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Web of Science Researcher ID: <https://www.webofscience.com/wos/author/rid/AAy-5950-2021>

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ResearchGate ID: https://www.researchgate.net/profile/Mathan_Babb

Google Scholar ID: <https://scholar.google.co.in/citations?user=gghukhuaaaaj&hl=en&authuser=1>

Publons ID (Web of Science Researcher ID) : <https://publons.com/p/43083071/>



Academic Profile

2021 – Present	Doctor of Philosophy (Ph.D.) in Department of Mechanical Engineering at Government College of Engineering, Bargur, Anna University, Chennai. Status: Course work Completed, Provisional Registration confirmed, papers published, waiting for submitting the thesis.
2015- 2017	Master of Engineering in Thermal Engineering, Anna University, Chennai. Percentage: 78.60
2010-2014	Mechanical Engineering, Anna University, Chennai. Percentage: 80.00
2008-2010	Higher Secondary Education (State Board), V.O.C. Secondary School, Kovilpatti. Percentage: 73.75
2008	SSLC education (State Board), Viswakarma High School, Kovilpatti. Percentage: 81.60

Research Experience

1. Government College of Engineering, Bargur

Designation : **Senior Research Fellow – DRDO (ER & IPR Scheme)**
File No: ERIP/ER/ 201903003/M/01/1769 dated 11.09.2019
Project Title: Effect of Pore size, Shape and Distribution on the Performance of Lanthanum Zirconate based Thermal Barrier Coatings
Project Cost: Rs. 31.66 lakhs

Duration : September 2022 to still now

Responsibilities :

- The development of **plasma sprayed** Lanthanum zirconate based thermal barrier coating collaboration with Gas Turbine Research Establishment (GTRE), Defense Research Development organization (DRDO)
- Handling and maintaining plasma spray facility in our lab.
- Material characterization studies and thermal cycling studies for TBC.

2. Government College of Engineering, Bargur

Designation : **Junior Research Fellow – DRDO (ER & IPR Scheme)**

Updated as on 10.07.2023

File No: ERIP/ER/ 201903003/M/01/1769 dated 11.09.2019

Project Title: Effect of Pore size, Shape and Distribution on the Performance of Lanthanum Zirconate based Thermal Barrier Coatings

Project Cost: Rs. 31.66 lakhs

Duration : 8th September 2020 to 7th September 2022 (2 years)

Responsibilities :

- The development and synthesis of Lanthanum zirconate based thermal barrier coating for Gas Turbine Research Establishment (GTRE), Defense Research Development organization (DRDO).
- Synthesis and Developing of Powder, Characterization of Coatings.
- Metallography preparation of coating materials.
- Optimization of Process parameter using Design of Expert software.
- Correlation of Microstructure & Properties and Process & project report submission time to time.
- This research resulted in Two Peer reviewed Review journal publications, Two Review articles are under review and eight conference presentations till now.

Facilitator:

- Involved in project related records, Purchase of Consumables and non-Consumables DRDO-Funded Research Project worth of Rs. **31.66 Lakhs** at Department of Mechanical Engineering, Government College of Engineering, Bargur.
- Involved in Purchase of Consumables and non-Consumables AICTE-MODROB research grant worth of Rs. **19 Lakhs** at Department of Mechanical Engineering, Government College of Engineering, Bargur.
- Involved in equipment maintenance and records maintenance of *Flame spray ,plasma spray facility, Pulse Electro plating, Vickers Hardness tester, Optical microscope, grinding and polishing machine, 3D priniter* purchased under TEQIP-III worth of Rs. **66 Lakhs** installed at Department of Mechanical Engineering, Government College of Engineering, Bargur.
- Involved in equipment purchase, inspection and installation activities of, *Cold Spray Equipment's for coatings* DST-funded project to a worth of **Rs. 47.00 Lakhs** installed at Department of Mechanical Engineering, Government College of Engineering, Bargur.
- Involved in procurement of Metallurgical Microscope with image processing software and multi-Specimen grinding/ Polishing Machine to Metallography Testing's under AICTE-MODROB-Rural Grant worth of **Rs. 10.00 Lakhs** installed at Department of Mechanical Engineering, Government College of Engineering, Bargur.

Industry Experience

1. e-CADD Solutions & Training Centre, Coimbatore.

Designation : CADD Engineer

Duration : 11 April 2017 to 02 September 2017

Responsibilities:

1. Working with CAD/CAM/CAE such like AutoCAD, Creo, Solidworks, ANSYS (APDL,

Workbench With CFD, Fluent)

2. Design, Analysis and Development of Mechanical Parts as applicable to customer defined practices.
3. Working with GD & T usage and tolerance stack-ups.
4. Handled More design Projects and Student Projects
5. Providing training to the students and trainees.

2. Profenaa Automation, Coimbatore

Designation : Design Engineer Trainee (Mechanical)

Duration : 16th June 2014 to 30th June 2015

Responsibilities:

1. Working with AutoCAD, Creo, Solidworks.
2. Produce 2D drawings, 3D models and other documentation.
3. Creating parametric 3D models Conversion of 2D drawings into 3D solid models, creating parametric 3D models and drafting for mechanical parts and associative drawings as applicable to customer defined practices.
4. Knowledge of machined component drawings.

Teaching Experience

1. Guest Lecturer in Department of Mechanical Engineering at Government College of Engineering, Bargur, Tamil Nadu.

Designation : Research Scholar & Guest Lecturer

Duration : 16th September 2020 to still now

Responsibilities : UG (B.E.) Class handling, Student Process report submission time to time, NBA (Criteria 7) Support, Project guidance and Counseling to the students, Handled Virtual Welding Learning Platform, 3 D Printing Machine.

Subject Handled : Bachelor of Engineering (Mechanical Engineering)

- 18MOE004- Elements of Project management
- 17MPE009- Newer production Process
- 20MPC309- Machine Drawing

Guided Students Project:

- **Project Title:** Developing empirical relationships to estimate porosity and micro hardness of plasma-sprayed YSZ coatings.
 - Kesavan. M, Tabraze Ahemed T, Rakesh.R

2. Assistant Professor in Department of Mechanical at Nandha College of Technology, Erode, Tamil Nadu.

Designation : Assistant Professor

Duration : September 2017 to May 2020

Responsibilities : UG (B.E.) Class handling, Student Process report submission time to time, NACC Criterion 3, CAD lab in-charge, Smart classes with PPT, GIF and NPTEL Videos, Project guidance and counseling the students.

