Curriculum Vitae

Brief Profile: My research interests are in metal casting, corrosion, surface engineering and composites. I served in the metal casting industry for more than 12 years. Recently, I have finished a major project worth of Rs.3 Crores in collaborating with NLC India Ltd, Neyveli sanctioned by CMPDI under coal ministry in the area of pipeline corrosion in mines. I am actively involved in the development of curricula and syllabi for UG and PG schemes in flexible and conventional system. We have established a well-equipped corrosion and foundry engineering laboratory under the funding of MHRD. Presently, I am heading the department of MME from Jan 2015 and we have got NBA accreditation for UG and One PG programme.



1. Name: Dr.S.P.Kumaresh Babu

2. Designation: Associate Professor & HoD

3. Office Address: Department of Metallurgical and Materials Engineering, NIT, Trichy-620015

4. Telephone (Direct) (Optional):

Telephone: 0431-2503462

Mobile (Optional): 9487438564

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

6. Field(s) of Specialization: Metal Casting, Corrosion, Surface Engineering and Composites.

7. Employment Profile

Job Title	Employer	From	То
Associate Professor	NIT, Trichy	May 2010	Till date
Asst.Professor	NIT, Trichy	May 2007	May 2010
Asst. Professor	VIT University, Vellore	Dec 2006	Apr 2007
Research Associate	NIT,Trichy	June 2006	Dec 2006
Asst. Professor	SBCEC,Arni	July 2003	Feb 2004
Sr.Engr	Sanmar Foundries, Viralimalai	Feb 1998	June 2003
Metallurgist	SSL,Chennai	July 1997	Jan 1998
Sr.Engr	Secals Ltd,Ranipet	June 1991	Dec 1994

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

Examination	Board / University	Year	Division/	Subjects
			Grade	
Ph.D.	NIT,Trichy	2006		Metallurgy
M.Tech.	KREC,Surathkal	1997	Ι	Process Metallurgy
M.E	PSG Tech, Coimbatore	1991	Ι	Industrial Metallurgy
B.E	GCT, Coimbatore	1987		Production
AMIIM	IIM,Calcutta	1994		Metallurgy
HSC	TNSSB	1982		Maths, Physics,
				Chemistry
SSLC	TNSSB	1980		-

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То
Staff Advisor	Pragyan	2009	2010
Staff Advisor	Mettle	2008	2009
Chairman	Class Committee (UG & PG)	2007	Till date
Nodal Officer	TEQIP	Jan 2010	Feb 2013
Chairman	DPEC for UG & PG	2011	2012
Coordinator	M.Tech Industrial Metallurgy Course	2011	Till date
Coordinator	Surface Engineering, Corrosion Engineering, Foundry Engineering, Process Metallurgy Labs	2007	Till date
Member	CECASE- STF	2012	Till date
Member	DAC	2012	Till date
HoD	Department of MME	Jan 2015	Till date

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	То
Executive committee member	IIM- Trichy Chapter	2012	Till date

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
	- NIL -	

12. Fellowships

Year of Award	Name of the Fellowship	Awarding	From	То
		Organization	(Month/Year)	(Month/Year)
2005	TEQIP- Research scholar	TEQIP-	Jan 2005	May 2006
	grant	NITT		

13. Details of Academic Work

(i) Curriculum Development:

Worked as a coordinator for developing flexible curriculum for UG & PG, MME.

(ii) Courses taught at Postgraduate and Undergraduate levels

Year	Subject Code	Subject
	CC101	Energy and Environmental Engineering (UG)
June-2007- Dec 2007	BMT 702	Corrosion Engineering (UG)
	BMT 709	Corrosion Engineering Laboratory
Jan 2008-May 2008	MT 467	Special Casting Techniques (UG)
	MT612	Corrosion of weldments (PG)
	MT 316	Non Ferrous Metallography Lab (UG)
June 2008- Dec 2008	CC101	Energy and Environmental Engineering-(UG)
	MT 702	Corrosion Engineering(UG)
	MT 709	Corrosion Engineering Laboratory (UG)
Jun 2009-Dec2009	MT 301	Metal Casting Technology(UG)
	MT 702	Corrosion Engineering(UG)
	MT 709	Corrosion Engineering Laboratory (UG)
Jan 2010-May 2010	MT 404	Non Ferrous Extraction(UG)
	MT 262	Metallurgy Lab (UG)
	MT 622	Surface Engineering (PG)
Jan 2011-May 2011	MT 622	Surface Engineering(PG)
	MT 304	Non-Ferrous Extraction(UG)
	MT 316	Non Ferrous Metallography Lab(UG)
Jun 2011-Dec 2011	MT 701	Foundry Technology (PG)
	MT 301	Metal Casting Technology UG)
	MT 702	Corrosion Engineering (UG)
	MT 709	Corrosion Engineering Laboratory (UG)
Jan 2012-May 2012	MT 725	Ferrous Foundry Metallurgy (PG)
	MT 659	Manufacturing Process (PG)
	MT 262	Metallurgy Laboratory (UG)
Jun 2012-Dec 2012	MT 301	Metal Casting Technology (UG)
	MT 701	Foundry Technology (PG)
	MT 709	Corrosion Engineering Laboratory (UG)
Jan 2013 – Jun 2013	MT702	Special Casting Processes (PG)
	MT725	Summer Industrial Training (PG)
Jul 2013- Dec 2013	MT701	Foundry Technology (PG)

Jan 2014-Jun 2014	MT659	Manufacturing Process (PG)
	MT725	Summer Industrial Training (PG)
Jul 2014-Dec 2014	MT701	Foundry Technology (PG)
	MT726	Thermodynamics of solidification
Jan 2015-Jun 2015	MT726	Thermodynamics of solidification
	MT659	Manufacturing Process (PG)
	MT 725	Ferrous Foundry Metallurgy (PG)
Jul 2015-Dec 2015	MT701	Foundry Technology (PG)
Jan 2016-Jun 2016	MT704	Foundry Metallurgy
	MT665	Manufacturing Process (PG)
Jul 2016- Dec 2016	MT701	Foundry Technology (PG)
	MT726	Thermodynamics of solidification

(iii)Projects guided at Postgraduate level

130 projects

(iv)Other contribution(s)

Developed foundry, surface engineering, and process metallurgy labs and their experiments.

