

Dr. K.CH. KISHOR KUMAR

Department: Mechanical Engineering
College : Gudlalleru Engineering College
Mobile 9440576157
E-Mail : kchkishorekumar2k@gmail.com,
kchkk9874@gmail.com
kchkk@gecgudlallerumic.in

RESIDENTIAL ADDRESS:

D.No 10-284/A1, Flat No 403, Ananda Nilayam, , opp. R.T.O Office, 2nd lane, Rajendra Nagar, Gudivada, Krishna (D.t)-521301

ACADEMIC QUALIFICATIONS:

- ❖ Ph.D (Composite Materials)
- ❖ M.Tech (Machine Design)
- ❖ B. Tech (Mechanical Engg.)

PROFESSIONAL EXPERIENCE:

Designation	Institution	Period
Professor	Seshadri Rao Gudlalleru Engineering College	July2023 to Till date
Associate Professor	Gudlalleru Engineering College	August 2006 to June 2023
Assistant Professor	Gudlalleru Engineering College	October 1999-August 2006
Associate Lecturer	S.V.K.P. Polytechnic, Cumbum,Prakasam District	1996 to 1997

PROJECTS GUIDED:

PhD	Post Graduation	Under Graduation
Nil	06	46

SPECIALIZATION: Conditional Monitoring, Metal Matrix Composites

PAPERS PUBLISHED IN JOURNALS:

Journals	:	23
Conferences	:	08
Patents	:	01

Invited Guest Lectures:

Invited as speaker at the event “**4th Euro-Global Summit on Future of Biologics and Biosimilars (BioL-BioS 2023)**” scheduled from November 06th to 07th in **Paris, France** on "Tribological Parameters Optimization of AZ31-SiC Composite Using Whale Optimization Algorithm".

REVIEWER :

- ❖ Reviewer for **silicon journal** of **Springer publication**
- ❖ **Editorial Board member** at **Journal of Advancements in Material Engineering**
- ❖ **Editorial Board member** at **Journal of Mechanical and Mechanics Engineering**
- ❖ Reviewer for **Advancement in Mechanical Engineering and Technology**
- ❖ Reviewer for **Research and Development in Machine Design**
- ❖ Reviewer for **Research and Reviews: Journal of Mechanics and Machines**

Google Scholar	:	https://scholar.google.com/citations?user=3YIi5iwAAAAJ&hl=en
Research gate	:	https://www.researchgate.net/profile/Dr-K-Ch-Kishor-Kumar
Vidwan inflibnet	:	https://vidwan.inflibnet.ac.in/profile/198851
Scopus ID	:	https://www.scopus.com/authid/detail.uri?authorId=57219205311
Orcid ID	:	https://orcid.org/0000-0003-1583-1483
Web of Science	:	https://www.webofscience.com/wos/author/record/AAW-4233-2021

LIST OF JOURNALS PUBLISHED:

a) International

- ❖ "An improved whale optimization algorithm for the model order reduction of large-scale systems", **Journal of Electrical Systems and Information Technology**, Vol. 10, Issue 29, 2023. (**Springer Open**)

