




R L JALAPPA INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, & Approved by AICTE)

Doddaballapura - 561203, Bangalore Rural District

DEPARTMENT OF MECHANICAL ENGINEERING

Faculty Name	Dr. Kumaraswamy J	
Designation	Assistant Professor	
Area of Interest	Design and Analysis of Components, Hard materials, Metal Matrix composites, Hybrid and Nano-composites, Production and Surface Technology.	
Email ID	kumaraswamyj@rljit.in	
Research Identity	Orcid Id: 0000-0003-4264-4763 Scopus Id:57222355076 Google Scholar Id: bnoc5kwAAAAJ Research gate Id: Vidwan Id: 357157	

EDUCATION: B.E, M. Tech, Ph.D.

TECHNICAL SKILLS: Design and Analysis of components, Finite Element Analysis (FEA), 3D solid Modeling, 2D drafting and detailing, Origin, Minitab and MS-OFFICE (MS Word, Excel, Power Point, M-S Dos, accessories)

PROFESSIONAL WORK EXPERIENCE: 9.7 Years

PUBLICATIONS:14

JOURNAL;10

[1]. J. Kumaraswamy, V. Kumar and G. Purushotham, A review on mechanical and wear properties of ASTM a 494 M grade nickel-based alloy metal matrix composites, Materials Today: Proceedings, Vol 37, 2021, pp 2027–2032, <https://doi.org/10.1016/j.matpr.2020.07.499>.

[2]. K. Jayappa, V. Kumar, and G. G. Purushotham, “Effect of reinforcements on mechanical properties of nickel alloy hybrid metal matrix composites processed by sand mold technique,” Applied Science and Engineering Progress, Vol. 14, no. 1, pp. 44–51, Jan.–Mar. 2021, <http://dx.doi.org/10.14416/j.asep.2020.11.001>

- [3]. J. Kumaraswamy, V. Kumar and G. Purushotham, Thermal analysis of nickel alloy/Al₂O₃/TiO₂ hybrid metal matrix composite in automotive engine exhaust valve using FEA method, *Journal of Thermal Engineering*, Vol. 7, No. 3, March, 2021, pp. 415-428. <https://dx.doi.org/10.18186/thermal.882965>.
- [4]. J Kumaraswamy, Vijaya Kumar, G Purushotham, Evaluation of the microstructure and thermal properties of (ASTM A 494 M grade) nickel alloy hybrid metal matrix composites processed by sand mold casting, *International Journal of Ambient Energy*, Vol. 43, pp. 4899–4908. <https://www.tandfonline.com/doi/abs/10.1080/01430750.2021.1927836>.
- [5]. Kumaraswamy J, Anil K. C., Vidyasagar Shetty and C Shashishekar. Wear behaviour of the Ni-Cu alloy hybrid composites processed by sand mold casting, *Advances in Materials and Processing Technologies*, Vol. 2, pp. 1-17. <https://doi.org/10.1080/2374068X.2022.2092684>
- [6]. Harish R S, Sreenivasa Reddy M, Kumaraswamy J, Wear characterization of Al7075 Alloy hybrid composites, *Journal of Metallurgical and Materials Engineering*, Vol. 28 (2), pp. 291-303. <https://doi.org/10.30544/821>.
- [7]. J. Kumaraswamy et al., "Thermal Analysis of Ni-Cu Alloy Nanocomposites Processed by Sand Mold Casting," *Advances in Materials Science and Engineering*, vol. 2022, Article ID 2530707, 11 pages, 2022. <https://doi.org/10.1155/2022/2530707>.
- [8] R.S. Harish, M. Sreenivasa Reddy and J. Kumaraswamy, Mechanical behaviour of Al7075 alloy Al₂O₃/E-Glass hybrid composites for automobile applications, *Materials Today: Proceedings*, <https://doi.org/10.1016/j.matpr.2022.08.460>
- [9] J. Kumaraswamy, K.C. Anil and V. Shetty, Development of Ni-Cu based alloy hybrid composites through induction furnace casting, *Materials Today: Proceedings*, <https://doi.org/10.1016/j.matpr.2022.09.215>
- [10] Anil, K.C., Kumaraswamy, J., Reddy, M., Prakash, B., Mechanical Behaviour and Fractured Surface Analysis of Bauxite Residue & Graphite Reinforced Aluminium Hybrid Composites, *Frattura ed Integrità Strutturale*, 16 (62) (2022) 168-179. DOI: 10.3221/IGF-ESIS.62.12

INTERNATIONAL CONFERENCE:

- [1]. Sandeep Khelge, Vijaya Kumar, Vidyasagar Shetty and Kumaraswamy J, Effect of reinforcement particles on the mechanical and wear properties of aluminium alloy composites: Review, *Materials Today: Proceedings*, Vol. 52, Part 3, pp. 571-576, 2022. <https://doi.org/10.1016/j.matpr.2021.09.525>
- [2]. Sandeep Khelge, Vijaya Kumar and Kumaraswamy J, Optimization of wear properties on aluminum alloy (LM22) hybrid composite, *Materials Today: Proceedings*, Vol. 52, Part 3, pp. 565--570, 2022. <https://doi.org/10.1016/j.matpr.2021.09.518>
- [3]. Vidyasagar Shetty, Shabari Shedthi B and Kumaraswamy J, Predicting the thermodynamic stability of perovskite oxides using multiple machine learning techniques, *Materials Today: Proceedings*, Vol. 52, Part 3, pp. 457-461, 2022. <https://doi.org/10.1016/j.matpr.2021.09.208>

[4]. K.C. Anil, J. Kumaraswamy, Akash et al., Experimental arrangement for estimation of metal-mold boundary heat flux during gravity chill casting, Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2022.07.399>

NATIONAL CONFERENCE: Nil

BOOK CHAPTERS: Nil

TEXT BOOK AUTHORED: Nil

PATENTS: Nil

FUNDED PROJECTS: Nil

INVITED TALKS: Nil

FDP/WORKSHOP ATTENDED:

- Attended Three days National level workshop on “**Hard Turning & its Application**” held during 5th to 7th January 2016, organized by the Department of Mechanical Engineering M.S. Ramaiah Institute of Technology, Bangalore.