14. Details of Major R&D Projects

		Duration		Status
Title of Project	Funding Agency	From	То	Ongoing/
				Completed
Development of Al-TiB ₂ and Al-ZrB ₂ in situ composites	TEQIP Networking (4.00 Lakhs)	2008	2009	Completed
Evaluation and Prevention of Storm Water Control Pumps of Lignite Mines- an R& D Project	Neyveli Lignite Corporation Limited, Neyveli (49.2 Lakhs)	Dec 2010	Feb 2013	Completed

Enhancing Life of De- Watering Pipes in Coal/Lignite Mines by Prevention of Erosion- Corrosion with Nano- Crystalline Surface Engineering Treatments.	CMPDI, Ministry of Coal, GoI (3.00 Crores)	Sep 2012	Aug 2016	Completed
Evaluation of Alternate Materials for Centrifugal and Slurry Pumps under Neyveli Lignite Corporation.	Neyveli Lignite Corporation Limited, Neyveli (2 Lakh)	2012	-	Completed
Analysis of 'Y' Joint Problems in SWC Pumps	Neyveli Lignite Corporation Limited, Neyveli (1 Lakh)	2012	-	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
M.S. Senthil Saravanan	Processing and Properties Evaluation of Carbon Nanotubes reinforced Al alloys	Main Guide/ Supervisor	August- 2011
N. Mohan	Mechanical and Tribological Behaviour of Fabric Reinforced Functional Filler Filled Epoxy Based Hybrid Composited	Co-Guide/ Co- Supervisor	April- 2011
S.Jerome	Development of Aluminium- Titanium Carbide (Al-TiC) matrix composite by liquid and solid state routes- A Study	Co-Guide/ Co- Supervisor	June- 2012
J.Yoganandh	Erosion and Corrosion behaviour of Materials under mining conditions with and without surface modification	Co-Guide/ Co- Supervisor	December - 2013
C. Anand Chairman	Abrasive wear behavior of Fiber and particulate filler reinforced polymer matrix composites	Main Guide/ Supervisor	January -2014
S. Manivannan	Studies on Microstructure, Mechanical and Corrosion properties Cast Mg-6Al-1Zn alloy by Ca, Ce and Y addition	Main Guide/ Supervisor	July -2015

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc.

Date (s)	Title of Activity	Level of Event	Role	Event Organize d by	Venue
4-13, July, 2007	FDP on ANSYS and applications	National	Participant	NITT	NITT
24-26, October, 2007 ,	International Conference on Advanced Materials and Composites (ICAMC-2007)	International	Participant	IIM	Trivandrum
December 19-20, 2007	Two day workshop on Design of Experiments for Engineers and Researchers	National	Participant	TEQIP	NITT
7-10 February, 2008	International Conference on "68 th World Foundry Congress	International	Participant	IIF	Chennai
15-3- 2008	One day workshop on XRD and Intellectual Property Rights	National	Participant	NITT	NITT
24-25, April, 2008	Two days workshop on RTI 2005 and role of Information officers	National	Participant	TEQIP	Pondicherry
2-4 October 2008	The seven habits of Highly Effective people	National	Participant	TEQIP	Munnar
16-17, October 2008	Two days workshop on Special purpose strategic and futuristic material for high technology sectors	National	Participant	IIM	Trivandrum
20-Nov, 2008	Awareness Programme on Intellectual Property rights	National	Participant	BDU	Bharathidasan University, Trichy.
13-24 July 2009	Two weeks AICTE-MHRD FDP on Composite Materials – Processing, Challenges and Opportunities	National	Participant	NITT	NITT
November 2-4, 2009 ,	International Conference on Surface Modification Technology (SMT-23)	International	Participant	JMT	Mamallapuram , Chennai

December 10-12, 2009	National seminar & Exhibition on Non Destructive Evaluation (NDE 2009)	National	Participant	NITT	NITT
21-12- 2009 to 2-1-2 010	AICTE-MHRD SDP on Quantitative Research techniques for Engineers and Researchers	National	Participant	NITT	NITT
18-Feb, 2010	one day workshop on Welding Power sources Evaluation and Process control	National	Participant	NITT	NITT
13-17 December 2010	NRC-M winter workshop on Joining of Materials at NITT organized by IISc and NITT	National	Participant	IISc	NITT
23-25, March, 2011	Pilot phase of Procurement Management Support System (PMSS), organized by NPIU and World Bank at College of Engineering	National	Participant	TEQIP	Pune
14-16, Oct 2 011	International conference on Foundry for Future	International	Participant	IIM	Coimbatore
16-17, Dec, 2011	DRDO-Academia Interaction workshop of ARMREB at ARDE	National	Participant	ARDE	Pune
19-21, Jan, 2012	Intl. Conference on Symposium of Joining of Materials; SOJOM - 2012	International	Participant	BHEL	BHEL, Trichy
20-22, June, 2012	International conference on Surface Modification Technology (SMT-26) at Lyon	International	Participant	SMT	Lyon, France