- ❖ **"Tribological Parameters Optimization of AZ31-SiC Composite Using Whale Optimization Algorithm"**, Journal of Materials Engineering and Performance, Vol. 32, 2022, 2735-2748, (Springer-SCI)
- ❖ **"Microstructural, Mechanical Characterization, and Fractography of AZ31/SiC Reinforced Composites by Stir Casting Method"** Silicon, Vol. 14, Issue 9, 2021, 5017–5027, (Springer-SCI)
- ❖ **"Analysis of Dry sliding wear behavior of Al-6061-Coconut shell ash metal matrix composites using stir casting"**, Applied Engineering Letters, Vol. 4, No. 2, 55-65, 2019, ISSN 2466-4677 (Scopus)
- ❖ **"Experimental Investigation on Effect of Nano Lubrication in A VCR System Using R410a Refrigerant With Al₂O₃ Nano Particles"**, International Journal of Mechanical and Production Engineering Research and Development, Vol 10, Issue 3, 2020, 1761-1768 (Scopus)
- ❖ **"Fabrication and Corrosion Characterization of AZ31 Mg Alloy SiC Reinforced Composites"**, Design Engineering, Vol. 5, 2021, 2556-2570.
- ❖ **"Characterization of mechanical and tribological properties of aluminum alloy based hybrid composites reinforced with cotton shell ash and silicon carbide"**, International Journal of Latest Engineering Science, Vol. 2, Issue 4, July 2019, ISSN: 2581-6659 (IF:1.25)
- ❖ **"Metallurgical and Tribological Behaviour of Al6061 with Reinforcement of E-Glass Fiber, SiC and Fly Ash by using Stir Casting"**, International Journal for Research in Applied Science & Engineering Technology, Vol. 7, Issue VII, July 2019, ISSN: 2321-9653, doi.org/10.22214/ijras.2019.7013
- ❖ **"Single and Multiple-crack detection in cantilever beam using discrete wavelet transform"**, International Journal of Scientific Research Engineering & Technology, Vol. 8, Issue 6, June 2019, ISSN: 2278-0882
- ❖ **"Analysis of simple rotor with two cracks"**, International Journal For Research and Development in Technology, Vol. 11, Issue 6, June 2019, pp. 273 – 277, ISSN: 2349-3585.
- ❖ **"Determination of stress intensity factors for semi-elliptical crack of two cracked rotor"**, IJSART, Vol. 5, Issue 6, June 2019, pp. 610 – 614,
- ❖ **"Mechanical Properties and Tribological behavior of Stir Cast Al-6063 Alloy Based Hybrid Composite Reinforced"**, Journal of Advancements in Material Engineering, Vol. 4, Issue 2, 2019
- ❖ **"Characterization of Stir Cast Al-6063 Alloy Based Hybrid Composite Reinforced With Quarry Dust, Fly Ash and SiC"**, Journal of Mechanical and Mechanics Engineering, Vol. 5, Issue 2, 2019, e-ISSN: 2581-3722.
- ❖ **"Mechanical behavior of Al 6061with reinforcement of E-glass fiber, SiC and fly ash by using Stir casting equipment"**, Journal of emerging Technologies and Innovative Research, Vol. 6, Issue 5, May 2019, ISSN: 2349-5162

- ❖ **“Characterization of Al-15Ni-1Mg with reinforcement of Al₂O₃ and fly ash using powder metallurgy”**, International Journal of Latest Engineering Sciences, Vol. 02, Issue 03, May 2019, ISSN: 2581-6659
- ❖ **“Characterization of Al 6061-Coconut shell ash metal matrix composites using Stir casting”**, International Journal of Latest Engineering Sciences, Vol. 02, Issue 03, May 2019, ISSN: 2581-6659
- ❖ **“Investigation on Mechanical characterization of Al-6063 MMCs with reinforcements of SiC, TiO₂, ZnCl₂ by using stir casting”**, International Journal for Research in Applied Science and Engineering Technology, Vol. 7, Issue 3, March 2019, ISSN :2321-9653
- ❖ **“Development and characterization of Al-6061 Zirconium dioxide reinforced metal matrix composites by stir casting”**, International Journal for Research in Applied Science and Engineering Technology, Vol. 7, Issue 3, March 2019, ISSN :2321-9653 (UGC Approved Journal)
- ❖ **“Vibration Analysis of Simple Rotor with Transverse Crack”**, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS) Volume VII, Issue VI, June 2018 | ISSN 2278-2540
- ❖ **"Finite Element Analysis of An Edge Cracked Plate Subjected to Mixed Mode Loading (I/II) and Combined Tension-Bending – A Comparative Study"**, International Journal of Control Theory and Applications", International Science Press, ISSN: 0974-5572, Vol. 9, No. 42, 2017, pg. no. 15-30(*Indexed to Elsevier Bibliography database*)
- ❖ **“An investigation of Effect of Mould Vibrations on Mechanical and Metallurgical properties of Aluminum 356 Casting”**, Invention Journal of Research Technology in Engineering & Management (IJRTEM) ISSN: 2455-3689, Volume 1, Issue 7
- ❖ **“Vibrational Analysis in Condition Monitoring and Faults Diagnosis of Rotating Shaft Over View”** International Journal of Advanced Engineering, Research and Science (IJAERS) Vol-4, Issue-1, Page No. 216-220, ISSN: 2349-6495(P) ISSN: 2456-1908(O) (January, 2017).
- ❖ **“Experimental and Finite Element Model Analysis of an un-cracked and cracked Cantilever beam”** International Journal of Advanced Research in Science, Engineering and Technology, Vol. 3, Issue 1, ISSN:2350-0328, Page Nos. 1266-1274(January, 2016).

