

Dr. KARUNA KUMAR G

Department : Mechanical Engineering
College : Gudlavalleru Engineering College
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Flat No:101, Murali Apartments, Eluru Road, GUDIVADA- 521301

ACADEMIC QUALIFICATIONS:

- ❖ Ph.D (2020) : Supply Chain Management (A U Visakhapatnam)
- ❖ M.Tech (2009) : Industrial Engineering & Management (NIT Calicut)
- ❖ B.Tech (2005) : Mechanical Engineering (JNTUH)

CERTIFICATIONS:

- ❖ Completed AICTE QIP PG certification programme in “Internet of Things” from Indian Institute Of Information Technology, Design & Manufacturing, Kurnool Institute in Andhra Pradesh in December, 2024.

ACADEMIC REWARDS / ACHIEVEMENTS:

- ❖ GATE 2007 Rank—3511 (All India Rank)

AREAS OF INTEREST:

- ❖ Industrial Engineering and Management, Production and Manufacturing.

PROFESSIONAL EXPERIENCE:

Designation	Institution	Period
Assistant Professor	Gudlavalleru Engineering College	01-06-2015 to Till Date.
Associate Professor	Welfare Institute of Science, Technology & Management	01-06-2014 to 30-04-2015
Assistant Professor	Welfare Institute of Science, Technology & Management	09-01-2013 to 31-05-2014
Assistant Professor	Koneru Lakshmaiah University	21-6-2010 to 12-12-2012.
Assistant Professor	Paladugu Parvathi Devi Collage of Engineering and Technology	14-7-2009 to 20-06-2010.
Assistant Professor	Sri Prakash College of Engineering	10-8 2005 To 31-05 2007

PROJECTS GUIDED

PhD	Post Graduation	Under Graduation
Nil	04	30

SPECIALIZATION:

- ❖ Supply Chain Management Industrial Engineering and Management, Production and Manufacturing.

❖ PAPERS PUBLISHED IN JOURNALS:

Journals: **National** : 01 **International** : 17

Conferences: **National** : 05 **International** : 10

❖ **Patents Granted** : 1

- ✓ Design Patent is granted with title “**AIR COOLED MOBILE STAND**” with design number 428201-001 dated: 26-08-2024 by The Patent Office, Government of India for 1.Seshadri Rao Gudlavalleru Engineering College 2. Dr. Gogineni Venkata Jagadeesh 3.Meda Hemalatha 4.Dr. G. Karuna Kumar 5.B.V.S. Raghu Vamsi 6.N. Premdasu.

- ✓ Design Patent is granted with title “**AN APLPHABETIC ROTATING TOY**” with Design No. 354790-001 dated: 13/12/2021 by The Patent Office, Government of India for Dr. Karuna Kumar.G, Assistant Professor, Department Of Mechanical Engineering, Seshadri Rao Gudlavalleru Engineering College, A.P., India, 521356, India 2. Agniparthi Pratyush, Assistant Profes Or, Department Of Mechanical Engineering, Lakireddy Bali Reddy College Of Engineering, Mylavaram, Ap, India, 521230, India 3. Bachali Rambabu Assistant Professor Department Of Mechanical Engineering Narasaraopeta Engineering Colleg, A.P. India. 522601, India 4. Anna Eswara Kumar, 29-922/1, 4th Line, Kothapeta, Vinukonda Guntur District, Andhra Pradesh, 522647, India in pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001

PAPERS PUBLISHED IN JOURNALS:

- ❖ Karuna Kumar Gonela , Chakkravarthy Vijayarman Effect of robotic weaving motion on mechanical andmicrostructural characteristics of wire arc additively manufactured NiTi shape memory alloy journal *International Journal of Materials Research*, <https://doi.org/10.1515/ijmr-2022-0272>
- ❖ Karuna Kumar G, P Muralidhar ASSORTMENT OF CONSTRUCTION PROJECT MANAGER USING PIPRECIA AND WSPLP METHODS, *Industrial Engineering Journal* ISSN: 0970-2555 Volume : 52, Issue 10, No. 3, October : 2023, pp 170-179 UGC CARE Group-1
- ❖ Dr.Karuna Kumar.G, Dr.B. Karuna Kumar, Seelam Krugon, S.Venkata Reddy, titled “An