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
Two days course on "Electrical Aspects of Welding" under TEQIP Networking scheme with GCE salem	National	Nov 1- 2, 2007	Convener/ co- convener	NITT
A course on "Latest Trends in Surface Coating Technologies"	National	Nov 17- 21. 2007	Convener/ co- convener	NITT
One day workshop on "Challenges and opportunities in surface Engineering Research" under TEQIP community services	National	Nov 21, 2007	Convener/ co- convener	NITT
One week AICTE-MHRD short term course on "Metallurgy: Today and Tomorrow"	National	Feb 11- 15, 2008	Convener/ co- convener	NITT
Seven "Welders training course for Self help group women" under TEQIP	National	Dec 2007 to Mar 2009	Convener/ co- convener	NITT
Organized three days workshop on "Right To Information act" under TEQIP community services	National	August 7-9, 2008	Convener/ co- convener	NITT
Three Days Short Term course on "Electron Microscopy" EM – 2008 (Under TEQIP Community Service)	National	Sept 06 – 08, 2008	Convener/ co- convener	NITT
Organized Two weeks AICTE-MHRD Short term course on "Recent advances in Materials and processing technologies" for Teachers and Executives.	National	June 1- 12, 2009	Convener/ co- convener	NITT

Recent trends in Corrosion Control & Surface Engineering (CC & SE 2009) (MHRD – AICTE Staff Development Programme)	National	June 08- 20, 2009	Convener/ co- convener	NITT
Two day Short term course on Corrosion Control and Surface Engineering under CECASE	National	Oct 18-19, 2012	Convener/ co- convener	NITT
Three – One Day Colloquium on Corrosion Control and Surface Engineering: Current R&D and Industrial Scenario under CECASE	National	Dec 10-12, 2012	Convener/ co- convener	NITT
Two-day Training Program for Steel Industry-CCAST	National	Dec 21-22, 2012	Convener/ co- convener	NITT
National Conference on Corrosion , Surface Engineering and Tribology (CST-2013) under CECASE	National	April 22-23, 2013	Convener/ co- convener	NITT

18. Invited Talks delivered

Topic	Date	Inviting Organization
Advances in Casting at MAM college of Engineering in AICTE -SDP	3-6-2009	MAM college of Engineering, Trichy
Issues in steel casting at Coimbatore in International Conference of Foundry for Future	14-11- 2011	Coimbatore
Melting of Cr-Mo steels in two day workshop namely, course on processing of 9Cr-Mo (Grade 91 & 92) steels organized by IIM Chapter BHEL.	26-27 September 2012	IIM Chapter BHEL, Trichy.
Lecture on NDT Techniques & Casting processes in NITT/DRDO special lecture series on Materials.	24 November 2012	NITT/DRDO

Lecture on Advanced materials and processing, TEQIP II sponsored	23-29 May , 2014	PSG College of Technology, Coimbatore
program		
Lecture on melting, QC/QA in foundry practices, FDP on modern technologies in foundry practices	6.1.2016	JSSATE, Bangalore
Lecture on casting, forging, machining and forming, one day workshop on ferrous materials and their processing (FEMA-16)	24-2-2016	IIM-Trichy, BHEL

19. Membership of Learned Societies

Type of Membership (Ordinary	Organization	Membership No.
Member/ Honorary Member / Life		with date
Member)		
Life member	Indian Institute of Metals	16627
Life member	IWS	-
Life member	Society for failure analysis	FLM-SFA-0471

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Switzerland	July 10-18, 2008	International conference
Singapore	4 th Dec2008- 3 rd Jan 2009	TEQIP Foreign university visit
Korea	Sep 14-18, 2010	International conference
France	20-22 June, 2012	International conference

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of paper	Journal	Year, Vol. (No) & Page No
S.P.Kumaresh Babu S.Natarajan	Influence of heat input on corrosion behaviour of flux cored arc weldments in Power Plant carbon steel	International Journal of Joining of Materials (JOM).	2006, Vol. 18(1), 19-26,
S.P.Kumaresh Babu S.Natarajan	Corrosion behaviour of flux cored arc weldments in Carbon Steel used in Power Plants	STEEL GRIPS	2006, Vol. 4, 207-211
S.P.Kumaresh Babu S.Natarajan	Corrosion and its inhibition in SA213-T22 TIG weldments used in power plants under neutral and alkaline environments	Material Science and Engineering A – Elsevier	2006, A 432, 47 – 51.
S.P.Kumaresh Babu S.Natarajan	Corrosion behavior of Pulsed GTA weldments in Power Plant carbon steel	Journal of Materials Engineering and Performance –ASM	2007, vol. 16(5), 620
S.P.Kumaresh Babu S.Natarajan	Influence of Heat Input on High Temperature Weldment corrosion in Submerged Arc Welded Power plant Carbon Steel	Materials & Design	2008, vol. 29 1032-1042
K. Sivaprasad S. Natarajan S. P. Kumaresh Babu B. Anil Kumar G. Dinesh, R.Narayanasamy	Study on abrasive and erosive wear behaviour of Al 6063/TiB ₂ in situ composites	Materials Science and Engineering A	2008, vol. 498 495–500.
S.Senthil kumaran S.P.Kumaresh Babu K. Sivaprasad S. Natarajan	High Temperature sliding wear behavior of Al 4032-ZrB ₂ in situ Composites	Int. J. of Materials Science	2009, Vol.4 (3), 283-298

