

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

7. Employment Profile

Job Title	Employer	From	To
Associate Professor	Department of Production Engineering, National Institute of Technology, Tiruchirappalli	23.04.2010	Till date
Assistant Professor	Department of Production Engineering, National Institute of Technology, Tiruchirappalli	23.04.2007	22.04.2010
Lecturer	Department of Management Studies, National Institute of Technology, Tiruchirappalli	23.07.1999	22.04.2007
Research Associate	Department of Production Engineering, National Institute of Technology, Tiruchirappalli	25.06.1998	22.07.1999

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D (Dr.-Ing)	Technical University of Clausthal, Clausthal-Zellerfeld, Germany	2006	-	Laser Material Processing
M.B.A.	Madurai Kamaraj University, Madurai	2001	First class	Operations Management
M.E.	National Institute of Technology, Tiruchirappalli	1998	First class with distinction	Manufacturing Technology
B.E.	Coimbatore Institute of Technology, Coimbatore	1996	First class with distinction	Mechanical Engineering

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Head	Department of Production Engineering	Feb 2015	Till date
Associate Dean	Planning and Development	10.10.2012	Till date
Member	Department Administrative Council	07.02.2012	Till date
Member	Centre for Excellence in Corrosion and Surface Engineering	12.10.2011	Till date

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Associate Professor	Department of Production Engineering	23.04.2010	Till date
Assistant Professor	Department of Production Engineering	23.04.2007	22.04.2010
Lecturer	Department of Management Studies	23.07.1999	22.04.2007
Research Associate	Department of Production Engineering	25.06.1998	22.07.1999

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Expert Member	KPR Institute of Engineering & Technology, Coimbatore	17.03.2016	Till date

11. Awards, Associateships etc.

S. No.	Year of Award	Name of the Award	Awarding Organization
1	2008	Young Scientist	Department of Science and Technology (DST), Government of India
2	2005	3 rd Best Student Paper	International Congress on Applications of Lasers and Electro-Optics (ICALEO)

12. Fellowships

S. No.	Year of Award	Name of the Fellowship	Awarding Organization	From	To
1	2006	German Academic Exchange Service (DAAD) Fellowship	ISAF, Technical University of Clausthal, Germany	June 2004	September 2006

13. Details of Academic Work

(i) Curriculum Development

Developed course curriculum for 2 courses at M.Tech level (Manufacturing Technology)

1. Lasers in Manufacturing
2. Tribology

(ii) Courses taught at Postgraduate and Undergraduate levels

1. Lasers in Manufacturing
2. Tribology
3. Advanced Manufacturing Processes
4. Project Management
5. Manufacturing Planning and Control
6. Computer Aided Design and Manufacturing
7. Non-traditional Manufacturing Processes
8. Manufacturing of Product from non-metallic materials

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9. Advanced Materials Processing
10. Operations Research
11. Behavioral Science and Industrial Management

(iii) Projects guided at Postgraduate level

S.No.	Name	Title of thesis	Year
1	M. Ferozhkhan (M.S.)	Characterization of SMA, GTA & PTA welding for hardfacing of stellite 6 on austenitic stainless steel	July 2016
2	Deep Chakravorty (phase II)	Study of tribological properties of laser treated nodular cast iron	May 2016
3	PranayKamble (phase II)	Identification and elimination of wastes from cable cutting for improved productivity using value stream mapping	May 2016
4	Naveena K P (phase II)	Impact of fuel on gas turbine combustor component durability	May 2016
5	Deep Chakravorty (phase I)	Study of tribological properties of laser treated nodular cast iron	Dec 2015
6	PranayKamble (phase I)	Identification and elimination of wastes from cable cutting for improved productivity using value stream mapping	Dec 2015
7	Naveena K P (phase I)	Impact of fuel on gas turbine combustor component durability	Dec 2015
8	Manikanta Reddy (phase II)	Laser surface texturing on silicon wafer	May 2015
9	S Ravi Kiran (phase II)	Air plasma sprayed ca-p coating on laser textured ti-6al-4v for biomedical applications	May 2015
10	Manikanta Reddy (phase I)	Laser surface texturing on silicon wafer	Dec 2014
11	S Ravi Kiran (phase I)	Air plasma sprayed ca-p coating on laser textured ti-6al-4v for biomedical applications	Dec 2014
12	MohitSinghal (phase II)	Taguchi optimization of AISI D-2 die steel using Graphite based Electrical Discharge Coating (EDC)	May 2014
13	Rahul V S (phase II)	Rotor dynamic analysis of Aero Engine Shaft-Blisk Assembly	May 2014
14	Arun G K (phase II)	Mechanical characterization & finite element analysis of laser clad Aero engine	May 2014