Subject Handled : Bachelor of Engineering (Mechanical Engineering)

- ME8493 - Thermal engineering (3 times)
- ME8391- Engineering Thermodynamics (2 times)
- GE8152- Engineering graphics (2 times)
- PH8251- Materials Science

- ME8792- Power Plant Engineering
- ME8073- Unconventional Machining Processes
- ME6403- Engineering Materials and Metallurgy
- ME8711 - Simulation & Analysis Laboratory (ANSYS APDL, Workbench with CFD)
- ME8681 - CAD / CAM Laboratory (AutoCAD, CREO)
- ME8381- Computer Aided Machine Drawing Laboratory (AutoCAD)

Guided Students Project:

1. **Project Title:** Experimental and Stress analysis of Pipe routing
 - Vinoth. A, Murali. K, Saravanan. A (2018 Batch)
2. **Project Title:** Experimental Investigation of cryogenic Treatment on machine Tools (Drill bit)
 - R. Rahul, K. Saravanan, A.S. Sathya (2018 Batch)
3. **Project Title:** Design and Thermal Analysis of Ceramic Coated Diesel Engine Piston (MgZrO₃ & NiCrAl)
 - Mohanraj.P, Navaneetha Krishnan.S, Naveen Kumar.T and Vijay.S(2019 Batch)
4. **Project Title:** Optimized Thermal and Structural Analysis of Gas Turbine Blade with Cooling System using FEA
 - Prabakaran.C, Ramaprakash.A, Swaminathan.R And Tamilselvan.J(2019 Batch)
5. **Project Title:** Performance Estimation of and Redesign of Horizontal axis Wind Turbine (HAWT) Blade
 - Aravindhnan.C, Karthikeyan.R, MadhunPrasath.V, Prajeesh.T.P. (2020 Batch)
6. **Project Title:** Design and Analysis of Latent Heat Storage of Hybrid Solar Energy
 - Gokula Krishnan.D, Inbarasu.S, Kanishkar.V, Praveen Kumar (2020 Batch)

Skills

Sophisticated R&D Equipment's:

- Characterization Techniques: Scanning electron microscopy, Particle Size Analyzer, UV-visible spectroscopy, Optical Microscope and Differential Scanning Calorimetric (DSC), Laser flash apparatus for thermal conductivity measurements, Grinding and polishing machine for metallographic preparations.
- Mechanical & Thermal analysis: Micro Hardness Tester, Powder X-Ray Diffractometer, Roughness Measurements, Robotic welding Arm, Virtual welding teaching and learning.
- Equipment used: Atmospheric plasma Spraying machines, Pulse electro deposition equipment, Flame spray machine, sand blasting, Phase change material Setup, 3D printing Machine.

CAD/CAM/CAE Software:

- **AUTO CAD-** AutoCAD 2D and 3D (Draft, annotate, and design 2D geometry and 3D models with solids, surfaces, and mesh objects, automate tasks such as comparing drawings, adding blocks)
- **Creo (Pro-E)- PTC-** Creo Parametric (PRO-E)- 2D Drawing, 3D Solid Modelling, Robust assembly modelling, technical surfacing, Sheetmetal modelling, Weld modelling, Drafting with Geometric & dimensional and Tolerance.
- **NX-CAD-** Master Diploma in NX-CAD with GD & T
- **ANSYS-** ANSYS APDL, Workbench With CFD, Fluent

Training

- Completed Government officials Training Programme on **3D printing / Additive Manufacturing** (3DP/AM) under “FutureSkills PRIME Programme” held from 10th November 2022 to 23rd November 2022 (14 days) under the **Ministry of Electronics & Information Technology (MoE&IT)**, Government of India organized by **National Institute of Electronics & Information Technology (NIELIT), Chennai**.
- Five days Implant training in “Tuticorin Thermal Power Station (TTPS)
- Completed course on “Steam power engineering” with Elite Grade Conducted by IIT Guwahati and **NPTEL for the** period of August-Oct 2019 (8 Week).
- Diploma in Computer studies (MS office, C and C++) - It covers MS DOS, MS-WORD, MS EXCEL, MS-POWERPOINT, C and C++ and secured B Grade.
- AUTO CAD, Creo (Pro-E), SOLID WORKS, NX-CAD, ANSYS at Profenaa Industrial Training Center, Coimbatore.

Publications

- Patent Filed: 3 (published), 3 (under review)
- International Journals: 17 (Published), 8(Under Review)
- Book Published: 05
- Conference with Proceedings: 18
- International/ National Conferences: 20

Citations

- Google Scholar Database:
- Citations: 84, h-index: 6, i10-index:3
- Scopus database: Citations: 65, h-index: 5

	All	Since 2018
Citations	84	84
h-index	6	6
i10-index	3	3

Paper Published in International journals:

1. Mohanraj, C. M., Ramesh Kumar, R., Mathanbabu, M., & Ashokkumar, M. (2023). Investigation on Mechanical characterization of abutilon indicum fiber nonwoven fabric reinforced epoxy composite materials. *Materials Research Express*, 10(1), 015101. Publisher: IOP, <https://doi.org/10.1088/2053-1591/acb19f>
2. Kumar, L. G. S., Thirumalaikumarasamy, D., Karthikeyan, K., Mathanbabu, M., Ashokkumar, M., & Ramachandran, C. S. (2023). An overview of recent trends and challenges of post treatments on magnesium alloys. *Materials Today: Proceedings*. Publisher: Elsevier, <https://doi.org/10.1016/j.matpr.2023.01.071>
3. **Mathanbabu, M.**, Thirumalaikumarasamy, D., Tamilselvi, M., & Kumar, S. (2022). Optimization of plasma spray process variables to attain the minimum porosity and maximum hardness of the LZ/YSZ thermal barrier coatings utilizing the response surface approach. *Materials Research Express*. Publisher: IOP, <https://doi.org/10.1088/2053-1591/ac8857>
(Impact factor: 2.06)
4. Babu S Hariprakasham K, Subaasini M G And **Mathanbabu M**. “Novel Tube-In-Tube Integrated Solar Water Heater System Thermal Performance Analysis”. Journal: "stochastic Modeling & Applications" by MuK Publications & Distributions. ISSN: 0972-3641, Vol. 25 No. 3 (July-December, Special Issue 2021 Part - 1) paper title: Page No: 410 414.