Integrated Method Using Fuzzy AHP and TOPSIS Method for Supplier Selection in Recycled Lubricating Oil Industry for GSCM” *International Journal of Advanced Science and Technology Vol. 29, No. 03, (2020), pp. 12473 – 12480, SCOPUS Indexed Journal.*

- ❖ Karuna Kumar .G Dr. Nakka Satyanarayana Suresh Babu Y, titled “An Interspersed Approach using fuzzy AHP and Taguchi Loss Functions for Supplier Evaluation and Selection” *International Journal of Advanced Science and Technology Vol. 29, No. 6, (2020), pp. 4548 – 4555, SCOPUS Indexed Journal.*
- ❖ Karuna Kumar.G, Dr.B. Karuna Kumar, G S S Picasso, A.Veera Brahmam, titled “ Fuzzy optimization technique for the selection of reclaimer” *International Journal of Scientific Research in Engineering and Management (IJSREM),Volume: 04 Issue: 07 | July -2020 ISSN: 2582-3930,pp 1-9.*
- ❖ Karuna Kumar .G ,Ujwal Teja M , Dr. Nakka Satyanarayana , titled “A Comprehensive AHP and VIKOR Method for Reclaimer Selection in GSCM” *IJRAR19L1381 International Journal of Research and Analytical Reviews (IJRAR) www.ijrar.org, Volume 7, Issue 2, (E-ISSN 2348-1269, P- ISSN 2349-5138), IJRAR April 2020, pp 965-970.*
- ❖ Karuna Kumar .G, Dr. B. Karuna Kumar, Dr. Kesava Rao V. V. S , titled “An Integrated Method for the Quantity to be ordered to Supplier” *International Journal of Research in Advent Technology, Special Issue, March 2019,E-ISSN: 2321-9637:1-9*
- ❖ Karuna Kumar .G, M. Srinivasa Rao Dr. Kesava Rao V. V. S , titled “Fuzzy multi objective technique for the quantity to be ordered on supplier” *International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN(P): 2249-6890; ISSN(E): 2249-8001 Vol. 9, Issue 1, Feb 2019, 509-522 © TJPRC Pvt. Ltd., SCOPUS Indexed Journal .*
- ❖ Karuna Kumar .G, M. Srinivasa Rao Dr. Kesava Rao V. V. S , titled “ Fuzzy Optimization Technique in inventory cost minimization” *International Journal of Mechanical Engineering and Technology (IJMET) Volume 9, Issue 13, December 2018, pp. 1527–1536, ISSN Print: 0976-6340 and ISSN Online: 0976-6359, Scopus Indexed.*
- ❖ Karuna Kumar .G, M. Srinivasa Rao Dr. Kesava Rao V. V. S , titled “Supplier Selection and Order Allocation in Supply Chain” *ScienceDirect ,Available online at www.sciencedirect.com ,Materials Today: Proceedings 5 (2018) 12161–12173.*
- ❖ Karuna Kumar .G, Dr. Kesava Rao V. V. S , titled “Supplier Selection and Evaluation in Supply Chain Management”*International Journal of Science and Research (IJSR) ISSN:*

2319-7064 Index Copernicus Value (2016): 79.57 | Impact Factor (2017): 7.296, Volume 7 Issue 12, December 2018, 1042- 1050.