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15	MohitSinghal (phase I)	Taguchi optimization of AISI D-2 die steel Molybdenum based Electrical Discharge Coating (EDC)	Dec 2013
16	Arun G K (phase I)	Numerical Finite element investigation on laser cladding of Aerospace components	Dec 2013
17	Rahul V S (phase I)	Finite Element Simulation and Optimization of dissimilar welding for Gas turbine applications	Dec 2013
18	Rajith.K.R (phase II)	Erosive-corrosion behavior of laser surface treated Hastelloy C-276	May 2013
19	Rajith.K.R (phase I)	Experimental analysis and simulation studies of laser surface treated Hastelloy C-276	Dec 2012
20	G.Nila (phase II)	Optimising delivery lead time in the subcontracting of boiler components	Dec 2012
21	K.E.Sarath Raghavendra Babu (phase II)	Comparative study of tribological behaviour of laser surface treated Hastelloy C-276 in Nitrogen and Argon atmosphere	May 2012
22	D.Sudhakar (phase II)	Tribological behaviour of D-Gun sprayed Cr3C2-NiCr coating	May 2012
23	K.E.Sarath Raghavendra Babu (phase I)	Laser surface Nitriding of Haselloy C-276	Dec 2011
24	D.Sudhakar (phase I)	Tribological behaviour of D-Gun sprayed Al2O3-TiO2 coating	Dec 2011
25	M. Jeyashree (phase II)	Dry sliding wear characteristics of Aluminium composites	May 2011
26	K S R Krishna (phase I)	Tribological study of Chrome coated AISI 304 Austenitic stainless steel	Dec 2010
27	M. Jeyashree (phase I)	Sliding wear characteristics of Nano Al ₂ O ₃ dispersed gray cast iron composite	Dec 2010
28	RattayyaPechetti	Dry sliding wear behaviour of Nickel-Chromium Electroplated low carbon steel (AISI 1020) at elevated temperatures	May 2010
29	SalunkeBalaji Mohan	Improvement of Tribological properties of Ti-6Al-4V alloy by Laser surface melting	May 2010
30	G.Nila (phase I)	Improvement of Wear resistance of Titanium alloy disc brake rotor through laser surface nitriding	Jan 2010

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31	More Satish Dashrathrao (phase II)	Study of Dry sliding wear of Plasma sprayed Mo-Ni/Cr-Ti-6Al-4V Tribo pair	May 2009
32	Naveen.R (phase II)	Wear analysis of Cr ₃ C ₂ -NiCr coaed Ti6Al4V alloy – brake pad pair for Automobile/Aircraft disc brakes at elevated temperatures	May 2009
33	More Satish Dashrathrao (phase I)	Analysis of Dry sliding wear using Finite element method	Dec 2008
34	Naveen.R (phase I)	High temperature Tribological behaviour of Ti6AL4V alloy for Automobile/Aircraft Disc brakes	Dec 2008
35	V.Sivaraman (phase II)	Synthesis and micromachining characterics of ZrO ₂ /Al ₂ iO ₅ ceramic nano composites	May 2008
36	Subbaraj.A (phase II)	Vendor evaluation with performance measurements using fuzzy AHP and DEA	May 2008
37	V Sivaraman (phase I)	Ultra sonic machining of ZrO ₂ /Al ₂ TiO ₅ Ceramic composites	Dec 2007
38	Subbaraj.A (phase I)	Vendor selection using product prioritization and customer expectation	Dec 2007
39	A.Manikandan	System reliability analysis in a paper industry	Feb 2002
40	Sivakumar.A	Resources outfit and cost benefit analysis of LPG Gas plan as an alternative to producer gas plant at BHEL, Trichy	Jan 2002
41	A.Poomari	System reliability analysis of a cement industry – A case study	Feb 2001
42	Balachandran	Rationalization of materials management at SST, BHEL	Jan 2001
43	P. Parthiban	Enhancement of Productivity through strategical material handling systems for cold mill at SSTP, BHEL	Jan 2001

(iv) Other contribution(s)

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14. Details of Major R&D Projects

S. No.	Title of Project	Funding Agency	Cost (in Lakhs)	Duration		Status
				From	To	Ongoing/ Completed
As Principal Investigator						
1	Hot air erosion studies on nickel based super alloy turbine blades and suitable surface treatment for erosion prevention for Aero Engine application	GTRE, DRDO, Bangalore,	9.60	2016	2018	Ongoing
2	Exploratory Studies on Laser surface patterning for providing high temperature protective coatings on Nickel based superalloy	GTRE, DRDO, Bangalore	9.80	2016	2017	Ongoing
3	Development of Thermal Interface Material (TIM) for Thermoelectric Generator (TEG)	BHEL, Trichy	17.20	2016	2017	Ongoing
4	Development of modified surface for ID fan blades to improve their service life	BHEL, Trichy	8.01	2015	2016	Completed
5	Structural Integrity Evaluation Studies on High Speed Transmission Shaft for Turbofan Engine Application	GTRE, DRDO Bangalore	49.95	2013	2015	Completed
6	Thermal barrier coatings on high temperature Aero Engine Components	DRDL, Hyderabad	9.90	2013	2015	Completed
7	Exploratory Studies on Localized Repair of Aero Engine Blade by Welding Techniques	GTRE, DRDO, Bangalore	9.90	2013	2014	Completed
8	Electrical Discharge Alloying of Ni-WC metal matrix composite on D-53 die steel for improved wear resistance	CSIR, New Delhi	14.00	2011	2014	Completed
9	Improvement of erosion resistance of Ti-alloy disc brake rotor through laser surface melting	DST	18.90	2008	2011	Completed

