



**DEPARTMENT OF MECHANICAL ENGINEERING
GOVERNMENT COLLEGE OF ENGINEERING-BARGUR**

(AUTONOMOUS)

KRISHNAGIRI- 635 104, TAMILNADU

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FACULTY PROFILE

Name	Dr D.Thirumalaikumarasamy
Designation	Assistant Professor (Selection Grade)
Office Address	Department of Mechanical Engineering, Government College of Engineering, NH46, Bargur, Krishnagiri-635104. Tamil nadu,India
Telephone	04343 266 067
Mobile	9894319865, 7010527923
Email	tkumarasamy412@gmail.com, tkumarasamy412@yahoo.com
Field(s) of Specialization:	1. Surface Engineering 2. Optimization Techniques 3. Corrosion Engineering 4.Coatings Technology

Employment Profile

Job Title	Employer	From	To
Assistant Professor	Annamalai University	15.12.2006	15.05.2017
Assistant Professor (SG)	Government College of Engineering, Bargur	16.05.2017	Till date

Academic Qualifications (From Highest Degree to High School):

Examination	Board /University	Year	Division/ Grade	Subjects
PhD	Annamalai University	2015	-	Manufacturing Engineering
ME	Annamalai University	2003	First Class	Manufacturing Engineering
BE	Manonmanium Sundaranar University	2000	First Class	Mechanical Engineering



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Academic/Administrative Responsibilities within the Institution

Position	Faculty/Department/Centre/Institution	From	To
Question Paper Setter	Government College of Engineering, Bargur	2017	Till date
Laboratory Incharge (Metrology and Measurement Lab, Workshop Practice Lab)	Government College of Engineering, Bargur	2017	Till date
Principal Investigator	DST-SERB, DRDO and AICTE-MODROB Research Projects	2019	Till date
Programme Coordinator	AICTE, ISTE and TEQIP III Sponsored National Conferences, Faculty Development and Student Training Programmes	2017	Till date

Academic/Administrative Responsibilities outside the Institution

Position	Faculty/Department/Centre/Institution	From	To
Question Paper Setter	Noorul Islam University, Sri Indu College of Engineering & Technology, Telangana, Kongunadu College of Engineering and Technology, Government College of Engineering, Bargur	2017	Till date
Practical Examiner	Pondicherry University, Noorul Islam University and Mahendra Engineering College, Namakkal	2015	Till date
Anna University Representative	Anna University Affiliated Colleges	2017	Till date
Research Supervisor	Anna University	2017	Till date
Editorial Board Member	International Journal of Bio Sciences & Engineering (IJBSE)	2017	Till date
Reviewer	International Journal of American Ceramic Society, International Journal of Saudi Chemical Society, Alexandria Engineering Journal, Plasma Science and Technology, Anti	2006	Till date

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	Corrosion Methods and Materials, Indian Journal of Chemical Technology and Journal of Corrosion Science		
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Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2020	Team Mentor	India International Science Festival 2020
2019	Best Paper Award	Government College of Engineering, Bargur
2015	Registrar P.Viswanatha Iyer Award' for Best Ph.D thesis in Manufacturing Engineering" in Annamalai University (instituted in 2015)	Annamalai University
2011	Certificate of Appreciation in recognition of the services rendered during the flood relief activities in cuddalore district during November and December 2011	Annamalai University

Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

Details of Academic Work (Theory courses and Labs handled)

UG Level: Engineering Metallurgy, Material Science, Metal Joining Process, Composite Materials, Operation Research, Statistical Quality Control, Newer Manufacturing Techniques, Tribology, Engineering Mechanics
PG Level: NanoTribology, Corrosion Engineering,
Laboratory Metrology and Measurements Lab, Workshop Practice Lab ,Engineering Practice



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Subjects: Lab, Programming Lab, Modeling and Simulation Lab, Production Lab
(UG & PG)

:
:

Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Performance Evaluation of Cold Spray Deposition for Metal Matrix Composite Coatings on AZ31B Magnesium Alloy by Friction Stir Processing	DST-SERB, New Delhi	2019	2022	Ongoing
Effect of Pore Size, Shape and Distribution on the Performance of Lanthanum Zirconate Coatings	DRDO-ER&IPR, New Delhi	2019	2022	Ongoing
Modernization of Metrology and Measurement Laboratory	AICTE-MODROB	2019	2022	Ongoing
Refresher/Induction Programme on "Outcome based Education"	AICTE-ISTE, New Delhi	2020	2021	Completed
STTP on Hands on Training on MATLAB and Advanced Optimization Techniques	AICTE, New Delhi	2020	2021	Completed