5. Seshaiyah, S., Sampathkumar, D., Mariappan, M., Mohankumar, A., Balachandran, G., Kaliyamoorthy, M., ... & Gopal, R. (2022). Optimization on Material Removal Rate and Surface Roughness of Stainless Steel 304 Wire Cut EDM by Response Surface Methodology. *Advances in Materials Science and Engineering*, 2022, Publisher: **Hindawi**. <https://doi.org/10.1155/2022/6022550> (Impact factor 2.098)
6. Mohankumar, Ashokkumar, Thirumalaikumarasamy Duraisamy, Deepak Sampathkumar, Sathiyamoorthy Ranganathan, Guruprasad Balachandran, Murugan Kaliyamoorthy, **Mathanbabu Mariappan**, and Lijalem Mulugeta. "Optimization of Cold Spray Process Inputs to Minimize Porosity and Maximize Hardness of Metal Matrix Composite Coatings on AZ31B Magnesium Alloy." *Journal of Nanomaterials* 2022 (2022). Publisher: **Hindawi**. <https://doi.org/10.1155/2022/7900150> (Impact factor: 2.986)
7. K.Mathivanan, D.Thirumalaikumarasamy, M.Ashokkumar, **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*, article in Press, Publisher: **Elsevier**. DOI: <https://doi.org/10.1016/j.jmrt.2021.09.069> (Impact factor: 5.3)
8. M.Anantha Babu, S.Deepak, M.Ashokkumar, **M.Mathanbabu**, K.Mathivanan,R. Ramalingam, "Experimental Investigation on Material Removal Rate, Surface Roughness of 304 Stainless Steel Using CNC Wire EDM" *Design Engineering (Toronto)*. 8(2021) 9333-9346. ISSN: 0011-9342. Publisher: Rogers Media Publishing Ltd. (Impact factor: 1.0) <http://www.thedesignengineering.com/index.php/DE/article/view/5976>
9. **M.Mathanbabu**, D.Thirumalaikumarasamy, P.Thirumal, M.Ashokkumar, "Study on Thermal, Mechanical, Microstructural Properties and Failure analyses of Lanthanum Zirconate based Thermal barrier coatings: A review" *Materials today proceedings*. 46 (2021) 7948– 7954. Publisher: Elsevier. DOI: <https://doi.org/10.1016/j.matpr.2021.02.672> (Impact factor:1.8)
10. Pitchia Krishnan B, **Mathanbabu M**, Sathiyamoorthy G, Gokulnath K, Govind Sanjeev Kumar L, **Performance Estimation and Redesign of Horizontal Axis Wind Turbine (HAWT) Blade**. *Materials today proceedings*. 46 (2021) 8025-8031. Publisher: Elsevier. DOI: <https://doi.org/10.1016/j.matpr.2021.02.777> (Impact factor:1.8)
11. Veeramanikandan K, Vignesh S,Pitchia Krishnan B, **Mathanbabu M**, Ashokkumar M, **Investigation of Al 2O3-water Nanofluid Flow through the Circular Tube**. *Materials today proceedings*. 46 (2021) 8288-8295. Publisher: Elsevier. DOI: <https://doi.org/10.1016/j.matpr.2021.03.253> (Impact factor:1.8)
12. **M. Mathanbabu**, B. Pitchia Krishnan, M. Muthuraj, R. Girimurugan, **Design and Analysis of Latent heat storage system for hybrid Solar Energy**, *Aegaeum Journal*, Volume 8, Issue 6, Page no 7-21, 2020, DOI:[16.10089.AJ.2020.V8I6.285311.3520](https://doi.org/10.10089.AJ.2020.V8I6.285311.3520). (Impact factor: 0.3)
13. B.Pitchia Krishnan P.Gopi , **M.Mathanbabu**, **Experimental Investigation of Solar Drier Integrated with HSU for Crops**, DOI: [10.5373/JARDCS/V11I12/20193351](https://doi.org/10.5373/JARDCS/V11I12/20193351), *Journal of Advanced research in dynamical & control systems*. Volume 11, Issue .12, Page no- 167-173,2019. (Impact factor: 0.31)
14. B.Pitchia Krishnan, Ragland Gazetrin Prabhu & **M.Mathanbabu**, **Enhancement of Heat Transfer on Rotating Heat Pipe**, DOI:[16.10089.IJSRR.2019.V8I3.287391.322595](https://doi.org/10.10089.IJSRR.2019.V8I3.287391.322595)., *International Journal of Scientific Research and Reviews*, ISSN NO: 2279-543X, Volume-8 Issue-8, page No: 19-24, 2019.
15. **M.Mathanbabu**, P.Mohanraj, S.Navaneetha Krishnan, **Design and Thermal Analysis of Ceramic Coated Diesel Engine Piston (MgZro3 & NiCrAl)** on *IJASER-ISSN:2455-9288* Volume-4 Issue-2 , Page no: 1-3, 2019.
16. **M.Mathanbabu**, C.Prabakaran, A.Ramaprakash. "Design and analysis of GAS turbine blade with cooling using FEA" on *International Journal of Intellectual Advancements and Research in Engineering*

- 17. M.Mathanbabu, R.Rahul, K. Saravanan** Published journal paper Titled “**Experimental Investigation of cryogenic Treatment on machine Tools (drill bit)**” on International Journal of Advanced Science and Engineering Research (ISRME) - ISSN NO: 2349-3860, Volume-5, Issue-3, page No: 5-8, **2018.**

Under Review:

1. Submitted Manuscript titled, Failure Mode Effective Analysis of Suspension System for Heavy Load Vehicle, Journal: International Journal of Vehicle Structures & Systems (**Status: Accepted**)
2. Submitted Manuscript titled " **Numerical simulation and analysis of hybrid solar energy-based waste heat recovery system using phase change materials**" to Solar Energy, Elsevier publications. (**Revision submitted**)
3. Submitted Manuscript titled, “Research progress on challenges and future perspectives of processing, microstructure, properties and post-treatment of advanced thermal barrier coatings” to the material research express, Publisher: IOP publications, Status- **Under review. Manuscript reference: MRX-127158**
4. submission entitled: "Developing Twin wire arc sprayed Aluminium coatings on AZ31B Magnesium Alloy by utilization of Design of Experiment and multi response optimization approach" for possible publication in International Journal on Interactive Design and Manufacturing (IJIDeM), Springer publications, ID: IJDM-D-23-00120
5. Submitted Manuscript titled “Experimental analysis of Conduction Heat Transfer performance of Electro-deposited Nickel-Zirconia composite Coatings” to Surface Topography: Metrology and Properties, Publisher: IOP publications, **Status- Under review.** Manuscript ID: STMP-102320
6. Submitted Manuscript titled, “Effect of APS process inputs on mechanical properties of LZ/YSZ thermal barrier- Design of experiment approach” to the Material testing **Status- Under review.**
7. submitted your manuscript entitled "Experimental investigations of v-shaped impellers on hydrodynamics of un-baffled stirred tank” for publication consideration in **Engineering Computations**, published by Emerald. Manuscript ID EC-02-2023-0049
8. Submitted Manuscript titled, Experimental investigation on the effect of scandium interlayer friction stir welding on the aluminium alloys, AIP Conference Proceedings, Publisher: American Institute of Physics.