S.Natarajan, R.Narayanasamy, S.P.Kumaresh Babu, G.Dinesh, B.Anil Kumar, K.Sivaprasad	Sliding Wear Behaviour of Al 6063/TiB ₂ in situ Composites at Elevated Temperatures	Materials and Design	2009, Vol. 30(7), 2521-2531.
S.Anoop, S.Natarajan, S.P.Kumaresh babu	Analysis of factors influencing dry sliding wear behaviour of Al/SiC _p -Brake pad tribo-system	Materials and Design	(2009), Vol. 30 3831-3838
N.Mohan, S.Natarajan, S.P.Kumaresh Babu, Siddaramaiah & Joong Hee Lee	Solid Particle Erosion of UHMWPE Filled Aramid Fabric-Epoxy Hybrid Composites	Journal of Advanced Materials Research	2009, Vol.123- 125, 1051-1054
S.P.Kumaresh Babu, S.Natarajan	High Temperature corrosion and characterization studies in Flux Cored Arc welded 2.25 Cr-1 Mo power plant steel	Journal of Materials Engineering and Performance –ASM	2010, vol. 19(5), 743-750
Naveen Kumar, R.Narayanasamy, S.Natarajan, S.P.Kumaresh Babu, K.Sivaprasad, S.Sivasankaran	Dry sliding wear behavior of AA 6351-ZrB ₂ in situ composite at room temperature	Materials and Design	2010, Vol.31 (3) 1526-1532.
M.S. Senthil Saravanan, S.P. Kumaresh Babu, K. Sivaprasad, M. Jagannatham	Techno- economics of carbon nanotubes produced by open air arc discharge method	Int.J.Engg.Sci.Tech.	2010, Vol. 2, 100-108
M.S. Senthil Saravanan, S.P. Kumaresh Babu, K. Sivaprasad, P. Susila, B.S. Murty	Synthesis and Characterization of CNT Reinforced AA4032 Nanocomposites by High Energy Ball Milling	AIP: Conference series	2010, Vol. 1276, 82-87
N.Mohan, S.Natarajan, S.P.Kumaresh Babu	Investigation on Two-Body Abrasive Wear Behavior of Silicon Carbide Filled Glass Fabric-Epoxy Composites	Journal of Minerals & Materials Characterization & Engineering	2010,Vol.9, 231-246

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S.P.Kumaresh Babu, Anand chairman	Investigation on Two body abrasive wear behavior of Tungsten carbide filled Glass Fabric-Epoxy Hybrid Composites	Journal of Advanced Materials Research	2010,Vol.123-125, 1039-1042
M.N. Satheesh Kumar, Z.Yaakob, N.Mohan, Siddaramaiah, S.P.Kumaresh Babu	Mechanical and Abrasive Wear studies on Biobased Jatropha oil cake incorporated Glass-Epoxy Composites	J.of American Oil Chemists Society	2010, Vol.87, No.8, 929-936.
N.Mohan, S.Natarajan, S.P.Kumaresh Babu	Studies on Two body abrasive wear behavior of graphite filled glass epoxy composites	International journal of Materials science.	2010, Vol. 5, 181- 196
N.Mohan S.Natarajan, S.P.Kumaresh Babu	Investigation on Sliding Wear Behaviour and Mechanical Properties of Jatropha Oil Cake- Filled Glass- Epoxy Composites	J.of American Oil Chemists Society	2011, Vol.88, 111-117.
N.Mohan S.Natarajan, S.P.Kumaresh Babu	Abrasive wear behaviour of hard powders filled glass fabric-epoxy hybrid composites	Materials and Design	2011, Vol.32, 1704-1709
N.Mohan ,S.Natarajan, S.P.Kumaresh Babu	Sliding Wear Behaviour of Graphite filled Glass-Epoxy Composites at Elevated Temperatures	Journal of Plastics- Polymer Technology and Engineering	2011, Vol.50(3), 251-261
M.S. Senthil Saravanan, S.P. Kumaresh Babu, K. Sivaprasad, B. Ravisankar, P. Susila, B.S.Murty	Consolidation of CNT reinforced AA4032 nanocomposites by ECAP	Int.J.Nanoscience,	2011, Vol. 10, No. 1 1- 4
M.S. Senthil Saravanan, K. Sivaprasad, P. Susila, S.P. Kumaresh Babu	Anisotropy models in calculating precise crystallite size of mechanically alloyed powders	Physica B	2011, Vol.406 165–168.

