for department faculty members and research scholars, NIT Trichy, December 22-24, 2007.
- Student member, Organizing Committee, "International Symposium of Research Students 2004 on Materials Engineering", IIT Madras, India.
- 10. Student member, Organizing Committee, "National Symposium of Research Scholars 2002", IIT Madras, India
- 11. Student member, Organizing Committee, "National Conference on Medical Materials", 2001, IIT Madras, India

Additional responsibilities

- 1. Associate Dean (Research & Consultancy) October, 2012 to November, 2015
- 2. Chairman, Class Committee, I year M.Tech. Welding Engg., 2009, 2010
- 3. Chairman, Class Committee, II year B.Tech., 2011, III year B.Tech., (2013, 2014, 2015, 2016) & IV year B.Tech., (2017)
- 4. Member, Department Project Evaluation Committee (DPEC), since 2010
- 5. Faculty In-charge, Department Library, Dept of MME, NITT from 2009 to 2011
- 6. Faculty In-charge, Mechanical Testing Lab, Dept of MME, NITT since 2009
- 7. Founder Faculty In-Charge, Advanced Materials Processing Lab, since 2009

Subjects Handled:

2007-08: ODD	2007-08: EVEN
Mineral Processing & Metallurgical Analysis (UG-III)	Mechanical Behavior of Materials (UG-VI)
High Temperature Materials (UG-VII)	High Temperature Materials (PG-II)
Metallography Laboratory	Mechanical Testing Laboratory
2008-09: ODD	2008-09: EVEN
Mineral Processing & Metallurgical Analysis (UG-III)	Mechanical Behavior of Materials (UG-VI)
Experimental Techniques (UG-VII)	High Temperature Materials (PG-II)
Non-Ferrous Metallography Laboratory	Mechanical Testing Laboratory
2009-10: ODD	2009-10: EVEN
Experimental Techniques (UG-VII)	High Temperature Materials (PG-II)
Mineral Processing & Metallurgical Analysis (UG)	Mechanical Behavior of Materials-II (UG-VI)
Mechanical Testing Laboratory	Ferrous Metallography Laboratory
Engineering Practice (UG-I)	Engineering Practice (UG-I)
2010-2011: ODD	2010-2011: EVEN
Mineral Processing & Metallurgical Analysis (UG-III)	Fatigue, Creep and Fracture Mechanics (UG-VI)
Materials Characterisation (PG-I)	High Temperature Materials (PG-II)
Mechanical Behavior of Materials (PG-I)	Materials Testing & Characterisation Laboratory (PG-II)
Mechanical Testing Laboratory	
2011-12: ODD	2011-12: EVEN
Materials Characterization (UG-VII)	Fatigue, Creep and Fracture Mechanics (UG-VI)
Electrical, Magnetic and Optoelectronic Materials (PG-I)	Nanomaterials and applications (PG-II)
Strength of Materials (UG)	Ferrous Metallography Laboratory (UG-IV)
Materials Testing Laboratory (UG-V)	. Sirous metamograpmy zazoratery (SS 117)
2012-13: ODD	2012-13: EVEN
PH211 Electrical Electronics and Magnetic Materials (UG-III)	Fatigue, Creep and Fracture Mechanics (UG-VI)
MT621 Testing Inspection and Characterisation (PG-I)	High Temperature Materials (PG-II)
MT657 Metallography, Materials Testing and Characterization	Materials Testing & Characterization Laboratory (PG-II)
Laboratory (PG-I)	Materials resting a characterization Eaboratory (1 6 11)
2013-14: ODD	Under TR.Anantharaman-Sir Dorabji Tata Fellowship at
PH211 Electrical Electronics and Magnetic Materials (UG-III)	University of North Texas, USA, from 1st Feb 2014 to 31st
MT621 Testing Inspection and Characterisation (PG-I)	May, 2014
MT657 Metallography, Materials Testing and Characterization	may, 2014
Laboratory (PG-I)	
2014-15: ODD	2014-15: EVEN
MT309 Mechanical Behavior of Materials (UG-V)	Fatigue Creep and Fracture Mechanics (UG-VI)
MT621 Testing Inspection and Characterisation (PG-I)	High Temperature Materials (PG-II)
MT315 Materials Testing Laboratory (UG-V)	Materials Testing & Characterization Laboratory (PG-II)
2015-16: ODD	2015-16: EVEN
MT452 High Temperature Materials (UG-VII)	MT011 Fatigue Creep and Fracture Mechanics (UG-VI)
MT621 Testing Inspection and Characterization (PG-I)	MT612 Mechanical Behavior of Materials (PG-II)
MT657 Metallography, Materials Testing & Char. Lab. (PG-I)	Advanced Materials Processing of Materials Lab. (PG-II-IM)
2016-17:ODD	2016-17: EVEN
MT309 Mechanical Behavior of Materials (UG-V)	MT001 Fatigue Creep and Fracture Mechanics (UG-VI)
MT618 Testing Inspection and Characterisation (PG-I)	MT612 Mechanical Behavior of Materials (PG-II)
MT657 Metallography, Materials Testing & Char. Lab. (PG-I)	
2017-18:ODD	
Mechanical Behavior of Materials (UG-V)	
MT618 Testing Inspection and Characterisation (PG-I)	
MT657 Metallography, Materials Testing & Char. Lab. (PG-I)	

References:

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