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Number of PhDs guided: 07

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
K.Arunkumar	Erosion Corrosion Resistant Coatings	Supervisor	-
M.Mathivannan	Corrosion Performance of Stellite Coatings on AZ91D Magnesium Alloy	Supervisor	2022
S.Deepak	Rheological properties of Shear Thickening Fluids for Soft Armour Applications.	Supervisor	-
M.Mathanbabu	Thermal Barrier Coatings and its Performance Investigation	Supervisor	-
R.Pradeep raj	Novel Erosion Resistant Coatings	Supervisor	-
M.Ashok kumar	Cold Spray Metal Matrix Composite Coatings	Supervisor	-
L.Govind Sanjiv Madan	Thermal Spray Cermet Coatings	Supervisor	-

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

Date	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant / Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
December 22-24,	Comprehensive review of	International	Paper presenter	Young Scientist Conference	Kolkatta

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2020	thermal spray coating methods and its novel applications			(online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	
December 22-24, 2020	Sensitivity analysis of HVOF process inputs to predict the porosity and hardness of WC-Co-Cr coatings	International	Paper presenter	Young Scientist Conference (online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	Kolkatta
December 22-24, 2020	A study on future gas turbine applications of Lanthanum Zirconate based thermal barrier coatings	International	Paper presenter	Young Scientist Conference (online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	Kolkatta
December 22-24, 2020	Experimental and numerical modeling of erosion corrosion analysis of HVOF	International	Paper presenter	Young Scientist Conference (online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry	Kolkatta

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	sprayed WC-12Co coatings			of Health and Family Welfare, Government of india	
December 22-24, 2020	Influence of angle of impingement , water jet velocity, stand of distance and erodent discharge of erosion performance of HVOF sprayed Cr ₃ C ₂ -NiCr coatings	International	Paper presenter	Young Scientist Conference (online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	Kolkatta
05 th -07 th March 2020	Development of empirical relationship to predict porosity and micro hardness of cold sprayed metal matrix composite coatings on AZ31B magnesium alloy	International	Paper presenter	ASM International Chennai Chapter	Chennai Trade Centre, Chennai
05 th -07 th March 2020	Optimizing cold spray process parameter to attain minimum porosity and maximum hardness in	International	Paper presenter	ASM International Chennai Chapter	Chennai Trade Centre, Chennai

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	metal matrix composite coatings on AZ31B magnesium alloy by response surface methodology				
05 th -07 th March 2020	Electrochemical corrosion performance of plasma sprayed titania coatings on magnesium alloy under sodium chloride environment	International	Paper presenter	ASM International Chennai Chapter	Chennai Trade Centre, Chennai
05 th -07 th March 2020	Effect of dry sliding wear test parameter on wear behaviour and wear mechanism of plasma sprayed satellite coatings on AZ91D magnesium alloy.	International	Paper presenter	ASM International Chennai Chapter	Chennai Trade Centre, Chennai
05 th -07 th March 2020	CFD based design and Analysis of High Velocity Oxy Fuel sprayed Chromium	International	Paper presenter	ASM International Chennai Chapter	Chennai Trade Centre, Chennai

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	carbide nickel chromium coatings				
15 th March 2020	Effect of Process inputs on Mechanical properties of HVOF sprayed Cr ₃ C ₂ /NiCr coatings on Stainless Steel	International	Paper presenter	Department of Electrical and Electronics Engineering	Arunai College of Engineering, Tiruvannamala i- 606603
15 th March 2020	RSM and FUZZY Logic Approaches for Predicting the Surface Roughness, Flank Wear, Built up Edge and Chip Packing Ratio during milling processor of Al-Si Composites	International	Paper presenter	Department of Electrical and Electronics Engineering	Arunai College of Engineering, Tiruvannamala i- 606603
05-07 th November 2019	Some investigation on parameter selection, deposition mechanism and sprayability of cold spray coating on light alloy materials	International	Paper presenter	Young Scientist Conference (online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	Biswa Bangla convention centre Kolkata
05 th -07 th November 2019	Improved corrosion performance of AZ31B	International	Paper presenter	Young Scientist Conference (online) organized	Biswa Bangla convention centre Kolkata

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	magnesium alloy through refinement and homogenization of surface microstructure by friction stir processing			by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	
05 th -07 th November 2019	Influence of atmospheric plasma spray parameters on the porosity and corrosion resistance of stellite coatings on AZ91D magnesium alloy	International	Paper presenter	Young Scientist Conference (online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	Biswa Bangla Convention Centre, Kolkata
05 th -07 th November 2019	On the key role of hvof process parameters on the properties of Cr ₃ C ₂ -NiCr coatings for erosion-corrosion applications	International	Paper presenter	Young Scientist Conference (online) organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Government of india	Biswa Bangla Convention Centre, Kolkata
15 th -17 th March 2018	Process Parameters effect of Porosity level of High Velocity Oxy Fuel Sprayed Cr ₃ C ₂ /NiCr Coatings	International	Paper presenter	Department of Analytical Chemistry	University of Madras, Chennai
8-9th	Influence of	International	Paper	Department of	Karpagam