Patent Published:

1. Design Patent Accepted and granted, in Intellectual Property India “**SAMPLING DEVICE FOR TOXIC ISOCYANATE VAPOUR**”. Journal No is 51/2022 and Journal Date is 31/05/2023, Design Number 381985-001 , class- 10-04 Date of Registration 21/03/2023
2. Design Patent Accepted and granted, in Intellectual Property India “**Prosthetic Leg**”. Journal No is 51/2022 and Journal Date is 23/12/2022, Design Number 370381-001 Class 24-03, Date of Registration 05/09/2022.
3. Patent filed in Intellectual Property India. “**WAPURE: Nanotechnology Based Water Purification System**” Filing No: 202241035488. The Patent Office Journal No. 25/2022 Dated 24/06/2022. Application No.202241035488 A. Status: Published.

Book Published:

1. Mathanbabu, Pandian, Davis Hans S J, Analysis of Shell and tube heat exchanger, Publisher: LAP LAMBERT Academic Publishing, Germany. **ISBN: 978-6204746258, 2022.**

Amazon Purchase link: https://www.amazon.com/Analysis-Shell-Tube-Heat-Exchanger/dp/6204746251/ref=sr_1_1?crid=1ZO2QZP100B0H&keywords=Analysis+of+Shell+and+

[tube+heat+exchanger&qid=1655807462&srefix=analysis+of+shell+and+tube+heat+exchanger%2Caps%2C445&sr=8-1](https://www.amazon.com/Analysis-of-shell-and-tube-heat-exchanger%2Caps%2C445&sr=8-1)

2. **Mathanbabu M.** Ashokkumar M. Barathiraja R., **Analysis of Gas Turbine Blade.** Publisher: LAP LAMBERT Academic Publishing, Germany. **ISBN:** 978-6203465358, 2021.
Amazon Purchase link: https://www.amazon.com/Analysis-Gas-Turbine-Blades-Structural/dp/6203465356/ref=sr_1_6?dchild=1&keywords=mathanbabu&qid=1628171902&s=books&sr=1-6
3. Mathivanan K, **Mathanbabu M,** Ashokkumar M, **Plasma Spray Coatings,** and Publisher: LAP LAMBERT Academic Publishing, Germany. **ISBN:** 978-6203581270, 2021.
Amazon Purchase link: https://www.amazon.com/Plasma-Spray-Coatings-Enhancing-Resistance/dp/6203581275/ref=sr_1_5?dchild=1&keywords=mathanbabu&qid=1628172076&s=books&sr=1-5
4. Ashokkumar M **Mathanbabu M** Barathiraja R, **Alternate fuels,** Publisher: LAP LAMBERT Academic Publishing, Germany. **ISBN:** 978-6203463378, 2021.
Amazon Purchase link: https://www.amazon.com/Alternate-fuels-Ashokkumar-M/dp/620346337X/ref=sr_1_4?dchild=1&keywords=mathanbabu&qid=1628172076&s=books&sr=1-4
5. Thirumalaikumarasamy D, Ashokkumar M **Mathanbabu M,** **Flame Spray Coatings,** Publisher: LAP LAMBERT Academic Publishing, Germany. **ISBN:** 978-620-5-49597-1
Purchase link: <https://www.morebooks.de/shop-ui/shop/product/978-620-5-49597-1>

Conference with Proceedings:

1. **M. Mathanbabu,** D. Thirumalaikumarasamy, M. Tamilselvi, Somasurendr kumar, P. Thirumal, attended and presented technical paper titled “**Investigation on the thermal cycling behavior of composite LZ/YSZ based thermal barrier coatings for gas turbine applications**” on 1st National Thermal Spray Conference organized by The Indian Thermal Spray Association (iTSA) during February 18th-19th 2023, , **Jodhpur, India.**
2. D. Thirumalaikumarasamy, **M. Mathanbabu,** M. Tamilselvi, Somasurendr kumar, attended and presented technical paper titled “**The effect of the radiative properties of composite LZ/YSZ based thermal barrier coatings**” on 1st National Thermal Spray Conference organized by The Indian Thermal Spray Association (iTSA) during February 18th-19th 2023, , Jodhpur, India.
3. **M. Mathanbabu,** D.Thirumalaikumarasamy, P.Thirumal, M. Tamilselvi, Somasurendra kumar attended and presented technical paper titled “**Optimization of plasma spraying parameters to maximize the optimal higher level of porosity of lanthanum zirconate based composite thermal barrier coatings**” on “**National welding Seminar-WELD INDIA**” during 19th to 21nd January 2023 organized by the Indian institute of welding, Chennai chapter at Chennai trade Centre, Chennai.
4. **M. Mathanbabu,** D.Thirumalaikumarasamy, P.Thirumal, M. Tamilselvi, Somasurendra kumar, paper presented titled “**Challenges and future perspectives of processing, microstructure, properties and post treatments of thermal barrier coatings**” at International Conference & Expo on Corrosion (CORCON-2022) during 19th to 22nd September 2022 at Udaipur, Rajasthan organized by AMPP India Chapter (Formerly NACE International India Section), Mumbai, India.

