CURRICULUM VITAE

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**Objective:**

Aspiring for a challenging job where in my qualifications and acquired knowledge are put to best use in the organization and also providing me with an opportunity to grow professionally to my full potential, proving me as an asset to the organization**.**

 **Education Qualifications:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EDUCATIONAL QUALIFICATION | NAME OF THE INSTITUTION | BOARD/ UNIVERSITY | YEAR OF PASSING | AGGREGATE (%) |
| Doctor of Philosophy (Materials & ProductionEngineering) | Jawaharlal Nehru Technological University, Anantapur, A. P | Jawaharlal Nehru Technological University |  | 2023(Awarded) |
| Master of Technology (Production Engineering) | Sri Venkateshwara University College of Engineering, Tirupati. | Sri Venkateshwara University, Tirupati. | 2011-13 | 76.8**(Recipient of Gold Medal)** |
| Bachelor of Technology(Mechanical Engineering) | Jawaharlal Nehru Technological University Hyderabad, Telangana. | Sree Visvesvaraya Institute of Technology and Science, Mahbubnagar. | 2006-09 | 62.48 |
| Diploma (Mechanical Engineering) | State Board of Technical Education andTraining | E.S.C Govt. PolytechnicCollege, Nandyal. | 2003-06 | 62.38 |
| S.S.C | Board of Secondary Education, A. P | SSVP High School, Nandyal. | 2003 | 77 |

**Technical Skills:**

**Software :** Minitab, Design Expert, Origin-Pro, MS-office.

**Seminar/workshop/STTP/FDP:**

* Actively participated 10 online seminars.
* Actively participated 03 short time training programs.
* Actively participated 12 faculty development programs.
* Successfully completed 9 course era courses and one NPTEL courses on various engineering subjects.

**Total Teaching Experience: (10 Years****)**

|  |  |  |  |
| --- | --- | --- | --- |
| Name of the organization | Designation |  Working period | No. of years  |
| Prasad V Potluri Siddhartha Institute of Technology, Vijayawada, Andhra Pradesh | Assistant Professor | 2019-Till Date | 2 |
| Sri Venkateshwara College of Engineering & Technology (SVCET).,Chittoor, Andhra Pradesh | Teaching Assistant | 2016-2019 | 3 |
| Yogananda Institute of Technology & Science. Tirupati, Andhra Pradesh. | Assistant Professor | 2013-2016. | 3 |
| Sri Venkateshwara University College of Engineering (SVCE). Tirupati, Andhra Pradesh. | Teaching Assistant | 2011-2013 | 2 |
| Vaishnavi Institute of Technology & Science (VITS). Tirupati, Andhra Pradesh. | Assistant Professor | 2009-2011 | 2 |

**Doctoral Thesis:**  : **Mechanical and machinability behavior of A356-TiB2/TiC in-situ**

 **composites**.

**Project Description:** The project aims to synthesize a novel composite A356-TiB2/TiC In-situ composite material through flux assisted synthesis method the composite characterized through optical microscopy, SEM, XRD and EDAX. The mechanical properties were evaluated under ambient and elevated temperatures. The machinability behavior of composite was studied under turning and drilling processes.

**Master of Technology Thesis:** **Selection of optimal machining parameters in drilling of EN24 steel and mild steel under MQL.**

**Project Description:** This project aims to find the optimum drilling parameters under minimum quantity lubrication by using various coated tool on EN24 and Mild steel. The experimental results disclose the optimum parameters to reduce the production time and economy of machining processes.

**Bachelor of Technology Thesis:** **Design of pressure fed water injection for rocket jet cooling**.

**Project Description:** The project aims to design and fabricate pressure fed water injection system for launch pad of PSLV launching vehicle. The various components of the cooling system were designed as per the requirement of fluent supply to the launch pad. As per the design calculations, the cooling systems were fabricated and realized with the trial experimentation. The result of the project shows the flow rate of fluent required to cool the launch pad of PSLV is achieved through theoretical and practical analysis.

**Diploma Thesis:** **Performance of diesel engine with the blending of oils.**

 **Project Description:** The performance characteristics diesel engine was evaluated with the blending of various Bio-Diesels.