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March 2018	High Velocity Oxy Fuel spray parameters on microhardness of Cr ₃ C ₂ /NiCr coatings on stainless steel		presenter	Mechanical Engineering	University, Coimbatore
28 Feb-02 nd March 2013	Influence of pH, chloride ion concentration and exposure time on the electrochemical corrosion behavior of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy in NaCl solutions	International	Paper presenter	National Association of Corrosion Engineers (NACE) and International Gateway India Section (NIGIS)	Chennai
19 th -21 st January 2012	Developing an empirical relationship to predict corrosion rate of plasma sprayed alumina coated AZ31B magnesium alloy under immersion environments	International	Paper presenter	IWS, Trichirappalli	Trichirappalli
22 nd -23 rd January 2011	Optimization of atmospheric plasma spraying parameters to minimize	International	Paper presenter	Coimbatore Institute of Technology (CIT) & Indian Welding Society, Trichirappalli	CODISSIA TRADE FAIR COMPLEX, Coimbatore.



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	corrosion rate in plasma sprayed alumina coated AZ31B magnesium alloy				
19 th -21 st 2012	Enhancing the corrosion resistance of AZ31B magnesium alloy by plasma sprayed ceramic coating	International	Paper presenter	Indian Welding Society, Trichirappalli	Trichirappalli
29 th -30 th November 2018	Optimization of plasma spray ceramic coatings via response surface methodology approach	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	A comparative study to evaluate the corrosion performance of friction stir welded AZ31B magnesium alloy under immersion, salt fog, pitting and galvanic corrosion tests under NaCl environment	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th	Influence of	National	Paper	TEQIP III	Department of

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November 2018	laser remelting parameters on hardness of stainless steel surface		presenter	Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Application of soft computing techniques to optimize the friction stir welded dissimilar nonferrous alloys	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	A comparative study to evaluate the corrosion performance of friction stir welded AZ31B magnesium alloy under immersion, salt fog, pitting and galvanic corrosion tests under Nacl environment	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Statistical optimization and sensitivity analysis of atmospheric plasma spraying parameters of titania	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur

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	coatings on AZ91D magnesium Alloy using Hooke and Jeeves algorithm			SAT18)	
29 th -30 th November 2018	Optimizing HVOF spray variables to achieve minimum porosity and maximum hardness in Cr ₃ C ₂ -NiCr coatings	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Electrochemical corrosion properties of thermal sprayed TiO ₂ coatings on Aluminium alloy under NaCl Solution	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Effect of process inputs on the mechanical properties of electrical resistance spot welded interstitial free steel joints	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Influence of tool shoulder diameters on tensile strength of friction stir welded aluminum alloy joints	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM	Department of Mechanical Engineering, Government College of Engineering, Bargur

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29 th -30 th November 2018	Review of stress corrosion cracking of aluminum alloy	National	Paper presenter	SAT18) TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Optimization of HVOF sprayed Cr ₃ C ₂ -Nicro coatings using Design of Experiments	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Future advancements in thermal spray coatings and their real time industrial applications	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Establishing an empirical relationship to predict corrosion rate of plasma sprayed TiO ₂ coated AZ91D magnesium alloy	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Slurry erosion and electrochemical corrosion properties of	National	Paper presenter	TEQIP III Sponsored National Conference on	Department of Mechanical Engineering, Government

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	HVOF sprayed amorphous coating on stainless steel			Recent Advances in Mechanical Science and Technology(RAM SAT18)	College of Engineering, Bargur
29 th -30 th November 2018	Electrochemical corrosion properties of thermal sprayed TiO ₂ coatings on Aluminium Alloy under Nacl solution	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
29 th -30 th November 2018	Review of electro chemical discharge machining process	National	Paper presenter	TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAM SAT18)	Department of Mechanical Engineering, Government College of Engineering, Bargur
19 – 21 Dec 2017	Corrosion performances of plasma sprayed ceramic coatings with different coating thickness	National	Paper presenter	National Conference on Advances in Bioenergy & Biomaterials and Advances in Mechanical Engineering & Mechatronics (TECHSYNOD'17) organized byISTE MCET chapter, KSCSTE, CSIR, DRDO, ISRO, IChE and Department of Mechanical Engineering, Mohandas College	Mohandas College of Engineering and Technology, Kerala