LIST OF CONFERENCES/WORKSHOPS/SEMINARS PRESENTED:

a) National

- ❖ A paper entitled **“Fault Diagnosis of a Combustion Ventilation Air Blower Unit Using Condition Monitoring”** in National Conference on Innovations in Engineering & Technology (NCIET 2013) at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 27th-28th December, 2013.
- ❖ A paper presented on **“Condition Monitoring and Fault Diagnosis of a Combustion and Ventilation Air Blower Unit”** is presented at national conference on Innovations and Emerging Trends in Mechanical Engineering at Dept. of Mechanical Engineering & Technology, Bangalore on 11th May 2012.

- ❖ A paper presented “**Analysis of Cracked Cantilever Beam Using ANSYS**” is presented at national conference on Innovations and Emerging Trends in Mechanical Engineering at Dept. of Mechanical Engineering & Technology, Bangalore on 11th May 2012.
- ❖ A paper presented on “**Torsion & Bending Analysis of Canopy in Powered Roof support using FEM**” is presented at national conference on “Emerging Technologies in Mechanical Engineering for Sustainable Development”, sponsored by AICTE, New Delhi, at SRKR Engineering College, Bhimavaram, on 22nd & 23rd December, 2006.

b) **International**

- ❖ "**Experimental Investigation On Mechanical And Tribological Properties Of Al 6101 - Sic Metal Matrix Composite Fabricated Through Stir Casting Method**", at International Conference on International Conference on Research Contributions in Mechanical Engineering (ICRCME) organized by Gudlavalleru Engineering College, Gudlavalleru, during 25th -26th February, 2022.
- ❖ "**Influence of bagasse Ash Particles on Mechanical Properties of Al 6082 Metal Matrix Composites**", at International Conference on International Conference on Research Contributions in Mechanical Engineering (ICRCME) organized by Gudlavalleru Engineering College, Gudlavalleru, during 25th -26th February, 2022.
- ❖ “**Characterization of AL-6061 Alloy reinforcement with Al₂O₃, SiC, TiO₂ and Fly Ash using Stir Casting**”, at International Conference on Recent Advances in Materials, Manufacturing & Energy Systems (ICRAMMES 2019) organized by V R Siddhartha Engineering College, Vijayawada during 3rd – 4th January, 2019.
- ❖ "**Finite Element Analysis of An Edge Cracked Plate Subjected to Mixed Mode Loading (I/II) and Combined Tension-Bending a comparative study**" in the 5th International Conference on Advanced Computing, Engineering & Technology (ICACET 2017) held in The Solitaire Hotel, Bangalore, India on 17th February, 2017.

LIST OF WORKSHOPS ORGANIZED:

- ❖ Organized IE(I) , AP state Center sponsored one day workshop on “**Characterization of Metal Matrix Composites**” by in association with Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru on 11th August,2018.
- ❖ Organized AICTE Sponsored 3 Day National Seminar on “**Applications of Optimization Techniques in Mechanical Engineering**” at Gudlavalleru Engineering College, Gudlavalleru during 18th - 20th January 2008.

LIST OF WORKSHOPS /SEMINARS ATTENDED:

- ❖ Participated in one week faculty training program on “**Evaluation Students’ Performance & Designing Question Papers**” organized by the NITTTR, Kolkata, during 25th February to 1st March, 2019.
- ❖ Participated in one week faculty training program on “**Recent Advances in Metal Matrix Composites & High Entropy Alloy**”, organized by the Department of Mechanical Engineering, ANU, Guntur during 21st to 25th January, 2019.
- ❖ Participated in two day Faculty training program on “**MAT Lab and its Applications**” organized by the Department of Mechanical Engineering, Gudlavalleru Engineering College, Gudlavalleru during 8th – 9th February 2018.
- ❖ Participated in a two day conference on “**National Conference on Condition Monitoring**” organized by NS&TL, DRDO, Visakhapatnam and CMSI during 25th – 26th September, 2015.
- ❖ 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.
- ❖ Attended Two week workshop on “**Control Systems**” organized in association with ISTE & IIT Kharagpur during 02.12.2014 to 12.12.2014
- ❖ Participated in the three day workshop on “**Advances in Computer Simulation of Solidification Processes**” organized by the Department of Mechanical Engineering, NIT, Warangal from 18th to 20th December, 2014.
- ❖ 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 “**Engineering Mechanics**” organized in association with ISTE & IIT Bombay during 26.11.2013 to 07.12.2013
- ❖ 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**” at IIT Bombay during 26th November- 07th December 2013.

