Profile

Name : Dr. B. Karuna Kumar

Father's Name: Burra Narayana Murthy (Late)

Date of Birth : 16-08-1962

Designation : Professor of Mechanical Engineering and Principal

Organization : Seshadri Rao Gudlavalleru Engineering College

Seshadri Rao Knowledge Village

Gudlavalleru – 521 356, Krishna District, A.P.

Education Qualifications:

➤ Ph.D in Industrial Engineering from VITU, Vellore in 2016.

➤ M.Tech. in Advanced Manufacturing Systems from JNTU, Hyderabad in 2003.

➤ AMIE in Mechanical Engineering from The Institution of Engineers (India) in 1999.

➤ Diploma in Mechanical Engineering from SBTET, A.P. in 1982.

Ratification: Ratified as Professor of Mechanical Engineering at JNTUK, Kakinada.

Professional Experience: 41 Years 5 Months

No. of Online Courses Completed

Employing Organization	Position	Period
Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru	Principal	01-12-2023 to till date
	Director- (Academic Strengthening & Advancement)	01-12-2020 to 30-11-2023
	Vice Principal – Administration	29-11-2017 to 30-11-2020
	Dean-Planning & Monitoring	10-09-2008 to 28-11-2017
	Professor of Mechanical Engineering	01-08-2018 to 09-09-2008
	Associate Professor of Mechanical Engineering, Coordinator T&P	01-07-2004 to 31-07-2008
AANM & VVRSR Polytechnic, Gudlavalleru	Head of Mechanical Engineering Section	01-02-2001 to 30-06-2004
	Workshop Superintendent	01-01-1993 to 31-01-2001
	Demonstrator in Mechanical Engineering	27-09-1982 to 31-12-1992

: 31

No. of NPTEL Courses with a position in Toppers' Page : 11

No. of Papers Published in National/International Journals : 15

No. of Papers Presented in National/International Conferences : 12

No. of International Conferences Convened : 01

No. of Patent Grants : 02

No. of Patent Publications : **02**

Ph.D Guidance : **01 Scholar**

Book Publication:

A book published on "Design Thinking and Innovation: Creating Tomorrow, Today", Astitva Prakashan publications - Self Publishing Parijat Extension, Nehru Nagar, Bilaspur, ISBN Number: 978-93-5838-678-3. Dt. 30-09-2024.

Honors / Recognitions:

- > NPTEL Superstar
- NPTEL Domain Scholar in the Domains Product Design and Faculty Domain-Advanced
- ➤ NPTEL Discipline Star
- > NPTEL Evangelist NPTEL Motivated Learner NPTEL Believer
- ➤ **Best Paper Award** for the Research Outcome at the International Conference on E-Business and Supply Chain Competitiveness (ESBSCC-2016) held at IIT, Kharagpur in Feb-2016.
- First Rank in M.Tech.
- Note of Appreciation for developing Workshop Manual for Diploma Students of SBTET, A P
- ➤ Convenor, Board of Studies, JNTUK B.Tech. Agricultural Engineering from the Academic Year 2021 2024.

Journals:

a) National

➤ B. Karuna Kumar, D. Nagaraju, et al., published a paper on "Supply Chain Coordination Models: A Literature Review", in Indian Journal of Science and Technology, Vol. 9 (38), Oct – 2016.

b) International

- ➤ B. Karuna Kumar, D. Nagaraju, et al., published a paper on "Optimality of cycle time and inventory decisions in a coordinated and non-coordinated three-echelon supply chain under exponential price dependent demand" in International Journal on Logistics Systems and Management, Vol. 25, No. 2, 2016.
- ➤ B. Karuna Kumar, D Nagaraju, et. al., published a paper on "Three-echelon supply chain with centralized and decentralized inventory decisions under linear price dependent demand" in International Journal on Logistics Systems and Management, Vol. 23, No. 2, 2016.
- ▶ B. Karuna Kumar, D. Nagaraju, et.al., published a paper on "Joint two Echelon Inventory Model for Optimal Inventory Decisions and Shipment Policies under Non Linear Price Dependent Demand", in Journal Applied Mathematical Sciences, Vol. 8, 2014, No. 169, pp. 8417 8434.
- ➤ B. Karuna Kumar, D. Nagaraju, et.al., published a paper on "Modeling of Two 0 Echelon Inventory System under Exponential Price Dependent Demand" in ARPN Journal of Engineering and Applied Sciences, Vol. 9 No. 4, April 2014.
- > T. Nagarju, B. Karuna Kumar, K.Ch. Kishor Kumar published a paper on "An investigation of Effect of Mould Vibrations on Mechanical and Metallurgical properties of