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M.S. Senthil Saravanan, S.P. Kumaresh Babu, K. Sivaprasad	Mechanically alloyed CNT reinforced AA4032 alloy: Synthesis and Characterisation	J.Mater.Miner. Char,	2011, Vol. 9, No.11, 1027-1035,
M.S.Senthil Saravanan, K.Sivaprasad, S.P.Kumaresh Babu	Influence of crystallite size on consolidation of carbon nanotube(s) reinforced AA 4032 composite powders by equal channel angular pressing	Key Engineering Materials	2011, Vol. 471 127-132
M.S. Senthil Saravanan, K. Sivaprasad, S.P. Kumaresh Babu	Dispersion and thermal analysis of CNT reinforced nanocrystalline AA4032 alloy produced by high energy ballmilling	Experimental Techniques	2013, Volume 37, 14–18
C.Anand chairman, S.P.Kumaresh Babu	Three body abrasive wear behavior of basalt and glass fabric reinforced epoxy composites	Jr. Applied mechanics and materials	2011, vol.121-126, 534-538
C.Anand Chairman, S.P.Kumaresh Babu, Muthukannan Duraiselvam, K.R.Balasubramanian.	Investigations on two-body abrasive wear behavior of titanium carbide filled glass fabric epoxy composites – a Box-behnken approach	Int.J.Engg.Sci.Tech	2011, Vol.3, No.4, 119-129
M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad	Mechanical properties and corrosion behavior of carbon nano tubes reinforced AA 4032 nano composite	Experimental Techniques	2014, Volume 38, Issue 1, 48–52
S.Jerome, Asish kumar, S.P. Kumaresh babu, B. Ravi Sankar	Studies on Mechanical properties and wear behavior of Al-TiC insitu composites	Advanced materials Research	2011,vol 328-330, 1654-1658
N.Mohan, S.Natarajan, S.P.Kumaresh Babu, Siddaramaiah and Joong Lee	Studies on Erosive wear behavior of UHMWPE Filled Aramid -Epoxy hybrid Composites	Journal of Materials and Manufacturing process	2012, vol.27, 430-435

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J. Yoganandh, T. Kannan, S.P. Kumaresh Babu, and S. Natarajan	Optimization of GMAW Process Parameters in Austenitic Stainless Steel Cladding Using Genetic Algorithm Based Computational Models	Experimental Techniques, Wiley publications	2013, Volume 37, Issue 5, Pages 48–58
S. Jerome, S. Govind Bhalachandra, S. P. Kumaresh Babu & B. Ravisankar	Influence of Microstructure and Experimental Parameters on Mechanical and Wear Properties of Al- TiC Surface Composite by FSP route	International Journal on Minerals& Materials Characterization & Engineering	2012, Vol. 11, No.5, 493-507,
C.Anand Chairman S.P.Kumaresh Babu	Mechanical and abrasive wear behavior of glass and basalt fabric-reinforced epoxy composites	Journal of Applied Polymer Science	2013, Vol 130 No.1, 120-130
C.Anand Chairman S.P.Kumaresh Babu	Influence of Titanium Carbide on the Three- Body Abrasive Wear Behavior of Glass-Fabric Reinforced Epoxy Composites.	Advances in Materials.	2012, Vol. 1,No. 1, 9-15.
M.Kumarasamy, S.Natarajan, S.P.Kumaresh babu, S.Santhanam, P.Veerabalu1e, S.Chokkuvel Murugan	Assessment of failure modes of components in high capacity pumps due to synergistic effects of Erosion and Corrosion –A case study in Lignite Mines	Key Engineering Materials, Trans Tech Publishing	Vol.710, 689-694
Jitendra Kumar Tirpude S.P.Kumaresh Babu R.Nagalakshmi	Fireside Corrosion Studies of Super 304H Ultra Super Critical Boiler grade Weldments	International Journal of Mechanical Engineering & Research	2013, Vol 3, Number 3 168-172
Anas Maliyekal S.P.Kumaresh Babu R.Nagalakshmi	Effect of Welding on Creep behavior of Super heater/Re heater Tube Materials For Advanced Ultra Super Critical Boilers	International Journal of Mechanical Engineering & Research	2013, Vol 3, 3215-219

J.Yogananth S.Natarajan S.P.Kumaresh Babu	Erosion Behaviour of WC– Co–Cr Thermal Spray Coated Grey Cast Iron under Mining Environment	Transactions of Indian Institute of Metals	2013, Vol 66 No.4, 437-443
J.Yogananth S.Natarajan S.P.Kumaresh Babu	Erosive Wear Behavior Of Nickel Based High Alloy White Cast Iron Under Mining Conditions Using Orthogonal Array.	International Journal of Materials Engineering and Performance (ASM)	2013, Volume 22, Issue 9, 2534–2541
J.Yogananth S.Natarajan S.P.Kumaresh Babu	Erosion Wear Characteristics Of Surface Modified Grey Cast Iron By WC-Co-Cr / NiCrBSi Coating using HVOF Thermal spray process	International Journal of Materials performance and characterization (ASTM)	2014, VOL. 3 No. 1, 309- 326
Appala Naidu A Kumaresh Babu S.P Manikandan, M; M Arivarasu; Ramkumar Devendranath, R; Arivazhagan, N	Hot Corrosion Studies on Welded dissimilar Boiler steel in Power plant environment under cyclic condition	International Journal of Chem Tech Research	2014, Vol.6, No.2, 1325-1334
Appala Naidu A Kumaresh Babu S.P Manikandan, M; M Arivarasu; Ramkumar Devendranath, R; Arivazhagan, N	Air oxidation and molten salt corrosion studies on bimetallic boiler steel at elevated temperatures	The Journal of Corrosion Science and Engineering	2014, Vol 17 No.15
S. Manivannan, M.P. Sathishkumar, S.P. Kumaresh Babu, Srinivasan Sundarrajan	Corrosion Analysis of AZ61 Alloy with Different Level of Ca Addition and Aging	Applied Mechanics and Materials	2014, Vol. 592- 594, 821-825
S. Manivannan Kumaresh Babu S.P et. al	Microstructure and Mechanical Properties of Cast Mg-6Al-1Zn-XRE Alloy with Additions of Yttrium and Different Ageing Temperature	European Journal of Scientific Research	2014, Vol. 122 No 4, 381-391
J.Yogananth S.Natarajan S.P.Kumaresh Babu	Erosion behavior of NiCrBSi coating under mining conditions	Surface Engineering	2013, Vol 000 1-7