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				of Engineering and Technology	
21 st & 22 nd October 2016	Characterization and corrosion behavior of plasma sprayed ceramic coatings on AZ31B magnesium alloy	National	Paper presenter	National Conference on Innovations in Mechanical Engineering (NCIME'16) organized by Department of Mechanical Engineering, Madanapalle Institute of Technology & Science, Proceedings (2016).	Madanapalle Institute of Technology & Science, Madanapalle
26 th -27 th , March 2014	Influence of plasma sprayed alumina coating thickness on corrosion resistance of AZ31B magnesium alloy	National	Paper presenter	National Workshop on Recent Advances in Welding and Surface Engineering organized by Indian Welding Society (IWS) and Annamalai University, Proceedings (2014).	Annamalai University
22 nd -23 rd , March 2012	Influences of atmospheric plasma spraying parameters on porosity of alumina coatings on AZ31B magnesium alloy	National	Paper presenter	National Workshop on Surface Engineering organized by Indian Welding Society (IWS) and Annamalai University, Proceedings (2012).	Annamalai University

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09 th -10 th April 2010	Effect of atmospheric plasma spraying parameters on corrosion behavior of alumina coated AZ31B magnesium alloy	National	Paper presenter	National Workshop on Surface Engineering organized by Indian Welding Society (IWS) Annamalai University, Proceedings (2010).	Annamalai University
26 th & 27 th July 2019	Abrasive wear characteristic of High Velocity oxy-fuel (HVOF) sprayed Titania coating	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19) organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Selection of Coating Material for Magnesium Alloy Using Fuzzy AHP-TOPSIS	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19) organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th	Review of	National	Paper	National	Department of



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July 2019	Cold Spray Process		presenter	Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19) organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Performance Evaluation of HVOF sprayed Cr ₃ C ₂ /NiCr coatings on Stainless steel	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19) organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Investigation on fusion zone characteristics of pulsed current gta welded AZ31B magnesium alloy joints	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19) organized by Department of Mechanical Engineering, Government	Department of Mechanical Engineering, Government College of Engg, Bargur

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				College of Engg, Bargur	
26 th & 27 th July 2019	Modelling HVOF Spraying Process: A Powerful Tool in Optimization	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19)orga nized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Development of empirical relationship for prediction of corrosion properties of magnesium alloy using response surface methodology	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19)orga nized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Investigation on corrosion performance of AZ91D magnesium alloy under Sodium Chloride Environment	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19)orga nized by Department of	Department of Mechanical Engineering, Government College of Engg, Bargur

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				Mechanical Engineering, Government College of Engg, Bargur	
26 th & 27 th July 2019	Optimization of drilling parameters of Al 6063/SiC/MOS2 hybrid composite in EDM	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19) organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Friction and wear behavior of Al 6063 alloy and Al 6063/SiC/MoS2 hybrid composite	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19) organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Study on temperature behaviour of pulsed current GTA welded AZ31B magnesium	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering	Department of Mechanical Engineering, Government College of Engg, Bargur

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	alloy joints			(RIWASE19)organized by Department of Mechanical Engineering, Government College of Engg, Bargur	
26 th & 27 th July 2019	Evaluating the performance of hard faced friction stir welding tools on AA7075-T6 aluminium alloy joints	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19)organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur
26 th & 27 th July 2019	Effect of single, double and multi passes on corrosion behaviour of friction stir processed of AZ91D magnesium alloy	National	Paper presenter	National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE19)organized by Department of Mechanical Engineering, Government College of Engg, Bargur	Department of Mechanical Engineering, Government College of Engg, Bargur



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Date	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant)	Event Organized by	Venue
7 th April 2007	One day Workshop on Automotive Materials	National	Participant	FEAT, Annamalai University	Annamalai University
23 rd to 27 th June, 2008	Metaheuristics: Emerging Paradigm in Engineering Optimization	National	Participant	Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore	Karpagam College of Engineering, Coimbatore
28 th to 30 th June, 2008	Faculty Awareness Camps on Entrepreneurship	National	Participant	Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore	Karpagam College of Engineering, Coimbatore
17-18 th April, 2009	Two day Workshop on Environmentally Cleaner Welding Process	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
1 st to 13 th June, 2009	Automotive Materials and Electronics	National	Participant	Faculty of Engineering and Technology, Annamalai University	Annamalai University
9 th -10 th April, 2010	Two day Workshop on	National	Participant	Manufacturing	Annamalai University

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	Surface Engineering			Engineering, Annamalai University	
5 th to 19 th October, 2010	In-service training programme	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
24 th November to 11 th December 2010	FDP on Pollution Free Manufacturing of Composite Materials and Weldability	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
11 th -12 th March, 2011	Two days symposium for in-house Research Scholars	National	Participant	Centre for Materials Joining and Research, Manufacturing Engineering, Annamalai University	Annamalai University
29 th July, 2011	One day workshop on Fatigue Life Evaluation of Welds	National	Participant	Centre for Materials Joining and Research, Manufacturing Engineering, Annamalai University	Annamalai University
24-26 th Nov, 2011	Workshop on Marine Corrosion and Surface Engineering	National	Participant	Centre for Advanced Study in Marine Biology, Annamalai University, CECRI, Karaikudi	Annamalai University
18 th	One day	National	Participant	Centre for	Annamalai