5. Presented technical Paper entitled , “**Developing empirical relationships to evaluation of porosity and hardness for Plasma sprayed Lanthanum Zirconate based Thermal Barrier Coatings using Response Surface Methodology**” in international conference entitled “International Virtual Conference on Materials Science and Technology (ICMAST-2022)” organized by Department of Physics, Kandaswami Kandari’s College, Velur, Namakkal in collaboration with Indian Spectro Physics Association (ISPA) between 15 and 16 March 2022 through online platform.
6. **M.MATHANBABU**, Presented technical Paper and participated, “**Physical properties of Composite Lanthanum Zirconate Based Thermal/Environmental Barrier Coatings for Defense Application**” in the Virtual International Conference on functional Materials And Its Application Aspects (ICFMAA – 2021) by the Department of Physics, Saveetha School of Engineering, Chennai, **Proceeding Abstract ID: OP-36, Page No. 38** on 29th & 30th, October 2021.
7. **M.MATHANBABU**, participated, “**Optimizing Low Pressure Cold Spray Process Parameter to attain minimum porosity and Maximum Hardness In Metal Matrix Composite Coatings On AZ31B Magnesium Alloy By RSM**” in the Virtual International Conference on functional Materials And Its Application Aspects (ICFMAA – 2021) by the Department of Physics, Saveetha School of Engineering, Chennai, **Proceeding Abstract ID: OP-51, Page No. 48** on 29th & 30th, October 2021.
8. **M.MATHANBABU**, participated, “**Developing an Empirical Relationship to predict porosity and corrosion rate of plasma spray coated AZ91D Magnesium alloy**” in the Virtual International Conference on functional Materials and Its Application Aspects (ICFMAA – 2021) by the Department of Physics, Saveetha School of Engineering, Chennai, **Proceeding Abstract ID: OP-41, Page No. 41** on 29th & 30th, October 2021.
9. **M.MATHANBABU**, participated, “**Theoretical Investigation on Post Treatments of Pulse Electro Deposition Coatings on Magnesium Alloys**” in the Virtual International Conference on functional Materials and Its Application Aspects (ICFMAA – 2021) by the Department of Physics, Saveetha School of Engineering, Chennai, **Proceeding Abstract ID: OP-12, Page No. 22** on 29th & 30th, October 2021.
10. **M.MATHANBABU**, presented a technical Paper, **Investigation on Synthesis, spheroidization and spray deposition of plasma sprayed lanthanum zirconate thermal barrier coatings**” International Virtual Conference on Materials Research (IVCMR-21) Organized by Department of Physics, Easwari Engineering College (Autonomous), Ramapuram, Chennai, India. **ISBN 978 - 81 - 89 843 - 18 – 2., Abstract ID: MR 019, Page No. 20**, August 26-27, 2021.
11. **M.MATHANBABU**, presented a technical Paper, **Theoretical Investigation of Advanced Versatile Applications of Cold Spray Coatings in Additive Manufacturing and Repair of Components**” International Virtual Conference on Materials Research (IVCMR-21) Organized by Department of Physics, Easwari Engineering College (Autonomous), Ramapuram, Chennai, India. **ISBN 978 - 81 - 89 843 - 18 – 2., Abstract ID: MR 006, Page No. 07**, August 26-27, 2021
12. **M.MATHANBABU**, presented a technical Paper, **Influence of various size and volume fraction of Suspended particles on the Rheological properties of Shear Thickening Fluids for Soft Armour Applications**” International Virtual Conference on Materials Research (IVCMR-21) Organized by Department of Physics, Easwari Engineering College (Autonomous), Ramapuram, Chennai, India. **ISBN 978 - 81 - 89 843 - 18 – 2. Abstract ID: MR 020, Page No. 21.**, August 26-27, 2021
13. **M.MATHANBABU**, Presented a technical Paper, **Prediction of corrosion rate of AZ91D magnesium**

- alloy in NaCl solution under salt fog environment”** International Virtual Conference on Materials Research (IVCMR-21), Organized by Department of Physics, Easwari Engineering College (Autonomous), Ramapuram, Chennai, India. ISBN 978 - 81 - 89 843 - 18 – 2. Abstract ID: MR 022, Page No. 23., August 26-27, 2021.
14. **M.MATHANBABU**, presented a technical Paper, “**A Theoretical Study of Post treatments on Supersonic Cold Spray Deposit: A Review**”, International Conference on Emerging Approaches in Mechanical & Automobile Engineering – ICEAMAE’21 Organized by Departments of Mechanical and Automobile Engineering, Arasu Engineering College, Kumbakonam, Tamil Nadu, India. Paper ID: ICEAMAE125, Page No.97, 17 & 18 March,2021.
 15. **M.MATHANBABU**, presented a technical Paper, **An Investigation on Physical properties of Yttrium Stabilized Zirconia Based Thermal Barrier Coatings**, Proceedings of The International Virtual Conference On Physics Of Emerging Materials And Molecules (IVCPMM - 2021) organized by India Sri Vidya Mandir Arts And Science College, Krishnagiri, Tamilnadu, India collaboration with Indian Spectro physics Association (ISPA), Chennai, Abstract No: A-22, Page No 34, 4 -5, March 2021.
 16. **M.MATHANBABU**, Presented a technical Paper, “**Investigation of Characterization on Nano-Structured Thermal Barrier Coatings for Aerospace Applications**”, Proceedings of the International Virtual Conference on Advances in Nano science and Nanotechnology (ICANN 2021) Sponsored by Tamil Nadu State Council for Science and Technology (TNSCST), Organized By Department of Chemistry, School of Science & Humanities, Bharath Institute of Science and Technology (BIST) Bharath Institute of Higher Education and Research (BIHER) Chennai, Tamil Nadu, India, Abstract No: A-040, Page No 47, 5 – 6 February 2021.
 17. **M.MATHANBABU**, Presented a technical Paper, “**Recent Trends in the Nanotechnology and its Applications in Thermal Energy Storage System: A Review**”, Proceedings of the International Virtual Conference on Advances in Nanoscience and Nanotechnology (ICANN 2021), Sponsored by Tamil Nadu State Council for Science and Technology (TNSCST), Organized By Department of Chemistry, School of Science & Humanities, Bharath Institute of Science and Technology (BIST) Bharath Institute of Higher Education and Research (BIHER) Chennai, Tamil Nadu, India. Abstract No: A-015, Page No 22, 5 – 6 February 2021.
 18. **M.MATHANBABU**, Presented a technical Paper, “**An Investigation on the Metal Matrix Composite Deposits for Aerospace Applications**”, Proceedings of the International Virtual Conference on Advances in Nanoscience and Nanotechnology (ICANN 2021) Sponsored by Tamil Nadu State Council for Science and Technology (TNSCST), Organized By Department of Chemistry, School of Science & Humanities, Bharath Institute of Science and Technology (BIST) Bharath Institute of Higher Education and Research (BIHER) Chennai, Tamil Nadu, India, Abstract No: A-022, Page No 29, 5 – 6 February 2021.

Paper Presented/ Participated in Conference:

1. **Mathanbabu M**, has presented a Paper (oral) Entitled, **Investigation on Thermo-Mechanical Characterization of Novel Materials for Thermal Barrier Coatings** at the “International E-Conference on Advanced Research in Materials Science” held on 24 to 26 March 2021 organized by the Department of Physics, Manonmaniam Sundaranar University – 627012, Tirunelveli, Tamil Nadu.
2. **Mathanbabu M**, has presented a Paper (oral) Entitled, **Experimental Investigation to Evaluate the Electrochemical Behavior of Friction Stir Welded AZ31B Mg Alloy Under NaCl Environment** at the “International E-Conference on Advanced Research in Materials Science” held on 24 to 26 March 2021 organized by the Department of Physics Manonmaniam Sundaranar University – 627012,

Tirunelveli, Tamil Nadu.