M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad	Synthesis, characterization and ECAP consolidation of CNT reinforced AA4032 Nanocrystalline composites produced by High Energy Ball Milling.	Journal of Engineering Materials and Technology	2015, 137(2),
S.Manivannan, S.P.Kumaresh Babu,S.Sundarrajan	Corrosion behavior of Mg- 6Al-1Zn+ X RE magnesium alloy with minor addition of Yttrium	Journal of Materials Engineering and Performances	Volume 24, Issue 4, 1649-1655
S.Manivannan,P.Dines h, S.P. Kumaresh Babu, S.Sundarrajan	Investigation and Corrosion performance of Cast Mg-6Al-1Zn+XCa alloy under Salt spray test(ASTM B-117)	Journal of Magnesium and Alloys	2015, Volume 3, Issue 1, 86–94
J.Yogananth S.Natarajan S.P.Kumaresh Babu	Erosive Wear Behavior of High Alloy Cast Iron and duplex stainless steel under Mining Conditions	International Journal of Materials Engineering and Performance (ASM)	2015, Volume 24, Issue 9, 3588–3598
M.S.Senthil Saravanan, S.P.Kumaresh Babu,	Compressive deformation study on bimodal AA 4032 alloy produced by ball milling	Indian Journal of Engineering & Materials Sciences	2015, Vol. 22, 376-380
S. Manivannan , Sarathy Kannan Gopalakrishnan, S.P. Kumaresh Babu, Srinivasan Sundarrajan	Effect of cerium addition on corrosion behavior of AZ61+ XCe alloy under salt spray test	Alexandria Engineering Journal	2016, Vol. 55, 663–671
S. Manivannan, P. Dinesh, R. Mahemaa, Nandhakumaran MariyaPillai, S.P. Kumaresh Babu, and Srinivasan Sundarrajan	Corrosion behavior of ascast Mg–8Li–3Al+xCe alloy in 3.5wt% NaCl solution	International Journal of Minerals, Metallurgy and Materials	2016, Volume 23, Number 10, 1196-1203
M. Murali , S.P. Kumaresh Babu,. Jeevan Krishna, Vallimanalan	Synthesis and characterization of AlCoCrCuFeZnx high-entropy alloy by mechanical alloying	Materials International	26 (2016) 380–384
S.P.Kumaresh Babu, S.Natarajan M.Ramesh	Corrosion behavior of GTA welded 9 Cr-1 Mo power plant steel	IWS welding journal	2007, 44-49

M.S. Senthil Saravanan, S.P. Kumaresh Babu, K. Sivaprasad	"Synthesis and Characterisation of CNT reinforced Al based composite powders .by high energy ball milling"	Trans PMAI	2009, Vol.35, 5-8
B.Thirumaran S.Natarajan S.P.Kumaresh Babu	Corosion behavior of CNT reinforced AA7075 Nanocomposites	Advances in Materials Science PG Publications	2013; Vol.2(1), 1-5

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings & Venue	Year, Page No & Conference theme
S.P. Kumaresh	High temperature Corrosion	Proceedings of International	Oct 24-26,
Babu,	and characterization Studies	conference (ICAMC -2008)	2007, Corrosion
Natarajan.S	in FCA welded 1 Cr-0.5Mo power plant steel	held at Trivandrum	
Jerome.S,	Prediction of welding residual	Proceedings of International	Oct 24-26,
S.P. Kumaresh	stresses in butt welded	conference (ICAMC -2008)	2007, Welding
Babu,	GTAW process by FEA	held at Trivandrum	
Ravishankar.B.			
A.Appala Naidu,	Studies on Hot Corrosion	Proc. International	July 2008,
K. Pulla Rao,	behavior of Cr-Mo boiler	Conference on symposium of	Welding
K. Siva Prasad,	FCA weldments in Na ₂ SO ₄ –	Joining of Materials	
S. Jerome,	NaCl Environment" Conf.	(SOJOM), , Welding	
S.P. Kumaresh		Research Institute, BHEL,	
Babu &		Tiruchirappalli,	
Arivazhagan			
K. Siva Prasad,	Study on cryorolling of Al-	Junior Euromat 2008,	July14-18,
V.V. Ravi	Cu- TiB ₂ in situ composite",	University of Lausanne,	2008,
Kumar and S.P.		Geneva, Switzerland,	Composites
Kumaresh Babu		,	-

K. Siva Prasad, S.P. Kumaresh Babu, S. Senthil Kumaran and S. Natarajan S.P.Kumaresh Babu, K. Siva Prasad, S. Senthil Kumaran, S.Jerome and S.Natarajan	Development of Al-ZrB ₂ in situ Composites and its High Temperature Wear Behaviour Sliding Wear Behaviour of WC-Coated Al-ZrB ₂ in situ Composite	International Conference of Advanced Tribology (iCAT 2008), National University of Singapore, International Conference of Advanced Tribology (iCAT 2008), National University of Singapore,	December 3-5, 2008, 15. tribology December 3-5, 2008, 215, Tribology
M.S. Senthil Saravanan, K. Siva Prasad, S. P.Kumaresh Babu,	Synthesis and characterization of carbon nanotube reinforced AA4032 Al-alloy composite by high energy ball milling	International Conference PM09, Goa,	February, 16- 18, 2009, Powder Metallurgy
N.Mohan, S.P.Kumaresh Babu, S.Natarajan	Tribological Behaviour of graphite filler filled glass fabric epoxy composites at elevated temperature	International Conference on Total Eng. Analysis and Manufacturing Techology-09 at Bangalore	November- 2009 <u>Best</u> <u>technical paper</u> <u>award obtained</u> , manufacturing
M.S. Senthil Saravanan, S.P. Kumaresh Babu, K.Sivaprasad, P. Susila, B.S.Murty	Synthesis and characterization of CNT reinforced AA4032 nanocomposites by high energy ball milling	American institute of Physics Conference proceedings, International Conference on Advanced Nanomaterials and Nanotechnology, IIT Guwahati	(ICANN 2009), December 09- 11, 2009, Nanomaterials
M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad, B.Ravisankar, P.Susila, B.S.Murty	Consolidation of CNT reinforced AA4032 nanocomposites by ECAP	International Conference on Advanced Nanomaterials and Nanotechnology, IIT Guwahati	(ICANN 2009), December 09- 11, 2009 Nanomaterials