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February 2012	symposium for Research Scholars			Materials Joining and Research, Manufacturing Engineering, Annamalai University	University
23-24 th March, 2012	Two day Workshop on Surface Engineering	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
31 st October –3 rd November, 2012	Workshop on Atmospheric Plasma Processing	National	Participant	Bharathiyar University, Coimbatore	Bharathiyar University, Coimbatore
26 th November, 2012	One day Workshop on Metallurgical Characteristics of Aluminium alloys	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
1 st February, 2014	One day Workshop on High Temperature Properties of Materials	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
5 th March 2014	One day Workshop on Friction Stir Welding of Steels	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
26-27 th March, 2014	National Conference on Recent Advances in Welding and Surface Engineering	National	Participant	Manufacturing Engineering, Annamalai University	Annamalai University
17 th to 23 rd May, 2017	Faculty Development	National	Participant	Government College of	Government College of

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	Programme on 'Metrology and Measurements'			Engineering, Bargur	Engineering, Bargur
25 th July 2020	TEQIP III sponsored webinar on "Protecting Research Inventions Through Intellectual Property Rights"	National	Participant	Government College of Engineering, Bargur	Government College of Engineering, Bargur
23 rd , 24 th April 2020	Faculty Development Programme(online) on " Design, Develop and Deliver online course through MOODLE Platform"	Local	Participant	Department of Technical Education, Tamilnadu & Coimbatore Institute of Technology, Coimbatore	Coimbatore Institute of Technology, Coimbatore
08-12 th February 2021	Online Professional Development Training	National	Participant	Indian Institute of Management, Raipur	Indian Institute of Management, Raipur

Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convener / Co-Convener)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Recent Innovations in Welding and Surface Engineering (RIWASE19)	National	26 th & 27 th July 2019	Coordinator	Government College of Engineering, Bargur

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TEQIP III Sponsored National Conference on Recent Advances in Mechanical Science and Technology(RAMSAT18)	National	29 th -30 th November 2018	Coordinator	Government College of Engineering, Bargur
TEQIP III Sponsored Faculty Development Programme on “Recent Innovations and Research Trends in Nanomaterial and Surface Coating”	National	01 st – 07 th August, 2019	Coordinator	Government College of Engineering, Bargur
TEQIP III Sponsored Student Training Programme on “Materials Characterisation Techniques”	Local	29th – 30th October, 2018	Coordinator	Government College of Engineering, Bargur
AICTE-STTP on “Hands on Training on MATLAB and Advanced Optimization Techniques”	National	Phase I: 21.12.2020 to 26.12.2020 Phase II: 18.01.2021 to 23.01.2021 Phase III:20.02.2021 to 25.02.2021	Coordinator	Government College of Engineering, Bargur
AICTE-ISTE Refresher/Induction Programme on “Outcome based Education”	National	Phase I: 28.12.2020 to 02.01.2021	Coordinator	Government College of Engineering, Bargur

Invited Talks delivered

Topic	Date	Inviting Organization



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Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	Indian Welding Society	L-00975

Academic Foreign Visits

Country	Duration of Visit	Programme

Publications: International Journals

S. No	Author(s)	Title	Name of Journal	Vol.	Page no	Year
1	S. Deepak, D. Thirumalaikumarasamy, M. Ashokkumar, & S. K. Nayak	Experimental analyzing the static puncture resistance performance of shear thickening fluid impregnated polypropylene hybrid composite target structures for armour application	The Journal of The Textile Institute (Taylor and Francis Publisher) (IF-1.86)	Accept		2022
2	Ashokkumar M, Thirumalaikumarasamy D, Sathiyamoorthy R, Murugan K, Guruprasad B, Deepak S and Lijalem Mulugeta	Optimization of Cold Spray Process Inputs to Minimize Porosity and Maximize Hardness of Metal Matrix Composite Coatings	Journal of Nano Material (Hindawi Publisher) (IF-2.986)	Accept		2022