- Aluminium 356 Casting" in Invention Journal of Research and Technology in Engineering and Management (IJRTEM) Vol. 1, Issue 7, ISSN: 2455-3689.
- ➤ "Supply Chain Coordination Models: A Literature Review" Indian Journal of Science and Technology, Vol. 9(38), ISSN: 0974-6486, Page Nos. 1-16.
- ➤ "Three-echelon supply chain with centralised and decentralised inventory decisions under linear price dependent demand" International Journal Logistics Systems and Management, Vol. 23, No. 2, page Nos. 231-254.
- ➤ "Three-echelon supply chain with centralised and decentralised inventory decisions under linear price dependent demand" International Journal Logistics Systems and Management, Vol. 23, No. 2, page Nos. 231-254.
- ➤ Prof. B. Karuna Kumar, Dr. K. Syam Sundar (April 2014) "Modeling of Two-Echelon Inventory System under Exponential Price Dependent Demand", ARPN Journal of Engineering and Applied Sciences Vol. 9, No. 4, ISSN 1819-6608, PP.405-414.

PAPERS PUBLISHED IN CONFERENCES:

a) National

- ➤ "Optimality of Inventory Decisions and Total Relevant Costs in a Coordinated Two-Level Supply Chain under Exponential Price Dependent Demand" at International conference on E- Business and Supply Chain Competitiveness (EBSCC 2016), held at the Indian Institute of Technology Kharagpur, February 12-14, 2016.
- ➤ Presented a Paper on "Multi- Echelon Inventory Systems for Supply Chain Coordination with Inflation under Price Dependent Demand" in the National conference on Innovations in Engineering & Technology (NCIET 2013) organized Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru, during 27.12.2013 to 28.12.2013.

b) International

- ➤ B. Karuna Kumar, D. Nagaraju, et al., presented a paper on "Coordinated Two –Echelon Inventory Model for Optimal Inventory and Shipment Decisions under Exponential Price Dependent Demand", in the International Conference on Materials Manufacturing and Modeling (ICMMM 2017).
- ➤ B. Karuna Kumar, D. Nagaraju, et.al., presented a paper on "Optimality of Inventory Decisions and Shipping Policies in a Two Echelon Inventory System under Quadratic Price Dependent Demand" in 12th Global Congress on Manufacturing and Management, GCMM 2014.
- ➤ Prof. B. Karuna Kumar and Dr. K. Syam Sundar have presented a paper on "Modeling of Two-Echelon Inventory System under Exponential Price Dependent Demand" in the International Conference on Trends in Product Life Cycle, Modeling, Simulation and Synthesis held during January 6th 8 th, 2014 at VIT University, Vellore.
- ➤ Presented a Paper on "Two Level Supply Chain Coordination Model Under Stock Dependent Demand" in the Conference "AIMS International Conference on Management" conducted by "Indian Institute of Management, Bangalore" during 6.1.2013 to 9.1.2013.
- ➤ Presented a Paper on "A Tool for Effective Teaching and Learning Experience" in National Conference, organized by ISTE AP-Section Fourth Annual Convention & Awards organized by Function Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru, during 21-11-2009 to 22-11-2009.
- ➤ Presented a Paper on "Co-ordination frame work for supply chain inventory alignment" at three day AICTE sponsored national seminar on Applications of Optimization Techniques in Mechnical Engineering held at Gudlavalleru Engineering College, Gudlavalleru during 18th 20th January, 2008

