

BIO - DATA

MEDAM INDRA REDDY^{M.Tech}

Assistant Professor,
Dept. of Mechanical Engineering,
S R K R Engineering College,
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1. Educational Qualifications :

Qualification	University/Board	Name of the College	Specialization	Year of Passing	Division/Class	% of Marks
X Class	SSC	Sri Saraswathi High School	-	2006	1 st CLASS	89
Intermediate	Intermediate	Sri Chaitanya Junior College	M. P. C	2008	1 st CLASS	94.3
UG	Andhra University, AP	S R K R Engg. College	Mechanical Engineering	2012	1 st CLASS	7.57 (CGPA)
PG	JNTUK, AP	QIS College of Engg. and Technology	Machine Design	2014	1 st CLASS with DESTINCTION	72
PhD	SRMIST, Kattankulathur	Pursuing (Since January 2019)				

2. Project/Thesis:

UG: Characterization of HSS (High Speed Steel) Cutting Tool Under Deep Cryogenic Treatment

PG: Dynamic Mechanical Analysis of Hemp Fiber Reinforced Polymer Matrix Composites

3. Research Interest:

- ✓ Nano Materials: Synthesis and Characterization.
- ✓ Nanomachining.
- ✓ Nanocomposites: Polymer, Metal, Ceramic and Carbon/Carbon.
- ✓ Hybrid polymer matrix nanocomposites.
- ✓ Hybrid metal matrix nanocomposites.
- ✓ Additive Manufacturing.

4. Teaching /Industry Experience:

S No	Designation	Organization	Period		Total Exp. Years and Months	Nature of Employment	Type of service Govt. Aided/ Un Aided/ Private/ recognized
			From	To			
1	Graduate Engineer Trainee	Sri Lalitha Cement Industries	01-05-2012	30-10-2012	6Months	Regular	Private
2	Assistant Professor	S R K R Engineering College	07-10-2013	Till Date	7Years 6Months	Regular	Private

5. **Total Experience:** Teaching - **8 Years 5 Months**

Industry - **6 Months**

6. Research Experience:

(a) Research Papers Published in Journals

1. R Thandaiah Prabu, S Parasuraman, Satyajeet Sahoo, TM Amirthalakshmi, S Ramesh, S Agnes Shifani, S Arockia Jayadhas, M Indra Reddy, Sami Al Obaid, Saleh Alfarraj, SS Kumar, "The Numerical Algorithms and Optimization Approach Used in Extracting the Parameters of the Single-Diode and Double-Diode Photovoltaic (PV) Models", International Journal of Photoenergy, 2022. DOI: <https://doi.org/10.1155/2022/5473266>
2. Ch. V. Subbarao, Y. Srinivasa Reddy, Vamsi Inturi and M. Indra Reddy, "Dynamic Mechanical Analysis of 3D Printed PETG Material", IOP Conference Series: Materials Science and Engineering 1057 (1), 012031, 2021. DOI: [10.1088/1757-899X/1057/1/012031](https://doi.org/10.1088/1757-899X/1057/1/012031)
3. M. Indra Reddy, M. Anil Kumar, Vamsi Inturi, "Experimental Investigation On The Mechanical Properties of American Agave And Glass Fiber Reinforced Polypropylene Composites", Trends in Manufacturing and Engineering Management, Springer Publishing, 381-391, 2020. DOI: [10.1007/978-981-15-4745-4_34](https://doi.org/10.1007/978-981-15-4745-4_34)
4. M. Indra Reddy, Ranjeet Kumar Sahu, M. Anil Kumar, Ch. Rama Bhadri Raju, "Study on Mechanical properties of jute/ Pineapple leaf fiber reinforced polymer (FRP) composite", AIP Conference Proceedings, 2142, 0700301-05, 2019, ISSN: 1551-7616. <https://doi.org/10.1063/1.5122422>
5. K. Durgashyam, M. Indra Reddy, A. Balakrishna, K. Satyanarayana "Experimental investigation on mechanical properties of PETG material processed by fused deposition