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As Co- Principal Investigator						
10	Exploratory studies on abrasive jet machining of superalloys	GTRE, DRDO, Bangalore,	9.40	2016	2017	Ongoing
11	Investigation on the properties of direct metal laser fabricated material and its brazing compatibility with nickel based casing	GTRE, DRDO, Bangalore	9.90	2014	2015	Completed
12	Experimental Investigations on the performance of nano composite surface coatings for boiler applications	BHEL, Trichy	13.50	2010	2012	Completed

15. Number of PhDs guided

S. No.	Name of the PhD Scholar	Title of PhD Thesis	Role	Year of Award
1	Ramesh. R	Mechanical and microstructural studies on laser metal deposited nickel and titanium based aero-engine blades	Supervisor	2016
2	Arun. I	Experimental investigations on the wear resistance of electrical discharge alloyed metal matrix composites	Supervisor	2015
3	Hashim. M	Experimental investigation on the tribological properties of Laser surface treated Hastelloy C-276	Supervisor	2013
4	G. M. Balamurugan	Comparative wear studies on WC-Co Plasma sprayed and chrome plated AISI 304 Austenitic stainless steel at elevated temperature	Supervisor	2012
5	N.L.Parthasarathi	High temperature tribological studies of NiCrBSiCFe Plasma sprayed AISI 316 Austenitic Stainless steel	Supervisor	2011

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

S. No.	Date (s)	Title of Activity	Level of Event	Role	Event Organized by	Venue
1	13.04.2015	ICAEST2015	International	Chair person	Madurai Institute of	Sivagangai

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					Engineering & Technology	
2	09.04.2015 - 11.04.2015	AMMA-2015	International	Chair person	National Institute of Technology, Tiruchirappalli	Tiruchirappalli
3	10.04.2015 - 11.04.2015	ICACCT'15	International	Chair person	Anna University BIT Campus, Tiruchirappalli	Tiruchirappalli
4	22.10.2010	Asia Pacific Interfinish 2010	International	Chair person	Singapore	Singapore
5	24.09.2008	Processes and Applications	International	Chair person	Surface Modification Technologies, SMT 22,	Trollhattan, Sweden
6	6.02.2008 - 7.02.2008	OXCEM 2008	National	Session chair	Oxford Engineering College, Tiruchirappalli	Tiruchirappalli
7	05.03.2010	FLAME'10	National	Chair person	BNEC, Aundipatti	Aundipatti
8	13.03.2009	RAMMP-2010	National	Advisory committee member	Mookambigai College of Engineering, Kalamavur, Tiruchirappalli	Tiruchirappalli

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

S. No.	Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
1	Workshop on Measuring Productivity in Higher Education	International	19.09.2016 - 22.09.2016	Coordinator	NIT, Trichy
2	Laser microprocessing for biomedical applications	National	03.04.2014	Coordinator	NIT, Trichy
3	Surface Engineering for Tribological Applications	National	10.06.2013 - 12.06.2013	Coordinator	NIT, Trichy
4	Design and optimization of Production Management systems	National	03.06.2013 - 08.06.2013	Coordinator	NIT, Trichy
5	Production processes for defence applications	National	03.06.2013 - 08.06.2013	Coordinator	NIT, Trichy

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6	Materials Awareness Program for DRDL scientists	National	02.11.2012 - 29.12.2012	Coordinator	NIT, Trichy
7	Emerging Industrial Applications of laser	National	30.06.2008 - 12.07.2008	Coordinator	NIT, Trichy
8	Application of Information Technology Tools in Manufacturing	National	11.03.2008 - 12.03.2008	Coordinator	NIT, Trichy
9	Laser Processing of Materials	National	06.03.2008 - 07.03.2008	Coordinator	NIT, Trichy
10	Enterprise Resource Planning	National	05.03.2008	Coordinator	NIT, Trichy
11	Entrepreneurship Skills for Engineers	National	22.02.2008	Coordinator	NIT, Trichy

18. Invited Talks delivered

S. No.	Topic	Date	Inviting Organization
1	Laser Induced Periodic Surface Structures	09.05.2015	Conference on Application of Lasers in Manufacturing 2015, Pragati Maidan, New Delhi
2	Laser Surface Engineering	13.04.2015	Madurai Institute of Engineering and Technology, Sivagangai
3	Laser Surface Engineering for Industrial Solutions	27.03.2015	KPR Institute of Engineering and Technology, Kovilpatti
4	Laser Surface Engineering for Tribological Solutions	11.02.2015	National Engineering College, Kovilpatti
5	Laser Surface Engineering	27.12.2014	Annamalai University, Annamalainagar
6	Advances in Composites and Nano Materials – Processing and Applications	05.12.2014	Sree Vidyanikethan Engineering College, Tirupati
7	Laser Surface Engineering	12.11.2014	Periyar Maniammai University, Thanjavur
8	Laser Materials Processing	05.09.2014	KSK College of Engineering & Technology, Kumbakonam
9	Nanoscience and Laser Materials Processing	09.03.2013	Jamal Mohamed College, Trichy
10	Critical Industrial Applications of Laser	28.01.2012	Annai College of Engineering and Technology, Kumbakonam
11	Composite based Surface Engineering for Industrial Tribo components	08.11.2011	Jayaram College of Engineering and Technology, Tiruchirappalli.
12	Laser Science and Technology	13.10.2010	PRIST University, Tiruchirappalli