- ➤ Presented a Paper on "Shaping Student as a Professional" at National Conference on Best Practices in Engineering Education, organized by Engineering Education Foundation Society, Pune in Association with Singhad Technical Education Society's Engineering Institute, Pune, Maharashtra, conducted during 2nd to 3rd February, 2007.
- ➤ Presented a Paper on "Practice for Lively Teaching-Learning Experience" at National Conference on Best Practices in Engineering Education, organized by Engineering Education Foundation Society, Pune in Association with Singhad Technical Education Society's Engineering Institute, Pune, Maharashtra, conducted during 2nd to 3rd February, 2007.
- ➤ Presented a Paper on "Innovation Unique Practice for continuous Improvement" at National Conference on Best Practices in Engineering Education, organized by Engineering Education Foundation Society, Pune in Association with Singhad Technical Education Society's Engineering Institute, Pune, Maharashtra, conducted during 2nd to 3rd February, 2007.

LIST OF WORKSHOPS ORGANIZED:

- ➤ A Coordination Framework for Supply Chain Inventory Alignment in the work shop for Applications of Optimization Techniques in Mechanical Engineering conducted by Gudlavalleru Engineering College, Gudlavalleru, during 18th 20th Jan. 2008.
- ➤ Work shop on "A Tool for Effective Teaching and Learning Experience" in ISTE AP-Section Fourth Annual Convention & Awards Function organized by Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru During 21st – 22nd November, 2009

LIST OF WORKSHOPS / CONFERENCES /SEMINARS ATTENDED:

- ➤ Attended Two Day Faculty Development Program on "Advances in Manufacturing", organized by the Department of Mechanical, Gudlavalleru Engineering College, Gudlavalleru during 16th 17th November 2018.
- ➤ Attended One Refresher Course on "Computational Fluid Dynamics", organized by AICTE ISTE, and Department of Mechanical, Gudlavalleru Engineering College, Gudlavalleru during 18th 23rd June 2018.
- ➤ Attended Two Day Training Program on "MATLAB, Simulink and Related Tool Boxes", organized by Capricot Technologies Pvt. Ltd. in Gudlavalleru Engineering College, Gudlavalleru during 8th 9th February 2018.
- Attended one week faculty training program on "MATLAB Applications in Mechanical Engineering", organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru during 7th to 11th September, 2015.
- ➤ Attended One week workshop on "Training Program on ANSYS", organized by the Departments of Mechanical and Civil Engineering, Gudlavalleru Engineering College, Gudlavalleru during 22nd to 27th June, 2015.
- ➤ Participated in a 2 day workshop on "Recent Trends in Manufacturing Processes", organized by Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru during 27th 28th June, 2014.
- Attended two week workshop on "Fluid Mechanics" organized in association with ISTE & IIT Kharagpur during 20.05.2014 to 30.05.2014.
- ➤ Attended two week workshop on "Engineering Mechanics" organized in association with ISTE & IIT Bombay during 26.11.2013 to 07.12.2013.
- ➤ Participated in one Day (18-2-2013) Workshop on "Thermodynamics Solution and Practice using MATLAB", organised by Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru.