N.Mohan, S.P.Kumaresh Babu, S.Natarajan N.Mohan,	Abrasive wear behavior of tantalum niobium carbide filler filled glass fabric reinforced –epoxy composites Sliding wear behavior of hard	Second International Conference on Polymer Processing and Characterization, Kottayam, Kerala Second International	January 15-17, 2010 Polymer on January 15-
S.P.Kumaresh Babu, S.Natarajan	powders filled glass fabric reinforced –epoxy composites	Conference on Polymer Processing and Characterization, Kottayam, Kerala	17, 2010 Polymer
N.Mohan S.Natarajan S.P.Kumaresh Babu	Abrasive wear behavior of glass fabric reinforced epoxy composite with TaNb/C filler	ICPPC-2010 15,Kottayam	17,January, 2010, Corrosion
M.Jagannatham, S.P.Kumaresh Babu, K.Sivaprasad, M.S.Senthil Saravanan	Studies on Synthesis and Mechanical properties of CNT reinforced Al-7075	International Conference on Recent Trends in Materials and Characterization (RETMAC) National Institute of Technology Karnataka, Surathkal,	February 14-15, 2010 Recent Trends in Materials
Pritesh Notwani, S.P.Kumaresh Babu, S.Natarajan	Wear behaviour of plasma sprayed WC-Co-Cr Coating on AISI 316	International Conference on Recent Trends in Materials and Characterization held at National Institute of Technology, Surathkal.	14 th – 15 th February 2010, Recent Trends in Materials
N.Mohan, S.P.Kumaresh Babu, S.Natarajan	Influence of jatropha press cake filler filled glass fabric- epoxy composites on sliding wear behaviors	International Conference on Recent Trends in Materials and Characterization, RETMAC-2010 NIT	14-15,February- 2010, Recent Trends in Materials
R.M.Nishanth, S.P.Kumaresh Babu, M.Kamaraj, V.Sivan	Wear Behavior of Nickel Based Hardfacing alloy Aws NiCr-B Deposited on Austenitic Stainless steel 316ln using plasma Transferred Arc-Welding process	IWS2k10, -Mumbai.	10-12 February 2010, Welding

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M.Jagannatham,	Tribological behavior of	International conference on	(ICON 2010), 5
S.P.Kumaresh	Multi-walled Carbon	synthesis, characterization,	- 6, March
Babu,	Nanotubes reinforced AA	consolidation and modelling	2010, modelling
K.Sivaprasad,	7075 nanocomposites	of nanomaterials PSG College	of
M.S.Senthil		of Technology, Coimbatore	nanomaterials
Saravanan			
K.Kiran Babu,	Comparison of abrasive wear	International Conference on	5,6 Jan 2010,
S.Natarajan,	behaviour of Tribaloy T – 400	Synthesis, Characterization,	modelling of
S.P.Kumaresh	nano coating on stainless steel	Consolidated and Modelling	nanomaterials
Babu	by plasma spray process	of Nanomaterials (ICON –	
		2010) held at PSG College of	
		Technology, Coimbatore	
N.Mohan,	Solid Particle erosion of	International Conference on	Sep 14-18,
S.Natarajan,	UHMWPE filled aramid	Multifunctional materials and	2010,
S.P.Kumaresh	fabric epoxy hybrid	synthesis (MFMS-2010), held	Multifunctional materials and
Babu,	composites	at Jeonju, Korea	synthesis
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N.Mohan,	Investigation on two-body	ICMST 2010 29-Trivandrum	31 October
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S.P.Kumaresh	tantalum niobium carbide		
Babu, C.Anand,	filled glass fabric epoxy		
G.Rajendra	composites		
N.Mohan,	Sliding wear behavior of	ISRS-2010, IITM, Chennai	Dec 20-
S.Natarajan,	Tungsten carbide filled glass		22,2010,
S.P.Kumaresh	fabric epoxy composites at		Tribology
Babu, C.Anand	elevated temperatures.		
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C.Anand	Investigation on two body	ISRS-2010, IITM, Chennai	Dec 20-
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S.P.Kumaresh	titanium carbide filled glass		
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S.Natarajan,	SiC filled glass fabric		January,2011
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Babu,	material at elevated		Networking and
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Subrat Das, S.P.Kumaresh Babu, S.Natarajan	Studies on hot corrosion Behavior of T91 boiler Tube steel weldment in Na ₂ SO ₄ +60% V ₂ O ₅ Environme nt.	SOJOM-2012, BHEL,Trichy	19-21, January,2012 Welding
B.Nikhil S.P.Kumaresh Babu, M.Mohan	Wear behavior of Stellite-21 Hardfacing alloy deposited over Low carbon steel	SOJOM-2012, BHEL, Trichy.	19-21, January,2012 Welding
M.Dheeraj, S.P.Kumaresh Babu Yoganand, S.Natarajan	Study of Erosive Wear characteristics of SMAW weldment of carbon steel using E6013-E7018 Electrodes	SOJOM-2012, BHEL, Trichy.	19-21, January,2012, Welding
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M.Kumarasamy S.Natarajan S.P.Kumaresh Babu S.Santhanam P.Veerabalu S.Chokkuvel Murugan	A case study on Design and Evaluation of Performance of HVOF Coatings for prevention of Pitting and Erosion Corrosion in High Capacity Pumps of Opencast Lignite Mines	Surface Modification Technologies, Ecole Centrale de Lyon, France	June 20-22, 2012, Surface Modification
C.Anand Chairman S.P.Kumaresh Babu	Three-Body Abrasive Wear Behavior of Basalt Fiber Reinforced Epoxy And Vinyl- Ester Composites	3 rd Asian Symposium on Materials & Processing(ASMP),IIT Chennai	August 30-31, 2012 Materials Processing
M.S.Senthil Saravanan S.P.Kumaresh Babu K.Sivaprasad	Bimodal AA 4032 Alloy Produced By Ball Milling: Compressive Deformation Studies	3 rd Asian Symposium on Materials & Processing(ASMP), IIT Chennai	August 30-31, 2012 Materials Processing
C.Anand Chairman S.P.Kumaresh Babu	Two-Body Abrasive Wear behavior of Basalt Fabric Reinforced Epoxy and Polyester Composites	ISRS 2012	Dec 13-15, 2012, Polyester Composites
Ramu Torrikonda S.P.Kumaresh Babu S.Natarajan	High temperature oxidation studies on autogenous GTA welded monel 400 plates	CORSYM - 2013, Chennai	Feb 28- March 02, 2013, Corrosion
Nachiket Kumthekar S.P.Kumaresh Babu S.Natarajan	Study of hot corrosion and high temperature oxidation of TIG welded boiler grade steel-T 23 joint	CORSYM - 2013 Chennai	Feb 28- March 02, 2013, Corrosion
L.V. Sagar, S.Manivannan S.P.Kumaresh Babu S.Sundarrajan	Stress corrosion cracking of P91 steel in magnesium chloride	CORSYM - 2013 Chennai	Feb 28- March 02, 2013, Corrosion