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13	Surface Engineering for Improved Tribological Properties of Industrial Components	30.04.2010	Kongu Engineering College, Erode
14	Recent Trends in Laser Based Applications	22.04.2010	Sethu Institute of Technology, Virudhunagar
15	Tribology	08.03.2010	PSG College of Technology, Coimbatore.
16	Laser Technology for Modern Industries	04.02.2010	JJ College of Engineering, Tiruchirappalli.
17	Modern Manufacturing applications based on Laser	07.09.2009	Mookambigai College of Engineering, Kalmavur, Pudukkottai.
18	Lasers for composite Materials Processing	14.07.2009	National Institute of Technology, Tiruchirappalli.
19	Laser micromachining	06.07.2009	MAM College of Engineering, Tiruchirappalli
20	Laser Materials Processing	16.03.2009	Jamal Mohamed College, Tiruchirappalli
21	Lasers in Industry	09.01.2009	Thanthai Rovever Institute of Polytechnic College, Perambalur
22	Laser Processing of Materials - An Overview	01.07.2008	Emerging Industrial Applications of laser, National Institute of Technology, Tiruchirappalli.
23	Laser Based Manufacturing for Competitive Advantage	08.04.2008	Institution of Engineers, Tiruchirappalli Chapter.
24	Lasers in Manufacturing	18.03.2008	National Institute of Technology, Tiruchirappalli.
25	Laser Surface Engineering	15.03.2008	National Institute of Technology, Tiruchirappalli.
26	Role of Lasers in Industry	13.03.2008	EGS Pillai Engineering College, Nagapattinam.
27	Industrial Applications of Laser	06.03.2008	National Institute of Technology, Tiruchirappalli.
28	Lasers for Indian Automobile Industry	26.08.2009	Oxford Engineering College, Tiruchirappalli.
29	Laser alloying-an experimental perspective	9.01.2007	National Institute of Technology, Tiruchirappalli.

19. Membership of Learned Societies

Type of Membership	Organization	Membership No. with date
Life Member	The Institution of Engineers (India)	M-136079-5 25.04.2008

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20. Academic Foreign Visits

Country	Duration of Visit	Programme
Germany	01.06.2004 – 01.09.2006	German Academic Exchange Service (DAAD) Fellowship
Switzerland	20.06.2005 – 24.06.2005	EMPA, Materials Science and Technology Division, Thun- Liquid Impact Erosion studies
USA	31.10.2005 – 03.11.2005	International Congress on Applications of Lasers and Electro-Optics ICALEO,
France	26.11.2007 – 22.12.2007	Laboratoire de Combustion et de Détonique, ENSMA, Futuroscope, Laser Shock Loading
Sweden	22.09.2008 – 24.09.2008	Surface Modification Technologies, SMT 22
Singapore	19.10.2010 – 22.10.2010	Asia Pacific Interfinish 2010
Finland	16.06.2014 – 18.06.2014	28 th International Conference on Surface Modification Technologies, SMT 28
Australia	01.12.2016 – 05.12.2016	5 th International Conference on “Engineering & Technology, Computer, Basic and Applied Sciences”

21. Publications

(A) Refereed Research Journals:

S. No.	Author(s)	Title of Paper	Journal	Vol No.	Page No.	Year	Impact Factor
1	S.R. Dhineshkumar, Muthukannan Duraiselvam, S. Natarajan, S.S. Panwar, Trilochan Jana, Muhammed Anaz Khan	Effect of Laser Glazing on Thermo Mechanical Properties of Plasma Sprayed LaTi2Al9O19 Thermal Barrier Coatings	Materials and Manufacturing Processes			2016	1.486
2	Muhammed Anaz Khan, Muthukannan Duraiselvam, S. S. Panwar, Trilochan Jena, S. R. Dhineshkumar	Improvement of strain tolerance of functionally graded TBCs through laser surface micro-texturing	Journal of Materials Science	52	696-708	2016	2.302
3	S.R. Dhineshkumar, Muthukannan Duraiselvam, S. Natarajan, S.S. Panwar, Trilochan Jana, Muhammed Anaz Khan	Enhancement of strain tolerance of functionally graded LaTi 2Al9O19 thermal barrier coating through ultra-short pulse based laser texturing	Surface & Coatings Technology	304	263-271	2016	2.139
4	Mohammed	Plasma transferred arc	Procedia	25	1305	2016	