- modeling method” in *Materials Today: Proceedings* (Elsevier Publications), 18, 6, PP 2052-2059, 2019, ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2019.06.082>
6. P. Venkata Deepthi, K. Sita Rama Raju, M. Indra Reddy, “Dynamic mechanical analysis of banana, pineapple leaf and glass fibre reinforced hybrid polyester composites” in *Materials Today: Proceedings* (Elsevier Publications), Volume 18, Part 6, Pages 2114-2117, 2019, ISSN/ISBN NO: 2214-7853 <https://doi.org/10.1016/j.matpr.2019.06.484>
 7. M. Indra Reddy, P. Vijaya Kumar Raju, N. R. M. R Bhargava, “Experimental Investigation on the Mechanical and Thermal Properties of Sprouts Center Stem (Asian Palmyra) Fiber Reinforced Polymer Composites” in *Materials Today: Proceedings* (Elsevier Publications), 5, 2, PP 7808–7817, 2018. ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2017.11.460>
 8. M. Indra Reddy, U.R.Prasad Varma, I.Ajit Kumar, V.Manikanth, P.V.Kumar Raju, “Comparative Evaluation on Mechanical Properties of Jute, Pineapple leaf fiber and Glass fiber Reinforced Composites with Polyester and Epoxy Resin Matrices”, in *Materials Today: Proceedings* (Elsevier Publications), 5, 2, PP 5649–5654, 2018, ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2017.12.158>
 9. M. Indra Reddy, M. Anil Kumar, Ch. Rama Bhadri Raju, “Tensile and Flexural properties of Jute, Pineapple leaf and Glass Fiber Reinforced Polymer Matrix Hybrid Composites”, in *Materials Today: Proceedings* (Elsevier Publications), 5, 1, PP 458–462, 2018, ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2017.11.105>
 10. N. V Subba Raju, M. Indra Reddy, M. Anil Kumar, Dr. K. Ramji, “Study on Thermo physical properties of Hemp, Jute and Glass fiber reinforced polyester composites”, in *Materials Today: Proceedings* (Elsevier Publications), 5, 2, PP 5918–5924, 2018, ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2017.12.191>
 11. P. Vijaya Kumar Raju, M. Indra Reddy, N. Harsha, J. Babu Rao, N. R. M. R Bhargava, “Mechanical deformation behavior of aged Al-Cu alloys and innovative Al-Cu metal matrix composite fabricated using stir-casting technique”, in *Materials Today: Proceedings* (Elsevier Publications), 5, 2, PP 5845–5856, 2018, ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2017.12.182>
 12. P. Vijaya Kumar Raju, M. Indra Reddy, N. R. M. R Bhargava, “Aging behavior and barreling of Al-Cu alloys and Al-Cu composite solid cylinders during cold upsetting” in *Materials Today: Proceedings* (Elsevier Publications), Volume 5, Issue 2, Part 2, PP 8121-8130, 2018. <https://doi.org/10.1016/j.matpr.2017.11.499>
 13. P. Vijaya Kumar Raju, K. Anji Reddy, J. Babu Rao, N.R.M.R. Bhargava, M. Indra Reddy, “Study of Corrosion of Al-Cu Hypoeutectic Alloys and Al-Cu Composite Fabricated Using Stir Casting Technique”, in *Materials Today: Proceedings* (Elsevier Publications), 5, 1, PP 1776–1784, 2018, ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2017.11.275>