3. **M.MATHANBABU** presented a technical Paper, “**Study on Thermal, Mechanical, Microstructural Properties and Durability Analyses of Lanthanum Zirconate based Thermal barrier coatings: A review**” in International conference on Materials, Manufacturing and Modelling (ICMMM-2021) Jointly organized by University of Utah-USA, Liverpool John Moores University-UK and University of Tours- France to be held at Vellore Institute of Technology-Vellore on 19-21st March 2021.
4. **M.MATHANBABU** presented a technical Paper, “**Performance Estimation and Redesign of Horizontal Axis Wind Turbine (HAWT) Blade.**” in International conference on Materials, Manufacturing and Modelling (ICMMM-2021) Jointly organized by University of Utah-USA, Liverpool John Moores University-UK and University of Tours- France to be held at Vellore Institute of Technology-Vellore on 19-21st March 2021.
5. **M.MATHANBABU** presented a technical Paper, “**Investigation of Al 2O3-water Nanofluid Flow through the Circular Tube.**” in International conference on Materials, Manufacturing and Modelling (ICMMM-2021) Jointly organized by University of Utah-USA, Liverpool John Moores University-UK and University of Tours- France to be held at Vellore Institute of Technology-Vellore on 19-21st March 2021.
6. **M.MATHANBABU**, presented a technical Paper, **Microstructure Design and thermal durability of Novel Thermal Barrier Coatings**, National E-Conference on Advanced Research in Materials Science held on 22nd and 23rd February 2021 organized by Department of Physics, Kamaraj College, Thoothukudi, Tamilnadu.
7. **Mathanbabu**, participated in the **International conference (Virtual) on Geospatial Technology for Sustainable Development** held on 5th and 6th February 2021 organized by University of Mysore and jointly organized by International Geographical Union (IGU).
8. **M.MATHANBABU**, Delivered oral presentation entitled, **A study on Future Gas Turbine Application of Lanthanum Zirconate based Thermal Barrier Coatings** under the Theme of “**Frontier area of Research-Engineering Science, in Young Scientist Conference (YSC)** organized during the 22nd to 24th December 2020 as a part of India International Science Festival-2020 by the Ministry of Science and Technology, Ministry of Earth science and Ministry of Health and Family welfare, Government of India in Collaboration with Vijnana Bharati (VIBHA).
9. **M.MATHANBABU**, participated in the International Conference on Advanced Materials for Energy and Environment Applications ICAMEEA-2020) organized by Birla Institute of Science and Technology (BIST), Birla Institute of higher education and research sponsored by TNSCST and Association with INHA University, South Korea and RSC South India Chapter during 3-4 December 2020.
10. **M.Mathanbabu**, presented a technical Paper “**Design and Analysis of Latent heat storage system for hybrid Solar Energy**” on International conference on science, Technology, Engineering and Management (ICSTEM’20) conducted by KIT-Kalaignar karunanidhi Institute of Technology, Coimbatore.
11. **M.MATHANBABU** Presented a paper titled, **An Investigation on Future Development of Thermal spray Technology: A Technology Review** in the National Conference on Recent Innovations in Welding and Surface Engineering (RIWASE-2019) held from 26 to 27, July 2019 organized by Department of Mechanical Engineering, Government College of Engineering, Bargur.
12. **M.Mathanbabu**, presented a technical Paper titled ‘**Design and analysis of GAS turbine blade with cooling using FEA**” International Conference on Recent Innovation in Engineering, Technology and Management (ICRIETM-2019) conducted Nandha Engineering College, Erode HELD ON 22nd March 2019.

13. **M.Mathanbabu**, Presented a technical Paper titled “**Design and analysis of GAS turbine blade with cooling using FEA**” International Conference on Advancement in Science, Engineering & Technology (ICASET’19), conducted by M.P.Nachimuthu M.Jaganathan Engineering College, Erode 16th March 2019.
14. **M.Mathanbabu**, Presented a technical Paper titled ‘**Design and Transient Thermal Analysis of Ceramic Coated Diesel Engine Piston (MgZro3 & NiCrAl)**’ International Conference on Advancement in Science, Engineering & Technology (ICASET’19), conducted by M.P.Nachimuthu M.Jaganathan Engineering College, Erode. 16th March 2019.
15. **M.Mathanbabu**, Presented a technical Paper titled “**Experimental Investigation of cryogenic Treatment on machine Tools (Drill bit)**” on “International Conference on Advancement in Science, Engineering & Technology (ICASET’18) conducted by M.P.Nachimuthu M.Jaganathan Engineering College, Erode on 28th March 2018.
16. **M.Mathanbabu**, presented a technical Paper titled “**Experimental Investigation of cryogenic Treatment on machine Tools (Drill bit)**” on “National Level Conference on Emerging Trends in Engineering Design & Manufacturing (ETEDM-2018)” conducted by Hindustan Institute of Technology, Coimbatore held on 22nd March 2018.
17. **M.Mathanbabu**, presented a technical Paper titled “Experimental and Stress analysis of Pipe routing” on “National Level Conference on Emerging Trends in Engineering Design & Manufacturing” (ETEDM-2018) conducted by Hindustan Institute of Technology, Coimbatore held on 22nd March 2018.
18. **M.Mathanbabu**, presented a technical Paper titled ‘**Design and Thermal Analysis of Ceramic Coated Diesel Engine Piston (MgZrO₃ & NiCrAl)**’ on International Conference on Advanced in Science, Engineering Research (ASER-2019), Page no 707-711, on 23rd March 2019 conducted by AL-Ameen Engineering College, Erode.
19. **M.Mathanbabu**, presented a technical Paper titled “Design and CFD Analysis of Helical Baffles Shell and Tube Heat Exchanger to Increase Rate of Heat Transfer” on “International Conference on Advanced Materials and Manufacturing (ICAMM2017)” on 10th March 2017, conducted by Cape Institute of Technology, Kanyakumari.
20. **M.Mathanbabu**, participated in the International Web Conference on Materials Science and its Technological Advancements, held on 22 September, 2021 Organized by the Department of Physics, Voorhees College, Vellore.

R&D and Consultancy Project Experience (Executed as a Team Member)

1. Modernization and Removal of obsolescence Rural (MODROB-Rural)- AICTE Grant
Total project cost: Rs. Rs.1566667 /-, **Duration:** 2 Years.
2. **Effect of Pore size, Shape and Distribution on the Performance of Lanthanum Zirconate based Thermal Barrier Coatings** – Defence Research Development Organization (DRDO- ER &IPR) Research Project.
Total project cost: Rs. 31,66,000/-, **Duration:** 2 Years.
3. Performance Evaluation of Cold Spray Metal Matrix Composite Coatings on AZ31B Magnesium Alloy by Friction Stir Processing- Department of Science and Technology (DST)- SERB Research Project.
Total project cost: Rs. 40,00,000/-, **Duration:** 2 Years.
4. Done design Part of the project, “**Hybrid Solar Concentrator Energy Storage Plant Using Nanostructured PCM for Industrial Applications**” for solar thermal research Laboratory (STRL) at PSG College of Technology, Coimbatore.
Total project cost: Rs. 1,00,000/.