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	Mohaideen Ferozhkhan, Muthukannan Duraiselvam, Kottaimathan Ganesh Kumar, Rajanbabu Ravibharath	welding of satellite 6 alloy on stainless steel for wear resistance	Technology		- 1311		
5	S.R. Dhineshkumar, Muthukannan Duraiselvam, S. Natarajan, S.S. Panwar, Trilochan Jana, Muhammed Anaz Khan	Enhanced ablation resistance through laser glazing of plasma sprayed LaTi2Al9O19-based functionally graded thermal barrier coating	Ceramics International	42	1018 4-1019 0	2016	2.60
6	V. Dillibabu, M. Duraiselvam, U. Chandrasekhar and R. Raju	Microstructural Studies on Laser Dissimilar Welded Ni and Steel Alloys for Aeronautical Turbine Applications	Lasers in Engineering		1-10	2016	0.40
7	A. Arulbrittoraj, P. Padmanabhan, M. Duraiselvam, R. Srinivasan, G. Ebenezer	The effect of sliding wear parameters on carburized AISI1040 steel	Journal of Mechanical Science and Technology	30	1825 - 1833	2016	0.761
8	M Adam Khan, S Sundarrajan, M Duraiselvam, S Natarajan, A Senthil Kumar	Sliding wear behaviour of plasma sprayed coatings on nickel based superalloy	Surface Engineering	ISS N: 0267 - 0844	1-7	2016	
9	K.E. Sarath Raghavendra Babu and Muthukannan Duraiselvam	Surface nano-texturing of silicon by picosecond laser irradiation through TiO2 nanotube arrays	Applied Surface Science	353	1112 - 1116	2015	2.71
10	Ramesh Raju, Muthukannan Duraiselvam, Vijay Petley, Shweta Verma, R. Rajendran	Microstructural and mechanical characterization of Ti6Al4V refurbished parts obtained by laser metal deposition	Materials Science and Engineering A	643	64-71	2015	2.88
11	V Senthilkumar, B Thiyagarajan, M Duraiselvam, K Karthick	Effect of thermal cycle on Ni-Cr based nanostructured thermal spray coating in boiler tubes	Transactions of Nonferrous Metals Society of China	25	1533 - 1542	2015	1.340
12	M Hashim, Muthukannan Duraiselvam	Enhancing Tribological and Corrosion Resistance of Hastelloy C-276	Materials Science Forum	830	659-662	2015	

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		through Laser Surface Treatment					
13	D.Sudhakar , D.Jeyasimman , M.Duraiselvam	Dry Sliding Wear Behavior of Cr3C2-NiCr Coating on Austenitic Stainless Steel	International Journal Of Core Engineering & Management	12	215-225	2015	
14	Ramesh Raju, Muthukannan Duraiselvam, Arun G. K	Numerical Finite Element Investigation on Laser Cladding of Aerospace Components	International Journal of Life Cycle Reliability and Safety Engineering	3-4	13-23	2014	
15	V. Dillibabu, Muthukannan Duraiselvam, Rahul V. S	Finite Element Simulation and Optimization of Dissimilar Welding for Gas Turbine Applications	International Journal of Life Cycle Reliability and Safety Engineering	3-1	13-23	2014	
16	Ilangoan Arun, P. Vaishnavi, Muthukan nan Duraiselvam, V. Senthilkumar, and V. Anandakrishnan	Development of carbide intermetallic layer by electric discharge alloying on AISI-D2 tool steel and its wear resistance	International Journal of Materials Research	105	544-551	2014	0.69
17	Illangoan Arun, Muthukannan Duraiselvam, V. Senthilkumar, R. Narayanasamy, V. Anandakrishnan	Synthesis of electric discharge alloyed nickel-tungsten coating on tool steel and its tribological studies	Materials and Design	63	257-262	2014	3.171
18	Muthukannan Duraiselvama, A. Valarmathi, S. M. Shariff, G. Padmanabham	Laser surface nitride Ti-6Al-4V for light weight automobile disk brake rotor application	Wear	309	269-274	2014	1.862
19	S. Baskaran, V. Anandakrishnan, Muthukannan Duraiselvam	Investigations on dry sliding wear behavior of in situ casted AA7075-TiC metal matrix composites by using Taguchi technique	Materials and Design	60	184-192	2014	3.171
20	S. Baskaran, V. Anandakrishnan, Muthukannan Duraiselvam, S. Raghuraman, V. M. Illayaraja Muthaiyaa	Taguchi Grey Relational Analysis of Dry Sliding Wear Behaviour of Annealed AA7075-TiC metal matrix composites	Applied Mechanics and Materials	541-542	258-262	2014	

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21	S. Baskaran, B. M. Muthamizh Selvan, V. Anandakrishnan, R. Venkatraman, Muthukannan Duraiselvam	Effect of Heat Treatment on Wear Behaviour of Hot Extruded AA7075-4% TiC in-situ metal matrix composite	Applied Mechanics and Materials	541-542	263-267	2014	
22	S. Rajesh, A. Gopala Krishna, P. Rama Murthy Raju, M. Duraiselvam	Statistical Analysis of Dry Sliding Wear of Graphite Reinforced Aluminium MMCs	Procedia Materials Science	6	1110 - 1120	2014	
23	Rajesh Siriyala, A. Gopala Krishna, P. Rama Murthy Raju, M. Duraiselvam	Multi-response optimization of tribological characteristics of aluminium MMCs using PCA	International Journal of Multidiscipline Modeling in Material and Structures	10	276-287	2014	
24	A Parthiban, R Ravikumar, H Abdul Zubar, M Duraiselvam	Experimental investigation of CO2 laser cutting on AISI 316L sheet	Journal of Scientific & Industrial Research	73	387-393	2014	0.385
25	S. Rajesh, A. Gopala Krishna, P. Rama Murthy Raju, M. Duraiselvam	Statistical Modeling and Analysis of Dry Sliding Wear of SiC Reinforced Aluminium MMCs	International Journal of Surface Engineering and Interdisciplinary Material Science	1	57-90	2013	
26	M. Hashim, K.E. Sarath Raghavendra Babu, Muthukannan Duraiselvam, Harshad Natu, V.Muthupandi, K.Sivaprasad, K.R. Rajith	Tribological studies on laser surface melted Hastelloy C-276	Surface Engineering	ISS N: 0267 - 0844		2013	1.51
27	M. Hashim, K.E. Sarath Raghavendra Babu, Muthukannan Duraiselvam, Harshad Natu	Improvement of wear resistance of Hastelloy C-276 through laser surface melting	Materials and Design	46	546-551	2013	3.171
28	N.L. Parthasarathi, Muthukannan Duraiselvamb, Utpal Borah	Effect of plasma spraying parameter on wear resistance of NiCrBSiCFe plasma coatings on austenitic stainless steel at elevated temperatures at various loads	Materials and Design	46	141-151	2012	3.171