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3	Ashokkumar M, <u>Thirumalaikumarasamy D</u> , Ramachandran C S, Thirumal P, Sathiyamoorthy R, Murugan K, Guruprasad B, Deepak S and Pradeep Raj R	Enhancing the Corrosion Resistance of Low Pressure Cold Sprayed Metal Matrix Composite Coatings on AZ31B Mg Alloy through Friction Stir Processing	Coatings (MDPI Publisher) (IF-2.881)	12	135	2022
4	Pradeep Raj R, <u>Thirumalaikumarasamy D</u> , Ramachandran C S, Ashokkumar M , Sathiyamoorthy R, Guruprasad B, ,K Murugan and L.Renjith	Optimisation of HVOF Spray Process Parameters to Achieve Minimum Porosity and Maximum Hardness in WC-10Ni-5Cr Coatings	Coatings (MDPI Publisher) (IF-2.881)	12	339	2022
5	Daniel C. Ribu, R. Rajesh, <u>D.</u> <u>Thirumalaikumarasamy</u> , Abdul Razak Kaladgi, C. Ahamed Saleel , Kottakkar Sooppy Nisar , Saboor Shaik, Asif Afzal	Experimental investigation of erosion corrosion performance and slurry erosion mechanism of HVOF sprayed WC-10Co coatings using design of experiment approach	Journal of Materials Research and Technology (Elsevier) (IF-5.289)	18	293-314	2022
6	K.Mathivanan, <u>D.Thirumalaikumarasamy</u> , P.Thirumal ,M.Ashokkumar	Investigate the corrosion properties of stellite coated on AZ91D alloy by plasma spray technique	Thermal Science (International Scientific Journal) (IF-1.39)	-	-	2021
7	Daniel C Ribu, R. Rajesh, <u>D</u> <u>.Thirumalaikumarasamy</u> , S. Vignesh R. Paventhan	Development of empirical relationships to predict porosity and hardness of WC-10Co coatings on 35CrMo steel using DOE approach	AIP Conference Proceedings(IF-0.40)	2395	050011	2021
8	K. Mathivanan, <u>D.</u> <u>Thirumalaikumarasamy</u> , M. Ashokkumar, S. Deepak, M.Mathanbabu	Optimization and Prediction of AZ91D Stellite-6 coated magnesium alloy using Box Behnken Design and Hybrid Deep Belief Network	Journal of Materials Research and Technology (Elsevier) (IF-5.289)	15	2953-2969	2021
9	R.V.Prasad, R. Rajesh, & <u>D.</u> <u>Thirumalaikumarasamy</u>	Sensitivity analysis and optimisation of HVOF process inputs to reduce porosity and maximise hardness of WC-10Co-4Cr coatings	Sadhana (Springer Publications) (IF- 1.188)	46	149	2021
10	R.Barathiraja, P.Thirumal,	Investigation of Drying	Materials today	46	7711-7718	2021

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	<u>D.Thirumalaikumarasamy</u>	Kinetics and Qualities of Turkey Berry in Fluidized Bed Dryer	proceedings (Elsevier) (IF- 1.24)			
11	M.Ashokkumar, <u>D.Thirumalaikumarasamy</u> ,P. Thirumal, R.Barathiraja	Influences of mechanical, corrosion, erosion and tribological performance of cold sprayed coatings-A review	Materials today proceedings (Elsevier) (IF- 1.24)	46	7581-7587	2021
12	M.Mathanbabu, <u>D.Thirumalaikumarasamy</u>	Study on thermal, mechanical, microstructural properties and failure analyses of lanthanum zirconate based thermal barrier coatings: A review	Materials today proceedings (Elsevier) (IF- 1.24)	46	7948-7954	2021
13	Daniel C.Ribu, R.Rajesh, <u>D.Thirumalaikumarasamy</u> , S.Vignesh	Influence of rotational speed, angle of impingement, concentration of slurry and exposure time on erosion performance of HVOF sprayed cermet coatings on 35CrMo steel	Materials today proceedings (Elsevier) (IF- 1.24)	46	7518-7530	2021
14	S. Deepak, <u>D. Thirumalaikumarasamy</u> P. Thirumal, T. Dharun, K. P. Bhuvana, R. Joseph Bensingh, K. Prakashan & S. K Nayak	Preparation and characterization of shear thickening fluid coated polypropylene fabric for soft armour application	The Journal of The Textile Institute (Taylor and francis Publications) (IF-1.86)	Accept		2020
15	R.V.Prasad, R. Rajesh, & <u>D. Thirumalaikumarasamy</u>	Selection of coating material for magnesium alloy using Fuzzy AHP-TOPSIS	Sadhana (Springer Publications) (IF- 1.188) (CI-9)	45	23	2020
16	S. Vignesh, V. Balasubramanian, K. Sridhar, <u>D. Thirumalaikumarasamy</u>	Slurry erosion behavior of HVOF-sprayed amorphous coating on stainless steel	Metallography Microstructure and Analysis (Springer Publications) (IF-1.27) (CI-3)	8	1-10	2019
17	<u>S. Vignesh</u> ,K.Shanmugam, <u>V. Balasubramanian</u> , <u>K.Sridhar</u> , and <u>D.Thirumalaikumarasamy</u>	Electrochemical corrosion behaviour of HVOF sprayed iron based amorphous metallic coatings on AISI 316 stainless steel in NaCl solution	Journal of the Mechanical Behavior of Materials (Degruyter) (IF-1.49) (CI-2)	27	1-9	2018
18	<u>D.Thirumalaikumarasamy</u> , V. Balasubramanian, S. SreeSabari, R. Rajesh and Medha R. Elayidom	Predicting the deposition efficiency of plasma sprayed alumina coatings on AZ31B magnesium alloy by response surface methodology	Applied Mechanics and Materials (Trans Tech Publications)	877	66-81	2018