Awards / Rewards / Credentials

1. Recognized as Reviewer of Part E: Journal of Process Mechanical Engineering, Sage Publisher.
2. Recognized as Reviewer of Materials today proceeding Journal from Elsevier Publisher.
3. Received **Bright Researcher Award 2019** for remarkable contribution in the field of Thermal Engineering from Green Thinkerz Society, India.
4. NSS State - Programme – Government Panchayat Union Primary School, Pandavarmangalam, Kovilpatti in the year 2010.
5. Presented a Technical Talk Discussed about “**Research impact on CAD Design**” for Profenaa Industrial Training Center, Coimbatore on 24.06.2020.
6. Serving as Technical Expert advisor for Profenaa Technologies, Coimbatore.

Membership

1. Lifetime Membership in Indian Society for Technical Education (ISTE) - Membership No: LM 128514.
2. Life member in International Association of Engineer (IAENG) - Membership No:246664
3. Member in International Association of Advanced Materials (IAAM) - Membership No 935101914632.
4. Associate member in Institute of research engineers and doctors (IRED)- Membership No:AM1010005845799.

Co- Curricular Activities

- Seminar/Workshop/Webinar invited talk: 3
- FDP/STTP/Training Program Attended: 21
- Seminar/Workshop/Webinar Conducted: 5
- Workshop Attended: 7
- Seminar//Webinar Attended: 12

Invited Talk/Guest lecture

1. Delivered invited talk on Department of Science and Technology (DST) – Science and Engineering Research Board (SERB) Sponsored two days’ workshop on “**future perspective in cold spray process and its applications**” 5th & 6th December 2022 Organized by Department of Mechanical Engineering Government College of Engineering Bargur.
2. Delivered invited talk on “**Design thinking, critical thinking and innovation design**” organized by Department of Aeronautical engineering hosted by M.A.M. School of Engineering, Tiruchi on 04/12/2021.
3. Delivered invited talk on “**Problem Solving and Ideation Workshop**” organized by Department of Mechanical and Automation technology hosted by Agni College of Technology, Chennai on 03/12/2022.

Faulty Development Training Programme /Short term Training programmes attended

1. Attended one week training hands-on Training Program on R&D Equipment on “**Advanced analytical testing for materials characterization**” under Synergistic Training Program Utilizing the Scientific and

- Technological Infrastructure (STUTI) funded by DST Govt. of India and organized by **National Institute of Technology, Trichy** during 21st to 27th June 2023.
2. Attended and completed course on “Government official training on Introductory course on **3D Printing/Additive Manufacturing & Its applications**” organized by National Institute of Electronics & Information Technology (NIELIT) from 10/Nov/2022 to 23/Nov/2022 (40 hours).
 3. Participated & completed successfully online Five days Faculty Development programme on “**Application of Artificial Intelligence and machine Learning in mechanical Engineering**” from 04.10.2021 to 08.10.2021 at SRM Institute of Science and Technology, Vadapalani campus, Chennai.
 4. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “**Additive Manufacturing: From 3D Printing to the Factory Floor**” from 23/08/2021 to 27/08/2021 at **National Institute of Technology Srinagar**.
 5. Participated in a Five days Online Faculty Development Programme on “**Recent Trends in Materials and Manufacturing**” organized by Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore from 02nd August 2021 to 06th August 2021.
 6. Participated and completed all the assignments in One Week Online Faculty Development Program on “**Nanoscience and Nanotechnology- Current Perspectives**” jointly organized by the Department of Physics & Department of Mechanical Engineering, G. H. Raison College of Engineering, Nagpur in association with The Institution of Engineers (India), Nagpur Local Centre during 27th July to 1st August 2020.
 7. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “**The role of Additive Manufacturing in the Era of Industry 4.0**” from 2021-6-21 to 2021-6-25 at Chennai Institute of Technology, Chennai.
 8. Participated in a six days Online Faculty Development Programme on “**Recent Development in Materials, Manufacturing and Thermal Applications**” jointly organized by Centre for Materials Science and University-Industry Interaction Centre & Karpagam Academy of Higher Education from 07.06.2021 to 12.06.2021.
 9. Attended AICTE & ISTE Sponsored Refresher/ Induction Programme on **Outcome based Education-Phase III**” from 14th to 20th April 2021 (Six Days) Organized by Department of Mechanical engineering Government College of engineering, Bargur, Krishnagiri District, Tamilnadu.
 10. Attended AICTE & ISTE Sponsored Refresher/ Induction Programme on **Outcome based Education-Phase II**” from 24th to 30th March 2021(Six Days) Organized by Department of Mechanical engineering Government College of engineering, Bargur, Krishnagiri District, Tamilnadu.
 11. Attended AICTE Sponsored Online Short-Term Training programme on “**Hands on Training on MATLAB and Advanced optimization Techniques-Phase III**” from 15th to 20th February 2021 (Six Days) Organized by Department of Mechanical engineering Government College of engineering, Bargur, Krishnagiri District, Tamilnadu
 12. Attended AICTE Sponsored Online Short-Term Training programme on “**Hands on Training on MATLAB and Advanced optimization Techniques-Phase II**” from 18th to 23rd January 2021 (SixDays) Organized by Department of Mechanical engineering Government College of engineering, Bargur, Krishnagiri District, Tamilnadu.
 13. Attended AICTE Sponsored Online Short term Training programme on “**Hands on Training on MATLAB and Advanced optimization Techniques-Phase I**” from 21st to 26th December 2020 (Six Days) Organized by Department of Mechanical engineering Government College of engineering, Bargur, Krishnagiri District, Tamilnadu.

14. Attended AICTE & ISTE Sponsored Refresher/ Induction Programme on **Outcome based Education - Phase I**” from 28.12.2020 to 02.01.2021(Six Days) Organized by Department of Mechanical engineering, Government College of engineering, Bargur, Krishnagiri District, Tamilnadu.
15. Attended Online training Programme on **“Digital Tools for Writing, Authoring and Reviewing”** jointly organized by Ministry of Electronics and Information Technology, Electronics & ICT Academies, **MNIT, Jaipur, NIT Patna & IIT Guwahati** during 21st September and 2nd October 2020. This programme is endorsed by NBA/AICTE/UGC.
16. Completed Six Days online in Faculty Development Training Program on **Application of Thermal Engineering** on 8th June 2020 to 12th June 2020 organized by Kings engineering College, Chennai.
17. participated in a Three day Online Faculty Development Programme on **“Improving Your Research Visibility – Research Impact and Metrics”** jointly organized by Research and Development Cell and Internal Quality Assurance Cell and Vellalar College of Engineering, Erode from 11th May to 13th May 2020.
18. Participated Five days’ online course on **Stress Management** organized by AVS College of Arts and Science, Salem from 13.04.2020 to 17.04.2020.
19. Participated in Faculty Development Training Program on **“Engineering Thermodynamics”** at University College of Engineering, Kanchipuram Sponsored by Centre for Faculty Development, Anna University, Chennai from 18th June to 24th June 2018.
20. Participated in Five days Faculty Development Training Program on **“Research Paper writing on using Journalizing Tools”** at Aalim Mohammed sleigh College of Engineering, Chennai from 1st November 2018 to 5th November 2018.
21. Participated Five days Short Term Training Program on **“CAD/CAM”** Sponsored by AICTE at Department of Mechanical Engineering, College of Engineering, Anna University, Chennai from 02nd December 2019 to 06th December 2019.