***International Journals publication:***

1. Ambreen Kalsoom, A. N Shankar, **Ismail Kakaravada,** Prakhar Jindal, VVK Lakshmi, S. Rajesh Kumar, Investigation of dynamic Properties of a three-dimensional printed thermoplastic composite beam containing controllable core under nonuniform magnetic field, Part-L: Journal of Materials: Design and application, **2021**.pp 1-9. **DOI: 10.1177/146442072.** *(****SCIE Indexed****)****.***
2. Xiaoran Zhang, Kantilal Pitambar Rane, **Ismail Kakaravada**, Mohammad Shahbaz, Research on vibration monitoring and fault diagnosis of rotating machinery based on IoT, Nonlinear Engineering, Modeling, and application. Vol. 5(6), **2021**. pp 245-254. **DOI: 10.1515/nleng-2021-0019.** (E**SCI Indexed**).
3. **Ismail. Kakaravada,** A. Mahamani, V. Pandurangadu, High-temperature tensile behavior of A356-TiB2/TiC in-situ composites, *Iranian Journal of Materials science and Engineering,* Vol 17, (1) 2020, pp 56-68**. DOI: 10.22068/ijmse.17.1.56***. (E****SCI Indexed****).*
4. **Ismail. Kakaravada**, A. Mahamani, V. Pandurangadu, Investigation on cutting forces, flank wear, and surface roughness in machining of the A356-TiB2/TiC in-situ composites, *International Journal of Materials Forming and Machining Processes,*5(2), **2018**, pp.45-77. **DOI: 10.4018/IJMFMP.2018070104. *(Scopus Indexed).***
5. **Ismail. Kakaravada**, A. Mahamani, V. Pandurangadu, Dry sliding wear behavior of A356- TiB2/TiC in-situ composites at ambient and elevated temperatures, *International Journal of Materials Engineering Innovation,* Vol 11, (2) **2020**, pp 145-162.**DOI:10.1504/IJMATEI.2020.106670** *(****Scopus Indexed****).*
6. Heruthunnisa. Shaik, **Ismail Kakaravada**, Optimization of thrust force, surface roughness and delamination in drilling of EN-24 steel using Taguchi based VIKOR-Entropy Method, *International Journal of Innovative Technology and Exploring Engineering, 8(2S2)*, **2018**, pp 3-8. **DOI: BS1999128218/19. *(Scopus Indexed).***
7. E. Kavitha, **Ismail Kakaravada,** M.R.S Satya Narayan*,* Modelling and fabrication of microcontroller-based speed control system in the hydro turbine. International journal of mechanical and production Engineering Research and Development (IJMPERD), Vol, 10(3), pp.1455-1462 **DOI:** [**IJMPERDJUN2020129**](https://doi.org/10.1088/1757-899X/390/1/012100)**. *(Scopus Indexed).***
8. D. Pradeep Sai Kumar, M. Balaji, **Ismail. Kakaravada,** Y. Bhargavi, optimization of single and multi-response characteristics in machining of mild steel and EN24 using Desirability function analysis (DFA), International Journal of Innovative Research in science Engineering and Technology, Vol. 5(6), 2016.pp 9180-9192. **DOI: 10.15680/IJIRSET.2016.0506075**. (**UGC Listed**)
9. A N Shankar, Apichit Maneengam, Rajesh Kumar Selvaraj, **Ismail Kakaravada,** Ananda Babu, Lavish Kumar Singh, and Nitesh Kumar. An Influence of functionally graded carbon nanotubes reinforcement on vibration response of honeycomb composite spherical sandwich shell structures, 2021.pp 1-16. **DOI: 10.1002/pc.26522** *(****SCIE Indexed****).*
10. Kurniya Paranita Kartika, **Ismail Kakaravada,** Abdussalam Ali Ahmed**.** Automatic load detector design to determine the strength of pedestrian bridges using load cell sensor based on Arduino. Indonesian Journal of electronics, Electromedical Engineering, and medical informatics. Vol. 4(1), 2022. pp 15-22. **DOI: 10.35882/ijeeemi. v4i1.3**. (**UGC Listed**)
11. Shuguang Zhang, Kode Srividya, **Ismail** **Kakaravada,** Dimitios A karras, Vishal Jagota, Inamul Hassan and Abdul Wahab Rahmani. A global optimization algorithm for an intelligent electromechanical control system with improved filling function, *Scientific Programming*. *(****SCIE Indexed****),* ***accepted for publication, 2022.***
12. **Ismail. Kakaravada,** A. Mahamani, V. Pandurangadu, Experimental investigation on thrust force, delamination, material removal rate and surface roughness in the drilling of A356-TiB2/TiC in-situ composites using different diameter drills, *Indian Journal of Engineering and Material Sciences, (****SCIE Indexed****),* ***accepted for publication, 2022.***
13. Ch. Polayya, Veeresh Kumar G.B, **Ismail Kakaravada,** Ravi Teja. S and Manoj Tripathi, Synthesis and mechanical properties of graphene nanoparticle reinforced aluminum alloy matrix composites, *Nanotechnology for Environmental Engineering.* **Scopus Indexed** ***accepted for publication, 2022.***