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19	<u>D.Thirumalaikumarasamy</u> V.Balasubramanian and S.Sreesabari	Prediction and optimization of process variables to maximize the Young's modulus of plasma sprayed alumina coatings on AZ31B magnesium alloy	Journal of Magnesium and Alloys (Elsevier) (IF-10.088) (CI-6)	5	133-145	2017
20	<u>D.Thirumalaikumarasamy</u> , V. Balasubramanian, S. SreeSabari, and S. Vignesh	Comparison of Artificial Neural Networks (ANN) and Response Surface Methodology (RSM) Modeling Approaches in Predicting the Deposition Efficiency of Plasma Sprayed Alumina Coatings on AZ31B Magnesium Alloy	Journal of Advanced Microscopy Research	12	1-10	2017
21	Medha. R. Elayidom, Abhishek A.S, AkhilMohan, AbhijithVijayakumar, R. Rajesh, N. Balakrishnan, D. Thirumalaikumarasamy	Fabrication of Stainless Steel Matrix Composites Containing up to 15%Boron Carbide	International Journal of Advanced Chemical Science and Applications (IJACSA)	5	21-24	2017
22	<u>D.Thirumalaikumarasamy</u> K.Shanmugam, V.Balasubramanian and S.Vignesh	Effect of pH, chloride ion concentration and immersion time on the microstructural and corrosion properties of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy under immersion environment	Journal of Advanced Microscopy Research	11	62-71	2016
23	<u>D.Thirumalaikumarasamy</u> K.Shanmugam, V.Balasubramanian and S.Vignesh	Microstructural and corrosion properties of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy under sodium chloride environment	Journal for Manufacturing Science and Production (Degruyter)	16	89-102	2016
24	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Effect of experimental parameters on the micro hardness of plasma sprayed alumina coatings on AZ31B magnesium alloy	Journal of Magnesium and Alloys (Elsevier) (IF-10.088) (CI-24)	3	237-246	2015
25	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Predicting the immersion corrosion behaviour in NaCl solution of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy	International Journal of Computational Materials Science and Surface Engineering (Inderscience) (IF-0.2)	6	130-159	2015
26	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and	Developing empirical relationships to predict	Journal for Manufacturing Science	15	169-181	2015

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	V.Balasubramanian	porosity and microhardness of atmospheric plasma-sprayed alumina coatings on AZ31B magnesium alloy	and Production (Degruyter) (CI-4)			
27	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Comparison of the corrosion Behavior of AZ31B magnesium alloy under immersion test and potentiodynamic polarization test in NaCl solution	Journal of Magnesium and Alloys (Elsevier) (IF-10.088) (CI-62)	2	36-49	2014
28	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Influence of pH, chloride ion concentration and spraying time on the corrosion behaviour of atmospheric plasma sprayed alumina coatings	Journal of Surface Engineering (Taylor and Francis) (IF-3.169) (CI-5)	30	183-194	2014
29	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Establishing empirical relationships to predict porosity level and corrosion rate of atmospheric plasma-sprayed alumina coatings on AZ31B magnesium alloy	Journal of Magnesium and Alloys (Elsevier) (IF-10.088) (CI-18)	2	140-153	2014
30	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Corrosion performance of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy under immersion environment	Journal of Asian Ceramic Societies (Elsevier) (IF-3.125) (CI-25)	2	403-415	2014
31	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Influence of chloride ion concentration on immersion corrosion behaviour of plasma sprayed alumina coatings on AZ31B magnesium alloy	Journal of Magnesium and Alloys (Elsevier) (IF-10.088) (CI-20)	2	325-334	2014
32	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Developing an empirical relationship to predict corrosion rate of AZ31B magnesium alloy under sodium chloride environment	Transactions of the Indian Institute of Metals (Springer) (IF-0.533) (CI-10)	67	19-32	2014
33	<u>D.Thirumalaikumarasamy</u> K.Shanmugam V.Balasubramanian, and R.Paventhan	Electrochemical corrosion behavior of atmospheric plasma sprayed alumina coatings	International Journal of Innovative Research in Science, Engineering and Technology	3	18390-18414	2014
34	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Optimisation and sensitivity analysis of atmospheric plasma spraying parameters	International Journal of Computational Materials Science and	5	346-369	2013