- ❖ G. Karuna Kumar, Ch. Maheswara Rao and V.V.S Kesava Rao, titled “Investigation of effect of speed, feed and depth of cut on multiple responses using vikor analysis” *International Journal of Modern Trends in Engineering and Research (IJMTER) Volume 05, Issue 2, 164-168 [February– 2018] ISSN (Online):2349–9745; ISSN (Print):2393-8161.*
- ❖ Karuna Kumar .G , Maheswara Rao Ch Dr. Kesava Rao V. V., titled “ application of WPCA& CQL methods in optimization of multiple responses” ,Materials Today: Proceedings, **Elsevier**, 2018 (Accepted for publication)
- ❖ Karuna Kumar .G , Dr. Kesava Rao V. V., titled ““*Supplier selection and order allocation in supply chain*”,Materials Today: Proceedings, **Elsevier**, 2018 *Materials Today: Proceedings 5 (2018) 12161–12173*
- ❖ Karuna Kumar .G , Lagadapati Murali krishna Dr. Kesava Rao V. V. S , titled Biological Extraction of Power From Bio Mass was published in *International Journal of Engineering Science Invention Research & Development*; Vol. III, Issue VIII, February 2017,www.ijesird.com, e-ISSN: 2349-6185 *ijesird*, Vol. III, Issue VIII, **February 2017**/ 452-456.
- ❖ Karuna Kumar.G, Dr.Y.V.S.S.S.V.Prasada Rao, titled "A Simulation Study And Analysis Of Job Release Policies In Scheduling A Dynamic Flexible Job Shop Production System" was published in *International Journal of Advanced Engineering Technology*, E-ISSN 0976-3945, Vol.III/ Issue I/January-March, 2012/259-263
- ❖ G.Karuna Kumar, Asst.Prof, P.Bhanu Krishna, K.V.Vamsi Krishna, M.Kuladeep, titled "The Importance of Transport and Logistics Services in Green Supply Chain Management" was published in *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* ISSN: 2278-3075, Volume-1, Issue-6, November 2012.
- ❖ G Karuna Kumar, S Hari Krishna Reddy, Shaik Nazeer Ahmed,titled“*Application of Cellular Manufacturing Concepts in an Automobile Workshop*”/ *International Journal of Engineering Research and Applications (IJERA)* ISSN: 2248-9622 www.ijera.com Vol. 2, Issue 6, November- December 2012, pp.1616-1619

PAPERS PUBLISHED IN CONFERENCES/WORKSHOPS:

a) National

Papers Title:-

- ❖ *Analysis of part scheduling and tool sharing decisions in a FMS*
- ❖ *Operation addition to reduce rejection in cylinder liners manufacturing*
- ❖ *The impact of vehicles in transport and logistics service in GrSCM.*

ISBN:978-93-81354-46-9.

b) International

- ❖ Presented a paper in International Conference on Advanced Mechanical Engineering and Applications (ISBN: 978-93-92504-66-2) Title: Fabrication of metal matrix hybrid composites and mechanical properties of Al2024 alloy based with B4C and Al2O3, APRIL 15-16, 2024
- ❖ Presented a paper in International Conference on Advanced Mechanical Engineering and Applications (ISBN: 978-93-92504-66-2) Title: Optimization of Process Parameters of Al2024 Alloy-Based Hybrid Composites With B4c And Al2O3, APRIL 15-16, 2024
- ❖ Presented a paper in international conference in advances in material and manufacturing engineering **ICAMME-2018** at Acharya Nagarjuna University
- ❖ Presented a paper in international conference in **ICMMM 2017** at VIT University,
- ❖ Presented a paper in international conference in NIT Calicut.

Paper Title :- “*Effect Of Due Date Assignment Methods And Scheduling Rules On The Performance Of A Dynamic Job Shop System*”

LIST OF WORKSHOPS ORGANIZED:

- ❖ Two days “**National Level** workshop on **R C AIRCRAFT**” has been conducted on 27th and 28th February 2018 in Mechanical Engineering Department at Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh.
- ❖ Two days “**Robozest -2015 on robotics**” workshop has conducted from 15th September and 16th September 2015 at Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh.
- ❖ Two days “**Non-Destructive Testing**” workshop has been conducted during 5th & 6th january 2016 in Mechanical Engineering Department at Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh.
- ❖ Two days “**National Level Quadcopter**” workshop has been conducted on 18th and 19th February 2016 in Mechanical Engineering Department at Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh.