***International Conference publications.***

1. **Ismail. Kakaravada**, A. Mahamani, V. Pandurangadu, Turning studies on A356-TiB2/TiC in- situ reinforced composites, *Advances in Manufacturing Processes. Lecture Notes in Mechanical Engineering, Springer, Singapore*, **2019,** pp. 37-48**. DOI: 10.1007/978-981- 13-1724-8\_4**. ***(Scopus Indexed).***
2. **Ismail. Kakaravada**, A. Mahamani, V. Pandurangadu, Optimization of machining parameters using Entropy-VIKOR method in drilling of A356-TiB2/TiC in-situ composites, IOP Conference Series: *Materials Science and Engineering*, 390(1), 2018, 012099. **DOI: 10.1088/1757-899X/390/1/012099. *(Scopus Indexed).***
3. A. Mahamani, P. Kumar, **Ismail. Kakaravada,** S. Jawahar, T. Chiranjeevi Reddy, T. Vijay Sai, T. Venkata Phaneendra, V. Uday Shankar V. Gopichand, Mono and multi-response optimization of 3D printer parameters to attain improved hardness and surface roughness, *IOP Conference Series: Materials Science and Engineering,* 390(1), **2018**, 012100. **DOI:** [**10.1088/1757-899X/390/1/012100.**](https://doi.org/10.1088/1757-899X/390/1/012100) ***(Scopus Indexed).***
4. P. Sneha, A. Mahamani, **Ismail. Kakaravada**, Optimization of wire electric discharge machining parameters in machining of Ti-6Al-4V alloy, *Materials Today: Proceedings*, 5(2), **2018,** 6722-6727. **DOI: 10.1016/j.matpr.2017.11.330. *(Scopus Indexed).***
5. **Ismail. Kakaravada**, A. Mahamani, V. Pandurangadu, Optimization of machining parameters using Entropy-VIKOR method in drilling of A356-TiB2/TiC in-situ composites, IOP Conference Series: *Materials Science and Engineering*, 390(1), 2018, 012099. **DOI: 10.1088/1757-899X/390/1/012099. *(Scopus Indexed).***
6. K. Vijay Kumar**, Ismail Kakaravada,** Y Dilip Kumar, Design and analysis of multi-tool light agricultural vehicle, *Intelligent Manufacturing and Energy Sustainability smart innovation and energy system Springer Nature, Singapore*, **2021, pp 475-484. DOI: 10.10007/978-16-6428-3\_47. *(Scopus Indexed).***
7. **Ismail. Kakaravada**, A. Mahamani, V. Pandurangadu, Turning and drilling studies on aluminum matrix composite -A Review, *Global Journal of Engineering Science and Researchers*, 5(4), **2017, pp 46-51. ISSN 2348 – 8034 (Thomson Router Indexed).**

***Text Books authored for UG students*.**

* ***Ismail Kakaravada*., Fundamentals of Microelectromechanical systems (MEMS) and its application, *Scientific International Publishing House.* ISBN:978-93-5625-013-0**
* ***Ismail Kakaravada*., Modern Electric Vehicle Technology: The future towards Eco-friendly Technology, *Scientific International Publishing House.* ISBN: Awaiting.**

***National Patent filed:***

* *Title of Invention:* ***Design*** of novel rotary flow control valve for a gas turbine fuel
* Application Number: 202141050197A
* Date of filing :02/11/2021
* Publication Date :19/11/2021

**Administrative activities:**

* Acted as student mentor: Evaluate student Progress, Academics activity of students.
* Monthly Report coordinator for the Department of Mechanical Engineering.
* Industrial visit coordinator for the Department of Mechanical Engineering
* Member of ISO certification for the Department of Mechanical Engineering.
* Project Committee member for the Department of Mechanical Engineering.
* Active member in NBA, NAAC Accreditation committee (For UG course).
* Acted as Deputy Warden for Indian and foreign Nationals (SVCET).

**Personal details**

Father’s Name : Shri. K. Imamsaheb.

Date of Birth : 05 June 1987.

Gender : Male.

Marital Status : Married.

Nationality : Indian.

Religion : Muslim.

Languages : English, Hindi, Telugu.

Hobbies : Reading Books, Learning new software’s.

**References**

**Dr. K. L.Narayana**, (Author: Eng Drawing, Machine Drawing Text Books) Emeritus Professor,

Indian Institute of Technology,

H.NO.1-4-S2-46/401, Opp. Cambridge Public school, Balaji Colony, Tirupati-517502

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**Dr. V. Pandurangadu** , (Doctoral Degree Co-Supervisor) Rtd. Professor and Rector,

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Date: 25/07/2023.

Place: **Alamuru. (K. ISMAIL.**