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		to minimise the porosity in alumina coatings on AZ31B magnesium alloy	Surface Engineering (Inderscience) (IF-0.2) (CI-2)			
35	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Influence of pH, chloride ion concentration and exposure time on the electrochemical corrosion behaviour of AZ31B magnesium alloy	International Journal of Emerging Technology and Advanced Engineering	3	308-320	2013
36	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Prediction of corrosion rate of AZ31B magnesium alloy under salt fog environment in NaCl solution	Usak University Journal of Material Sciences	1	75-98	2013
37	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Prediction of porosity level and corrosion rate of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy	Journal of Advanced Microscopy Research	8	1-21	2013
38	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Influences of atmospheric plasma spraying parameters on porosity level of alumina coating on AZ31B magnesium alloy using response surface methodology	Journal of Progress in Natural Science: Materials International (Elsevier) (IF-3.607) (CI-70)	22	468-479	2012
39	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Effect of atmospheric plasma spraying parameters on porosity level of alumina coating	Journal of Surface Engineering (Taylor and Francis) (IF-3.169) (CI-24)	28	759-766	2012

Publications: National Journals

S. No	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	M.Ashok Kumar, <u>D.Thirumalaikumarasamy</u> , R. Paventhan and P. Thirumal	A comparative study to evaluate the corrosion performance of friction stir welded AZ31B magnesium alloy under immersion, salt fog, pitting and galvanic corrosion tests under nacl environment	Journal of Manufacturing Engineering (SME)	14	010-025	2019
2.	R.Sathiyamoorthy, K.Shanmugam, T. Senthilvelan and <u>D.Thirumalaikumarasamy</u>	Tribological behaviour of ceramic coating	Journal of Manufacturing Engineering (SME)	14	090-092	2019
3.	D.Karunakaran, V S K Venkatachalapathy and <u>D.Thirumalaikumarasamy</u>	Electrical behaviour of aluminium and copper bimetallic joint using friction stir spot welding	Journal of Manufacturing Engineering (SME)	14	097-100	2019
4.	<u>D.Thirumalaikumarasamy</u>	Influence of spraying time	Indian Journal of	25	257-264	2018

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	K.Shanmugam and V.Balasubramanian	on corrosion behavior of plasma sprayed alumina coatings on AZ31B magnesium alloy under salt fog environment	Engineering & Materials Sciences (IF-0.881)			
5.	<u>D.Thirumalaikumarasamy</u> K.Shanmugam V.Balasubramanian, and R. Kamal Jayaraj	Multiobjective optimization of atmospheric plasma spray process parameters to deposit alumina coatings based on response surface methodology	Journal of Manufacturing Engineering (SME)	12	82-93	2017
6.	<u>D.Thirumalaikumarasamy</u> K.Shanmugam V.Balasubramanian, and S.Sree Sabari	Corrosion and metallurgical characteristics of AZ31B magnesium alloy under NaCl environment	Manufacturing Technology Today (CMTI)	15	9-28	2016
7.	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Microstructural characterization and immersion corrosion behavior of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy in NaCl solution	Manufacturing Technology Today (CMTI)	15	10-23	2016
8.	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Statistical analysis and optimization of atmospheric plasma spraying parameters to attain maximum corrosion resistance in alumina coatings on AZ31B Magnesium alloy	Manufacturing Technology Today (CMTI)	14	10-26	2015
9	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Comparative study of the corrosion behavior of AZ31B magnesium alloy under immersion and salt fog environments	Manufacturing Technology Today (CMTI)	13	12-29	2014
10	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Effect of coating thickness on corrosion properties of plasma sprayed alumina coated AZ31B magnesium alloy in nacl solution	Journal of Manufacturing Engineering (SME)	9	197-201	2014
11	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Influences of spraying parameters on porosity level and corrosion rate of atmospheric plasma sprayed alumina coatings on AZ31B magnesium alloy	Journal of Materials Science and Engineering with Advanced Technology	8	27-53	2013
12	<u>D.Thirumalaikumarasamy</u> K.Shanmugam and V.Balasubramanian	Sensitivity analysis of atmospheric plasma spraying parameters on porosity level of alumina	Journal of Manufacturing Engineering (SME)	7	277-283	2012

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		coating on AZ31B magnesium alloy using response surface methodology				
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RESEARCH PAPERS PUBLICATION DETAILS AVAILABLE IN ‘SCOPUS and GOOGLE SCHOLAR’

Author ID	55444203100
Author Name	Thirumalaikumarasamy, D.;
Documents	40
References	301
Citations	307 total citations by 69 documents
h Index	9
Co-authors	8

ORCID ID: <https://orcid.org/0000-0003-0195-0668>

Research gate ID: <https://www.researchgate.net/profile/Dthirumalai-Kumarasamy-2>

Google scholar link: <https://scholar.google.com/citations?user=5oufC68AAAAJ&hl=en>

Publons ID: <https://publons.com/researcher/3824384/thirumalaikumarasamy-d/>

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=55444203100>

Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year