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29	G.M. Balamurugan, Muthukannan Duraiselvam, V. Anandakrishnan	Comparison of high temperature wear behaviour of plasma sprayed WC-Co coated and hard chromium plated AISI 304 austenitic stainless steel	Materials and Design	35	640-646	2012	3.171
30	Rajesh Siriyala, Gopala Krishna Alluru, Rama Murthy Raju Penmetsa, Muthukannan Duraiselvam	Application of grey-taguchi method for optimization of dry sliding wear properties of aluminum MMCs	Frontiers in Mechanical Engineering	7	279-287	2012	
31	C. Anand Chairman, S. P. Kumaresh Babu, Muthukannan DuraiSelvam, K.R.Balasubramanian	Investigation on two-body abrasive wear behavior of titanium carbide filled glass fabric-epoxy composites- a Box-Behnken approach	International Journal of Engineering, Science and Technology	3	119-129	2011	
32	M. Prince, P. Gopalakrishnan, M. Duraiselvam, S. Natarajan	Dry Sliding Wear Behavior of HVOF Sprayed Molybdenum and Nickel/Chromium Coatings	International Journal of Applied Engineering Research	5	75-86	2010	
33	Muthukannan Duraiselvam, N.L. Parthasarathi	Dry sliding wear behavior of NiCrBSiCFe Plasma coating on austenitic stainless steel	Journal of Manufacturing Engineering	5	118-123	2010	
34	Balamurugan G M , Muthukannan Duraiselvam, Subramaniam Arunachalam	Sliding wear behaviour of AISI 304 austenitic stainless steel at elevated temperature	Journal of Manufacturing Engineering	5	137-142	2010	
35	Balamurugan G M , Muthukannan Duraiselvam	Influence of temperature on the wear behaviour of WC-Co plasma sprayed AISI 304 austenitic stainless steel	Computer Modelling and New Technologies	14	30-40	2010	
36	N.L. Parthasarathi, Muthukannan Duraiselvam	Effect of sliding velocity and plasma spraying parameters on wear resistance of NiCrBSiCFe plasma sprayed on austenitic stainless steel at high temperature	Computer Modelling and New Technologies	14	17-29	2010	
37	N.L. Parthasarathi, Muthukannan	Improvement of high temperature wear	Journal of Minerals and	9	653-670	2010	

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	Duraiselvam	resistance of AISI 316 ASS through NiCrBSiCFe plasma spray coating	Materials Characterization and Engineering				
38	N.L. Parthasarathi, Muthukannan Duraiselvam	High temperature tribological properties of NiCrBSiCFe plasma-sprayed coating on austenitic stainless steel substrate	Journal of Alloys and Compounds	505	824-831	2010	2.726
39	M. Prince, P. Gopalakrishnan, Muthukannan Duraiselvam, S. Natarajan	Study of Dry sliding wear of Plasma Sprayed Mo-Ni/Cr - Ti-6Al-4V Tribo Pair	European Journal of Scientific Research	37	41-48	2009	
40	Muthukannan Duraiselvam, Rolf Galun, Volker Wesling, Barry L. Mordike, Rolf Reiter, Jörg Oligmüller, G. Buvanashakaran	Cavitation erosion resistance of Ti-6Al-4V laser alloyed with TiC-reinforced dual phase intermetallic matrix composites	Materials Science and Engineering A	454-455	63-68	2007	2.409
41	Muthukannan Duraiselvam, Rolf Galun, Stephan Siegmann, Volker Wesling, Barry L. Mordike	Study of liquid impact erosion in B2-NiTi and Ti ₃ Al Based intermetallic matrix composites on laser alloyed Ti-6Al-4V	Advanced Engineering Materials	9	171-176	2007	1.508
42	Muthukannan Duraiselvam, Rolf Galun, Stephan Siegmann, Volker Wesling, Barry L. Mordike	Investigation of hydro-abrasive erosion of laser alloyed nickel and titanium based intermetallic matrix composites with TiC reinforcement	Surface Engineering	23	425-430	2007	1.51
43	Muthukannan Duraiselvam, Rolf Galun, Volker Wesling, Barry L. Mordike, Rolf Reiter, Jörg Oligmüller	Cavitation erosion resistance of AISI 420 martensitic stainless steel laser-clad with nickel aluminide intermetallic composites and matrix composites with TiC reinforcement	Surface and Coatings Technology	201	1289 - 1295	2006	2.199
44	Muthukannan Duraiselvam, Rolf Galun, Volker Wesling, Barry L.	Improvement of the cavitation erosion resistance of Ti-6Al-4V through laser alloying	Lasers in Engineering	16	423-436	2006	0.298