14. A. Balakrishna, M. Indra Reddy, A. S. P. Seshank, Ch. Raghuv eer, M. Anil Kumar, "Characterization of process parameters on Mechanical Properties of short and randomly oriented Agrostis (Bentgrass) fiber reinforced composite", in Materials Today: Proceedings (Elsevier Publications), Volume 5, Issue 12, Part 1, Pages 25766-25772, 2018, ISSN/ISBN NO: 2214-7853. <https://doi.org/10.1016/j.matpr.2018.06.568>
15. M. Indra Reddy, M. Anil Kumar, S. Anki Reddy, P. Vijaya Kumar Raju, "Thermo physical properties of Jute, Pineapple leaf and Glass fiber reinforced polyester hybrid composites", in Materials Today: Proceedings (Elsevier Publications), 5, PP 21055–21060, 2018. <https://doi.org/10.1016/j.matpr.2018.06.499>
16. A. Jaya Krishna Sai Ram, M. Anil Kumar, M. Indra Reddy "Dynamic Mechanical Analysis of Asian Palmyra Sprouts fiber Reinforced Epoxy Composites" in International Research Journal of Engineering and Technology (IRJET),5, 7, PP 183-187, 2018, ISSN/ISBN NO: 2395-0056.
17. M. Indra Reddy, P. Jaya Praksh, P. Vijay Kumar Raju, V. Manikanth, S. Rajesh, "Mechanical properties of short and randomly oriented Borassus Flabellifer (Asian Palmyra) Sprouts fiber reinforced epoxy composites" in International Journal of Advanced Materials Manufacturing & Characterization, 7, 2, PP 49-52, 2017, ISSN/ISBN NO: 2347-1891. <http://dx.doi.org/10.11127/ijammc2017.10.01>
18. M. Indra Reddy, Ch. Srinivas, M. Anil Kumar, V. Manikanth, "The Effect of Copper and Aluminium Foil on Mechanical Properties of Natural Fiber Reinforced Plastics" in International Journal of Advanced Materials Manufacturing & Characterization, 6, 2, PP 1-5, 2016, ISSN/ISBN NO: 2347-1891. <http://dx.doi.org/10.11127/ijammc2016.09.01>
19. M. Indra Reddy, P. Vijaya Kumar Raju, N. R. M. R Bhargava, "Study on Mechanical properties of Hemp-Jute-Glass fibre reinforced polyester composites" in Journal of Chemical and Pharmaceutical Sciences, 10, PP 1-5, 2016, ISSN/ISBN NO: 0974-2115.
20. M. Indra Reddy, "Smart Cities: A Literature Review" in BIOSPECTRA, 11, 2, PP 1-4, 2016, ISSN/ISBN NO: 0973-7057.
21. M. Indra Reddy, Dr. Y. Sessa Rao, A. S. P Seshank, Vamsi Inturi, "Characterization and performance evaluation of HSS cutting Tools under deep cryogenic treatment" in International Journal of Emerging Sciences, 5, 10, PP 13-19, 2015, ISSN/ISBN NO: 2222-4254.
22. Inturi Vamsi, Dr. C. V. Subba Rao, M. Indra Reddy, "Experimental Investigations on the Engine Performance and Characteristics of Compression Ignition (CI) Engine Using Dual Bio-Fuel Methyl Ester As Alternate Fuel With Exhaust Gas Recirculation" in International Journal of Engineering Research and Applications, 5, 4, PP 53-58, 2015, ISSN/ISBN NO: 2248-9622.

23. M. Indra Reddy, V Srinivasa Reddy, "Dynamic Mechanical Analysis of Hemp Fiber Reinforced Polymer Matrix Composites" in International Journal of Engineering Research and Technology, 3, 9, PP 410-415, 2014, ISSN/ISBN NO: 2278-0181.

(b) Research Papers Published in Conferences

1. P. Vijaya Kumar Raju, M. Indra Reddy, N. R. M. R Bhargava, Ch. Suseela "Mechanical Properties and Study of Corrosion of Al-Cu alloys and Al-Cu/Egg Shell particles as Hybrid Composite", ICEMRCI 2016.
2. M. Anil Kumar, Dr. P. Ramamurthy Raju, Dr. S. Rajesh, B. Srinivas and M. Indra Reddy, "Influence of Boron Carbide Reinforcement Content on Mechanical Properties of AMMC'S" in ICEEE 2016.
3. A. S. P Seshank, Dr. A. Balakrishna, M. Indra Reddy, "Implementation of web based concurrent engineering in product development" in CAE-2015, PP 382-389, Dec 2015.