- ❖ Attended a One day workshop on “**DFX - Product Design Excellence**”, organized by department of mechanical engineering, Gudlavalleru Engineering College, on 17th September, 2012.
- ❖ Attended a Two-day Workshop on “**Best Practices in Production**”, organized by Gudlavalleru Engineering College, during 20th – 21st July, 2012
- ❖ Attended one day workshop on “**DFX - Product Design Excellence**” at Gudlavalleru Engineering College, Seshadri Rao Knowledge Village, Gudlavalleru on 17 July 2012.
- ❖ Attended National Seminar on “**Applications of Finite Element Methods in Engineering**” at GEC, Gudlavalleru during 8th-9th July 2011.
- ❖ Attended one day workshop on “**Supply chain Management**” at KL University, Guntur in April 2010.
- ❖ Attended One day Workshop on “**Current Trends in Biofuels**” at GEC, Gudlavalleru in October 2010.
- ❖ Attended one day workshop on “**3D Modeling & Design Validation Software, Solidworks & Manufacturing Solution, CAM Works**” at CADD CENTRE Software Solutions, Chennai in August 2009.
- ❖ Attended AICTE Sponsored 3 Day National Seminar on “**Applications of Optimization Techniques in Mechanical Engineering**” during 18th - 20th January 2008 at Gudlavalleru Engineering College, Gudlavalleru.
- ❖ Attended two day workshop on “**Robotics & Automation**” at GEC, Gudlavalleru during 9th-10th Feb 2007.
- ❖ Attended Short Term Course on “**Instructional Design and Delivery**” by NITTTR, Chennai during 3rd-8th July 2006 at GEC, Gudlavalleru.
- ❖ Attended two day workshop on “**Mechanical Vibration-Concepts, Understanding & Practices**” at M.S.RAMAMIAH SCHOOL OF ADVANCED STUDIES, Bangalore during 05th & 6th may 2006.
- ❖ Attended One week AICTE/ISTE sponsored workshop on “**Concurrent Engineering**” at S.R.K.R.Engineering College, Bhimavaram during 27th – 31st December 2004
- ❖ Attended a workshop on National Symposium on “**Acoustics and workshop on MEMS Technology & Active Noise Control**” during 25th – 27th November 2004 at Jayachama Rajendra College of Engineering, Mysore.
- ❖ Attended AICTE – ISTE short term training programme on “**Noise Measurement, Analysis & Control**” during 8 – 13 March 2004 at Jayachama Rajendra College of Engineering, Mysore.

- ❖ Attended a workshop on “**MECHATRONICS**” at Vellore Institute of Technology, Vellore in August, 2003.
- ❖ Participated in National Work shop on “**Design for Manufacturability and Production Drawing Practice**” at JNTU college of Engg. Hyderabad in the year 2001.

SUBJECTS HANDLED:

- ❖ Engineering Graphics, Machine Drawing, Kinematics of Machines, Dynamics of Machines, Design of Machine Members, Principles of Machine Design, Instrumentation and Control Systems, Tribology, Condition Monitoring, Gear Engineering, Mechanical Vibrations.

GUEST LECTURES DELIVERED:

- ❖ Delivered a guest lecture on “ Advanced Dynamics of Machines” at NRI Institute of Technology, Sattenapalli.

MEMBERSHIP IN PROFESSIONAL BODIES:

- ❖ LMISTE
- ❖ MIE
- ❖ SOCIETY FOR LEARNING TECHNOLOGIES

GRANTS FETCHED:

Title of the project : Effect of Sintering on matrix and reinforcement of nickel based super alloy
Funding Agency : GEC, Gudlavalleru
Sanctioned Amount : Rs.2.27 Lakhs
Academic Year : 2016 - 17

Title of the project : Optimization of Tribological Parameters of Mg alloy reinforced with SiC and B₄C Hybrid Metal Matrix Composite fabricated through Stir Casting
Funding Agency : GEC, Gudlavalleru
Sanctioned Amount : Rs. 35000
Academic Year : 2022-23

PATENT:

Title : Lathe and Miller Structural Assembly
Inventors : K. Ch.Kishor Kumar, Prabhakar Rao Ganji, P. Ravindra Babu, A. Jawahar

Babu, K.Syam Sundar

Publication date :16-09- 2022

Patent office : India

Patent number : 20224105261A