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	Mordike, Rolf Reiter, Jörg Oligmüller, G. Buvanashakaran	titanium aluminide based intermetallic matrix composites					
45	Muthukannan Duraiselvam, Rolf Galun, Stephan Siegmann, Volker Wesling, Barry L. Mordike	Liquid impact erosion characteristics of martensitic stainless steel laser clad with Ni-based intermetallic composites and matrix composites	Wear	261	1140 - 1149	2006	1.862
46	Muthukannan Duraiselvam, Rolf Galun, Volker Wesling, Barry L. Mordike	Laser clad WC reinforced Ni-based intermetallic-matrix composites to improve cavitation erosion resistance	Journal of Laser Applications	18	297-304	2006	
47	Muthukannan Duraiselvam, Rolf Galun, Stephan Siegmann, Volker Wesling, Barry L. Mordike	Particle-laden liquid impact erosion characteristics of laser clad Ni-based intermetallic matrix composites with TiC and WC reinforcements	Lasers in Engineering	15	355-373	2005	0.298
48	R. Narayanasamy, Muthukannan Duraiselvam	CAD/CAM of streamlined extrusion Dies	Journal of the Institution of Engineers Singapore	40	35-39	2000	
49	Muthukannan Duraiselvam, G. Buvanashakaran, A. Noorul Haq	Wear resistance enhancement through laser surface alloying - an overview	Metals Materials and Processes	17	149-160	2005	
50	Muthukannan Duraiselvam, R. Narayanasamy	A knowledge-based system for process sequence design in deep drawing operation	Metals Materials and Processes	12	63-68	2000	

(B) Conferences/Workshops/Symposia Proceedings

S. No.	Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page No.	Venue	Year
1	K.E. Sarath Raghavendra Babu, L. Manikanta Reddy, Muthukannan Duraiselvam	Surface Micro-texturing of Silicon by Picosecond Laser to Enhance Antireflection Effect	International Conference on Application of Lasers in Manufacturing 2015		Pragati Maidan, New Delhi, India	2015
2	Ramesh Raju,	Finite Element Modeling	International		Pragati	2015

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	Muthukannan Duraiselvam, Arun G. K	and Experimental Investigation of Laser Clad Inconel 718 for Aerospace Structural Materials	Conference on Application of Lasers in Manufacturing 2015		Maidan, New Delhi, India	
3	S. Baskaran, V. Anandakrishnan, Muthukannan Duraiselvam, N. Keerthivasan	A study on dry sliding friction behavior of TiC reinforced AA7075 in-situ composites by Taguchi technique	2nd IRF International Conference	1-4	Singapore	2014
4	Ramesh Raju, Muthukannan Duraiselvam, Arun G. K, Vijay Petley, Shweta Verma, Rajendran R	Mechanical and metallurgical characterization of laser metal deposited aero-engine blade materials	28 th International Conference on Surface Modification Technologies, SMT 28		Tampere University of Technology, Tampere, Finland	2014
5	Duraiselvam M, Ramesh, Sai Balagi T. S, Ranajyoti Dutta, Sai Prashanth T. S, Vamshi Krishna	Optimization of Process Parameters for Laser Surface Cladding using Geometric Programming	International Mechanical Engineering Congress 2014		National Institute of Technology Trichy	2014
6	Ramesh Raju, Muthukannan Duraiselvam, Arun G. K	Numerical Finite Element Investigation on Laser Cladding of Aerospace Components	International Conference on Reliability and Safety Engineering		Anna University – BIT Campus	2014
7	V. Dillibabu, Muthukannan Duraiselvam, Rahul V. S	Finite Element Simulation and Optimization of Dissimilar Welding for Gas Turbine Applications	International Conference on Reliability and Safety Engineering		Anna University – BIT Campus	2014
8	M. Hashim, K.E. Sarath Raghavendra Babu, Muthukannan Duraiselvam, Harshad Natu	A comparative study of laser surface treated Hastelloy C-276 in argon and nitrogen atmosphere	Second International Conference on Advances in Materials Processing and Characterisation		Anna University, Chennai	2013
9	Muthukannan Duraiselvam, G. M. Balamurugan	Tribological analysis of AISI 304 Austenitic stainless steel at high temperature	International Conference on Advances in Mechanical and Computer Engineering (ICAMCE-2013)		Haryana	2013