Seminar/Workshop/Webinar Conducted

1. Attended two days National Virtual Workshop on **“National Virtual Workshop on Machine Learning: An Ice Breaker Between Materials Research and Data Science”** held during 12-13 April 2023 Organized by SSN Research Centre, SSN Institutions, Chennai-603110, Tamil Nadu, India in association with Indian Association for Crystal Growth (IACG), Chennai & Anand Memorial Trust, Hyderabad.
2. Organized as Member, AICTE & ISTE Sponsored Refresher/ Induction Programme on Outcome based Education-Phase I, II, III” (Each Phase- Six Days) Organized by Department of Mechanical engineering Government College of engineering, Bargur, Krishnagiri District, Tamilnadu.
3. Organized as Member, AICTE Sponsored Online Short term Training programme on **“Hands on Training on MATLAB and Advanced optimization Techniques-Phase I, II, III”** (Each Phase- Six Days) Organized by Department of Mechanical engineering Government College of engineering, Bargur, Krishnagiri District, Tamilnadu.
4. Organized as Co-ordinator National level workshop on **“Emerging trends in Electrical vehicle design”** Associated with Indian Society Technical Education (ISTE) and Nandha College of Technology, Erode on 14th February 2020.
5. Conducted as Co-ordinator on workshop with Hands on training to students Associated with Diagonal CADD and Nandha College of Technology, Erode from 25th August 2018 to 27th August 2018.

Workshop Attended

1. Participated one day workshop on “**Thermal spray technology and applications**” organized by department of Metallurgical and materials engineering, IIT, madras in association with Indian institute of metals, Chennai chapter, Indian thermal spray association and metallizing equipment company, Jodhpur on 26th October 2022 at **IIT madras**.
2. Participated in the DST-SERB sponsored one week online workshop on “**Statistical Techniques for Data analysis**” from 22.11.2021 to 26.11.2021 organized by Department of physics, Dr.B.R.Ambedkar National Institute of Technology, Jalandhar, **Punjab,India**.
3. Participated Two days’ Workshop on Effective way of writing Research Proposals and articles organized by SRM Institute of Science and Technology, Chennai held between 11th and 12th December 2020.
4. Participated TEQIP-III Sponsored one day Workshop on “E-Source for Teaching, Learning and Research” organized by GRD Memorial Library, PSG College of Technology, Coimbatore on 13th March 2020.
5. Participated in National Level Workshop On “Design Characteristics of Welding” organized by Profenaa Industrial Training Centre, Coimbatore on 11th August 2019.
6. Participated in National Level Workshop On “Intellectual property Rights& Innovations” organized by Research and Development Cell, Nandha College of technology, Erode held on 15th September 2017.
7. Participated in “WORKSHOP ON UNIGRAPHICS NX” conducted by CADD Centre, Madurai on 14th September 2014.

Seminar/ /Webinar Attended

1. participated in the national level webinar on “**3D PRINTING AND CAD/CAM**” conducted by Department of Mechanical Engineering, Nehru Institute of Engineering and Technology, Coimbatore on 08th July 2021.
2. Participated in a National Level Webinar on “**Research methodology**” on 29-06-2021 hosted by Department of Mechanical Engineering - Srinivasa Ramanujan Institute of Technology, Rotarypuram Village, BK Samudram Mandal, Anantapur District, Andhra Pradesh, India.
3. Participated in the Expert Webinar titled “**Digital Twin Driven Smart Manufacturing**”, Organized by the Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Sriperumbudur on 17th June, 2021.
4. participated in the webinar “**Nano fluids in Solar Energy Utilization**” Organized by Department of Mechanical Engineering, Francis Xavier Engineering College, Tirunelveli on 11th July 2020.
5. Attended webinar on “**Thermal Energy Management System**” on 06/07/2020 organized by the Department of Mechanical Engineering, FX Polytechnic College, Tirunelveli.
6. Participated in the webinar on “**Basic Author Workshop Research Article Writing & Reference Management Using Mendeley**” organized by the Faculty of Science, Annamalai University in collaboration with ELSEVIER on Monday, 22nd June 2020.
7. Participated in the Webinar on “**Solar Thermal Technologies**” jointly organized by National Institute of Solar Energy and Muhamed Sathak Engineering College, Kilakarai on 27.05.2020.
8. Participated in the Webinar on “**Industry 4.0**” organized by Chennai Institute of Technology, Chennai on 15th May,2020.
9. Participated in an online webinar series on Following topic “**How to prepare Technical paper, Automation Industry- Present & Future, Design thinking as a pedagogy, Fuel Cell**” conducted from 29.04.2020 to 02.05.2020.

10. Participated in the Webinar on “**Fundamentals of Strength of Materials**” organized by Chennai Institute of Technology, Chennai on 29th April, 2020.
11. Participated in an online webinar on “**How to Get Published in Scientific Journal: From Research to Publication**” on 27/04/2020 from hosted by MHRD - Institute Innovation Council - Sri Sai Ram Institute of Technology, Chennai, Tamilnadu.
12. Participated in National level Seminar on “**Computational Fluid Dynamics**” Organized by SAE INDIA and Nandha College of Technology, Erode on 1st April 2015.

International Collaborators

1. Dr. C. Ramachandran

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2. Dr. Tushar Sonar

Senior Research Scientist, Department of Welding Engineering,
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3. Dr. S. Rajkumar

Department of Mechanical Engineering, Faculty of Manufacturing,
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Reference

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2. Dr. A. Tamil Selvi

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6. Mr. M. Muthuraj

Founder and Managing Director
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Personal information

Date of Birth : 10th May, 1993
Gender : Male
Address : 1/9, West Street, Kilavipatti,
Kovilpatti Taluk, Thoothukudi District- 628502.
Languages known : Tamil, English

Declaration

I, **Mathanbabu. M**, hereby declare that the above furnished information is Authentic to the best of my knowledge and belief.

Place: Bargur

Yours truly,

Date: 10.07.2023

(Mathanbabu.M)