Sunil Shinge S.P.Kumaresh Babu S.Sundarrajan	Study of hot corrosion and high temperature oxidation of TIG welded boiler grade Cr- Mo steels	CORSYM - 2013 Chennai	Feb 28- March 02, 2013, Corrosion
Anas Maliyekal S.P.Kumaresh Babu et. al	Effect of Welding on creep behavior of super heater/reheater tune materials for advanced ultrasuper critical boilers	WCFMAAE- 2013, New Delhi	Feb 02 & 03, 2013 Welding
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S Manivannan, M P Sathishkumar, S P Kumaresh Babu and Srinivasan Sundarrajan	Corrosion Analysis of AZ61 Alloy with Different Level of Ca Addition and Aging	IMEC 2014, NITT	June 13-15, 2014, advancement of Mechanical Engineering
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S.P. Kumaresh Babu, Jerome.S, V.Narayana	Studies on structure property correlation and corrosion of GTA welded	Proc. of National Conf. EMT INDIA - Inconel 718 at NITT	24-25, Jan, 2008, corrosion
Senthil kumaran.S, S.P. Kumaresh Babu, Jerome.S, Ravishankar.B	Solidification modeling of aluminum alloy casting in sand and metal mold	Proc. of National Conf. EMT INDIA -2020 held at NITT	24-25,Jan,2008, corrosion

Arulkumar.S Jerome.S. S.P. Kumaresh Babu	Microstructure studies and hot corrosion behavior of GTA welded Inconel 718".	Proc. of National Conf. EMT INDIA -2020 held at NITT	24-25, Jan, 2008, corrosion
N.Mohan, S.P.Kumaresh Babu, S.Natarajan	Influence of Jatropha press cake powder filled glass fabric epoxy composites on abrasive wear behaviour	ISAMPE National Conference on Composites Emerging Trends in Composites Materials and technology at Thiruvananthapuram, India	December 4-5, 2009, Composites
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C.Anand chairman, S.P.Kumaresh Babu, N.Mohan, S.Natarajan, Siddaramaiah	Dry sliding wear behavior of TiC filled E glass fabric reinforced epoxy composite material	POLYCON-2011, SJCE,Mysore	25-26 April,2011, Polymers
C.Anand Chairman, S.P.Kumaresh Babu, Mohan, S.Natarajan, Siddaramaiah	Investigation on two body abrasive wear behavior of TiO2 filled glass fabric reinforced epoxy composites	POLYCON-2011 SJCE,Mysore	25-26 April,2011, Polymers

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Anindya Sarkar & S.P.Kumaresh Babu	Effect of sodium modification on microstructure and mechanical properties of Al- 11.1Si alloy	Advances in materials and processing PSGTECH, Coimbatore	4 th May 2013, Advances in materials and processing
M. Ganesh kumar M.S.Senthil Saravanan S.P.Kumaresh Babu	Microstructural and Property Evaluation of CNT Reinforced Al Composites by FSP	National Symposium for Materials Research Scholars MR-13 IIT, Bombay	9-10 May, 2013, Materials Research

(C) Books & Monographs

(c) Books & Honographs				
Author(s)	Title of Book/Monograph	Name of	Year of	ISSN/ISBN
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