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10	Rajesh. S, A. Gopala Krishna, P. Rama Murthy Raju, M. Duraiselvam	Statistical Analysis of Wear Characteristics of Aluminum Metal Matrix Composites	International Conference on Intelligent Manufacturing Systems (ICIMS 2012)	25-31	SASTRA University, Tanjore	2012
11	Muthukannan Duraiselvam, S.M. Shariff, G. Padmanabham	Application of laser surface engineering in power generation and automobile industries	Asia Pacific Interfinish		Singapore	2010
12	N. L. Parthasarathi, Muthukannan Duraiselvam, G. M. Balamurugan	Influence of temperature in dry sliding wear of AISI 316 austenitic stainless steel	Advances in Materials, Mechanics and Management	706-715	College of Engineering Trivandrum , Kerala	2010
13	Muthukannan Duraiselvam, More Satish Dashrathrao, Naveen R, S. Natarajan	Simulation and Analysis of Dry Sliding Wear of Automobile Brake pad – Ti-6Al-4V disc pair using Finite Element Method	International Conference on Latest Trends in Simulation Modelling and Analysis (COSMA 2009)	461-464	NIT Calicut, Kerala	2009
14	Muthukannan Duraiselvam, N.L. Parthasarathi	A compatibility study on welding between AISI 316 and AISI 410 in a tailor welded blank	International Conference on Recent Advances in Materials Processing Technology (RAMPT 09)	779-783	Kovilpatti, India	2009
15	Muthukannan Duraiselvam, R. Naveen, S. Natarajan, More Satish	Wear analysis of Ti6Al4V alloy - brake pad pair for automobile/aircraft disc brakes at elevated temperatures	Surface Modification Technologies, SMT 23	339-343	Mamallapuram, India	2009
16	G. M. Balamurugan, Muthukannan Duraiselvam , N. L. Parthasarathi	Sliding wear behaviour of WC-Co plasma sprayed coating on AISI 304 steel at room temperature	India-Japan conference on Advances in materials processing	1-8	University, Chidambaram	2009
17	N. L. Parthasarathi, Muthukannan Duraiselvam, G. M. Balamurugan	Dry sliding wear behaviour of plasma sprayed NiCrBSi coating on AISI 316 steel at room temperature	India-Japan conference on Advances in materials processing		University, Chidambaram	2009
18	Hemalatha Thiagarajan, M.	Integration of aggregate production planning and	6 th International Conference on		National Institute of	2008

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	Duraiselvam, Srisankara swaminathan J. V.	distribution optimization using ACO with fuzzy forecasting	Supply Chain management and Information Systems (SCIMS 2008)		Technology Tiruchirappalli	
19	Muthukannan Duraiselvam, N.L. Parthasarathi	Experimental Investigations of the impact of laser process parameters on the microstructural outcome	International Conference of Fascinating Advancements in Mechanical Engineering (FAME 08)	509-511	Sivakasi	2008
20	Muthukannan Duraiselvam, Rolf Galun, Stephan Siegmann, Volker Wesling, Barry L. Mordike	Correlation of liquid impact erosion resistance of laser alloyed nickel and titanium based intermetallic matrix composites with instrumented indentation-derived properties	Surface Modification Technologies, SMT 22	321-327	Trollhattan, Sweden	2008
21	V. Sivaraman, M. Duraiselvam, S. Ananthakumar, R. Krishnamurthy	Ultrasonic machining of ZrO ₂ /Al ₂ TiO ₅ ceramic composites	IISc Centenary-International Conference on Advances in Mechanical Engineering, IC-ICAME		Bangalore	2008
22	N.L. Parthasarathi and M. Duraiselvam	Process Parameter Optimization Involved in Laser Cladding of AISI 420 Martensitic Stainless Steel	International Conference on Advanced Manufacturing Technology	276-281	CSIR-CMERI, Durgapur	2007
23	M. Duraiselvam	Experimental Investigations of the Impact of Laser Process Parameters on the Microstructural Outcome	International Conference on Advanced Manufacturing Technology	232-236	CSIR-CMERI, Durgapur	2007
24	V. Sivaraman, M. Duraiselvam	Influence of Nano-Coating on Cutting Tools	International Conference on Advanced Materials and Composites		NIIST, Thiruvananthapuram	2007
25	Muthukannan Duraiselvam, R.Galun, V.Wesling, B.L. Mordike	Laser clad WC reinforced Ni-based intermetallic-matrix composites to improve	24 th International Congress on Applications of Lasers and	611-620	Miami, Florida, USA	2005

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		cavitation erosion resistance	Electro-Optics ICALEO			
26	Muthukannan Duraiselvam, G. Buvanashakaran, A. Noorulhaq	Laser surface alloying of SiC coating on AISI 430 Ferritic stainless steel	International Conference on Advances in Surface Treatment: Research and Applications (ASTRA)	213-217	Hyderabad, India	2003
27	G. Buvanashakaran, Muthukannan Duraiselvam, A. Noorulhaq	Laser surface modification technique to improve metallurgical properties of AISI 304 stainless steel	International Conference on Advances in Surface Treatment: Research and Applications (ASTRA)	229-234	Hyderabad, India	2003
28	Muthukannan Duraiselvam, G. Buvanashakaran, A. Noorulhaq	Analysis of laser surface alloying using factorial experiment design- A case study	National conference on modeling and analysis of production systems (MAPS)		Tiruchy	2004

(C) Books & Monographs

S. No.	Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
1	Muthukannan Duraiselvam,	Laser Surface Engineering for Turbine Industries, Methodology and Testing Techniques	VDM Verlag Dr.Muller GmbH & Co. KG	2011	978-3-639-28783-7
2	Duraiselvam	Laser Surface Modification of Alloys for Corrosion and Erosion Resistance (chapter 6)	Woodhead Publishing	2012	978-0-857-09015-7