(c) Workshops/STTP Attended:

S No	Name of the workshop/ STTP	Place	Period	
			From	To
1	Vibration Condition Monitoring and Control for Automobile and Industrial Applications	NIT Rourkela	20-12-2021	24-12-2021
2	Advanced Materials: Challenges and Opportunities Upcoming Years	BMSITM, Bengaluru	17-05-2021	21-05-2021
3	Machine Learning and its Applications	KL University, Vijayawada	14-12-2020	24-12-2020
4	Faculty development program on "Recent Developments in Mechanical Engineering"	KITS, Warangal	07-07-2020	11-07-2020
5	International Faculty Development Program on "Emerging Research Areas in	SRMIST, Chennai	05-06-2020	9-06-2020

	Engineering”			
6	Intrapersonal and Interpersonal Skills for Effective Classroom Communication and Documentation	SRKREC, Bhimavaram	23-04-2019	23-04-2019
7	Innovations in Materials and Manufacturing	SRKREC, Bhimavaram	01-03-2019	01-03-2019
8	Advanced Mechanical Micromachining Techniques for Miniaturization of Products and Processes	IIT Madras	14-01-2019	19-01-2019
9	Additive Manufacturing	SRKREC, Bhimavaram	13-07-2018	14-07-2018
10	Thermoelectric Material and its Applications	IISc, Bangalore	04-06-2018	08-06-2018
11	Industry- Academia Interaction Meet (India International Science Festival)	CSIR-SERC, Chennai	13-10-2017	16-10-2017
12	Solid Mechanics	IISc, Bangalore	01-05-2017	05-05-2017
13	Statistical Analysis with ‘R’	SRKREC, Bhimavaram	13-02-2017	18-02-2017
14	Geospatial Technologies	SRKREC, Bhimavaram	27-10-2016	28-10-2016
15	Materials and Processing for High Temperature Applications	IIT Roorkee	06-06-2016	10-06-2016
16	Advanced Concept of Quality Inspection and its Application in Fatigue and Fracture Mechanics	IIT Roorkee	18-04-2016	23-04-2016
17	Advances in Composites Materials	CIT, Coimbatore	04-01-2016	10-01-2016
18	Theoretical and Computational Fluid Dynamics	IIT Madras	23-11-2015	27-11-2015
19	Advanced Trends in Manufacturing	PITS, Ongole	16-10-2015	16-10-2015
20	Recent Trends in Mechanical Engineering	SRKREC, Bhimavaram	31-08-2015	31-08-2015

(d) Workshops Conducted

S No	Name of the workshop/ STTP	Place	Period	
			From	To

1	Scilab	SRKREC, Bhimavaram	2014-15
2	Sensor Guided Autonomous Robotics	SRKREC, Bhimavaram	2014-15
3	Automobile Design (RC Car)	SRKREC, Bhimavaram	2014-15
4	Computational Fluid Dynamics	SRKREC, Bhimavaram	2014-15
5	3D Printing	SRKREC, Bhimavaram	2014-15
6	Innovations in Materials and Manufacturing	SRKREC, Bhimavaram	01-03-2019

7. Strengths:

- Self Motivation.
- Able to learn very quickly and apply new skills to existing problems.
- Thorough understanding of the subject with ability to convey the same to the students.

8. Other Details if any: NIL

9. Personal Details:

- (a) Name of the Father : **M. Venkata Swami Reddy**
(b) Name of the Mother : **Subbulu**
(c) Address : **4-1080, Kotha Reddy Palem, Darsi-523247, Prakasam.**
(d) Gender : **Male**
(e) Marital Status : **Married**
(f) Nationality : **Indian**

Date: 21-03-2022

Place: Bhimavaram.



Signature of the Candidate