- ➤ Participated in one Day (30.9.2011) Workshop on" Recent Trends in Nanotechnology", organised PVPSIT, Vijayawada
- ➤ Participated in two Day (8.7.2011 to 9.7.2011) National Seminar of "Applications of Finite Element Methods in Engineering" organised by GEC, Gudlavalleru
- ➤ Participated in two day (5.11.2011 to 6.11.2011) work shop on "The Best International Practices in Production" organized by The Institution of Engineers (India) Vijayawada Local Center.
- ➤ Participated in one Day (23.10.2010) workshop One day Workshop on "Current Trends in Biofuels" organised by GEC, Gudlavalleru.
- ➤ Participated in four Day (26-6-2008 to 30-06-2008) Workshop on (i) Effective Teaching; Cooperative Learning; Outcomes Based Education; quality and Accreditation and (ii) Preparation for Indian's Membership of the Washington Accord as part of the Indo US Engineering Faculty Leadership Institute organised by Global Education Centre of Infosys Technologies, Mysore.
- ➤ Participated in two Day (15-11-2007 to 17-11- 2007) National Workshop on "soft skills" organised by CRR College of Engineering, Eluru in association with TCS.
- Attended Two Day Workshop on "Robotics & Automation" organized by Gudlavalleru Engineering College, Gudlavallerru during 09-02-2007 to 10-02-2007.
- ➤ Participated in International Conference "Logistics and Supply Chain Management" held at PSG College of Technology, Coimbatore during 2-4 August, 2006.
- ➤ Attended to workshop on "Emerging Trends in campus selections" organized by CIT, Tumkur during 28th Oct, 2005 to 29th Oct, 2005.
- ➤ Attended to International Conference on Logistics and Supply Chain Management organized by PSG College of Technology, Coimbatore during 3-08-2004 to 5-08-2004.
- ➤ Participated in "SLS and SLA" Different Technologies for different applications, National Conference in State of Art of Mechanical Technologies, 2004, JNTUCE, Kukatpally Hyderabad on 29th & 30th June 2004.
- ➤ Participated in "Rapid Prototyping –What, Why and How?", National Conference in recent developments in Mechanical Engineering (NCME-2003), Thapar Institute of Engineering and Technology (Deemed University), PATIALA, 30th October 1st November, 2003.
- ➤ Participated in "Dry Machining", National Seminar at MMEC, MULLANA, March 14th 16th, 2003.
- ➤ Participated in "Fuzzy Front End An Extraordinary Opportunity", National Seminar at MMEC, MULLANA, March 14th -16th 2003.
- Attended for several workshops conducted by Technical Teachers Training Institute Extension Centre, Hyderabad.
- ➤ Participated in a workshop conducted on "Inter personnel skills, Communication and Counselling" at SRKR Engineering College, Bhimavaram.

Refresher Course:

➤ Attended Refersher course on "Communication Skills in English" organized by UGC & ASC, GEC, Gudlavalleru during 15.09.2005 to 20.09.2005.

CERTIFICATIONS:

➤ Certified in the Course "Learning How to Learn: Powerful mental tools to help you master tough subjects" conducted by McMaster University & University of California San Diego in association with CourseEra.

- ➤ Certified in the Course "Work System Design" conducted by Indian Institute of Technology, Roorkee, in association with NPTEL and stood in top 5%.
- ➤ Certified in the Course "Educational Leadership" conducted by Indian Institute of Technology, Kharagpur, in association with NPTEL.
- ➤ Certified in the Course "Developing Soft Skills and Personality" conducted by Indian Institute of Technology, Kanpur, in association with NPTEL and stood in top 2%.
- ➤ Certified in the Course "Outcome Based Pedagogic Principles for Effective Teaching" conducted by Indian Institute of Technology, Kharagpur, in association with NPTEL.
- ➤ Certified in the Course "Effective Engineering Teaching in Practice" conducted by Indian Institute of Technology, Madras, in association with NPTEL and stood in top 1%.
- ➤ Certified in the Course "Product Design and Development" conducted by Indian Institute of Technology, Roorkee, in association with NPTEL.
- ➤ Certified in the Course "Fundamentals of Manufacturing Processes" conducted by Indian Institute of Technology, Roorkee, in association with NPTEL and stood in top 1%.

GRANTS FETCHED:

➤ A grant of Rs. 0.73 Lakhs has been received from Internal R & D, Department of Mechanical Engineering on the title "Effect of temperature gradient on segregation of impurities during directional solidification of Al – Cu, Al – Mn, Al – Mg and Al – Zn Alloy systems" during the Ac.Yr. 2017 – 18.

GUEST LECTURES DELIVERED:

➤ Prof. B. Karuna Kumar, Professor of Mechanical Engineering and Dean P&M affairs delivered a guest lecture on "Engineers' Contribution for Efficacy" in the Department of ECE, Gudlavalleru Engineering College, Seshadri Rao Knowledge Village on 15.9.2012.

MEMBERSHIP IN PROFESSIONAL BODIES:

- > MISTE
- > FIE(I)
- > SAEIndia

(Dr. BURRA KARUNA KUMAR)

Date : 04-01-2025

Place: Gudlavalleru