LIST OF WORKSHOPS /CONFERENCES /SEMINARS ATTENDED:

- ❖ Attended for the One-Week Online Faculty Development Programme on “Applications of Artificial Intelligence & Machine Learning in Mechanical Engineering”, organized by the Department of Mechanical Engineering, Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru during 06th – 10th March 2023.
- ❖ Attended Two day FDP on “**ADVANCES IN MANUFACTURING**” on 16-17th NOVEMBER, 2018. organized by Gudlavalleru Engineering College Gudlavalleru, Andhra Pradesh
- ❖ Attended Two day National workshop on “**EVOLUTIONARY COMPUTING & BIOLOGICALLY INSPIRED ALGORITHMS USING MATLAB**” on 6th and 7th January 2017 organized by Swarnandhra college of engineering & technology, narsapur.
- ❖ Attended Two day national convention and national seminar on “**INTELLIGENT SYSTEM FOR MORE CONNECTED WPRLD: INTERNET OF THINGS**” on 24-25th October, 2016. organized by the institution of engineers.
- ❖ Participated in one week faculty development program on “**MATLAB APPLICATIONS IN MECHANICAL ENGINEERING**” conducted by Gudlavalleru engineering college, Gudlavalleru on 7th-11th September 2015.
- ❖ Attended two days workshop on “**RECENT TRENDS IN MANUFACTURING TECHNOLOGY**” during 30th-31st July 2015 organized by TEQIP-II in VR Siddhartha engineering college.
- ❖ Attended one week workshop on “**TRAINING PROGRAM ON ANSYS**” during 22nd-27th June 2015 organized by Gudlavalleru engineering college, Gudlavalleru, Andhra Pradesh.
- ❖ Attended one day National workshop on “**COMPETITIVE MANUFACTURING MANAGEMENT**” on February 26, 2009 organized by National Institute of Technology Calicut.
- ❖ Attended Two day National workshop on “**ADVANCED OPTIMAZATION THROUGH INTELLIGENT TECHNIQUES: A RESEARCH PERSPECTIVE**” on 1st&2nd March 2012 organized by VIT University, Vellore.
- ❖ Participated in one day “Institutional training program on **Energy Conservation Opportunities**” conducted by PVP Siddhartha Institute of Technology on 14 September 2004.

CERTIFICATIONS:

- ❖ Certified in the Course “Work System Design” conducted by Indian Institute of Technology, Roorkee, in association with NPTEL.
- ❖ Certified in the Course ‘Data Science for Engineers’ conducted by Indian Institute of Technology, Madras, in association with NPTEL .
- ❖ Certified in the Course ‘Metal Additive Manufacturing’ conducted by Indian Institute of Technology Kanpur in association with NPTEL
- ❖ Certified in the Course “Operations Management” conducted by Indian Institute of Technology, Roorkee, in association with NPTEL.
- ❖ Certified in the Course “Operations and supply chain management” conducted by Indian Institute of Technology, Madras, in association with NPTEL .
- ❖ Certified in the Course “Metal Cutting and Machine Tools” conducted by Indian Institute of Technology, Kharagpur, in association with NPTEL
- ❖ Certified in the Course “Introduction To Industry 4.0 And Industrial Internet Of Things” conducted by Indian Institute of Technology, Kharagpur, in association with NPTEL
- ❖ Certified in the Course ‘Computer Integrated Manufacturing’ conducted by Indian Institute of Technology Kanpur in association with NPTEL

MEMBERSHIP IN PROFESSIONAL BODIES:

- ❖ MIE(I)
- ❖ SAEINDIA