- Attended Five days Faculty Development Program on “**Advances in Composite and Smart Materials, ASCM-2017**” held during 31st July to 4th August 2017, organized by the Department of Mechanical Engineering, at BMS Institute of Technology & Management, Bangalore.
- Attended Two weeks Faculty Development Program on “**Cloud Based CAD/CAM Tools for Product Design**” from 15th to 29th December 2017 organized by Department of Mechanical Engineering, RIT, Bengaluru and Sponsored by AICTE, New Delhi.
- Attended One day Faculty Development Program on “**Importance of Research in Present Scenario and Faculty Skills**” held on 19 October 2019 at Sri Devaraj Urs Institute of Management, Doddaballapur.
- Attended One day workshop on “**Hands Training on Solar Study Lamp Assembly**” held on 2nd October 2019 at R. L. Jalappa Institute of Technology, Doddaballapur.
- Attended Webinar titled “**Continuous Improvement and Effective Leadership**” held on 24/05/2020 at R. L. Jalappa Institute of Technology, Doddaballapur, Bengaluru Rural Dist.
- Attended Two-day international Symposium on Design, Modelling and Simulation for Additive and Custom Manufacturing of Metals” held on 30th and 31st May 2022 at Ramaiah University of Applied Sciences, Bengaluru.
- Attended One Week FDP on “**Advanced NDT Techniques & Applications Industry**” held on 25th to 29th May 2020, organized by Indian society for Non-Destructive Testing, Hyderabad chapter in association with Department of Mechanical Engineering, QISCET, Ongole.
- Attended Six Days AICTE-ISTE funded induction program on “**Future Wireless Communication: Standards & Technologies**” organized by the Department of Electronics & Communication Engineering between 24th -29th May 2021 at K.S Institute of Technology, Bengaluru-560109.
- Attended Webinar on “**Opportunities and Challenges in Entrepreneurship and Start Up**” held on 15/06/2020 at Government Engineering College Ramanagara.
- Attended One Week National Level FDP on “**Renewable Energy for Sustainable Development**” from 1st to 5th March 2022 at BIGCE, Maharashtra-413255.
- Attended Webinar on “**Research Methodology and Data Analysis**” held from 17th to 20th June 2020 at Karnataka Science and Technology Academy, Bengaluru.
- Attended One Week FDP on “**Research Proposal Writing and Opportunities in the field of Science, Engineering and Management**” organized by R & D Center-BIT, from 6th July 2020 to 11th 2020.

- Attended Five days FDP on “**Modern Trends in Engineering Technology**” from 4th to 8th June 2021 at HKBK College of Engineering, Bangalore-5660045.
- Attended Six Days National Level FDP on “**Cryogenics & Superconductivity- A Research Perspective**” organized by Department of Mechanical Engineering from 21/09/2020 to 26/09/2020 at Coorg Institute of Technology, Kodagu, Karnataka.
- Attended International FDP on “**Trends in Automotive Technology**” organized by Sathyabama Institute of Science & Technology, Chennai, India.
- Attended Alumni Talk Series “**Scope of Finite Volume Method and Computational Fluid Dynamics and its Future Prospect**” held on 13-07-2020 and conducted by Department of Mechanical Engineering, SJBIT, Bengaluru
- Attended Five days FDP on “**Advanced Nano Materials, Nano Fabrication Techniques & Devices**” organized by department of Mechanical Engineering from 10th – 14th August 2020 at BMSIT, Bengaluru.
- Attended Webinar on “**Significance on Quality Management-An Overview**” held on 19/06/2021 at Dr. Amberdkar Institute of Technology, Bangalore
- Attended Webinar on “**Strategic Planning and Best Practices**” held on 22/05/2020 at C. Byregowda Institute of Technology, Kolar-563101

CONFERENCE/FDP/WORKSHOP CONDUCTED:

- Conducted One Day Virtual workshop on “**Sources of Research Grants and Art of Writing a Research Paper**” held on 03th June 2021 at R. L. Jalappa Institute of Technology, Doddaballapur.
- Conducted One day workshop on “**Hands Training on Solar Study Lamp Assembly**” held on 2nd October 2019 at R. L. Jalappa Institute of Technology, Doddaballapur.
- Conducted Webinar titled “**Continuous Improvement and Effective Leadership**” held on 24/05/2020 at R. L. Jalappa Institute of Technology, Doddaballapur, Bengaluru Rural Dist.
- Conducted Two Day all India Seminar on “**Application of Green Manufacturing Technology in Mechanical Processing**” (AGMTMP-2019) held on 13th and 14th Sep. 2019 at R. L. Jalappa Institute of Technology, Doddaballapur, Bengaluru Rural Dist.

UNIVERSITY RESPONSIBILITIES: DCS, Evaluator, Moderator ana Room supervisor

OTHER RESPONSIBILITIES:

COLLEGE LEVEL: Police Exam coordinator and administrative work.

DEPARTMENT LEVEL: NAAC coordinator, Test coordinator, Timetable coordinator, Class coordinator and LG coordinator.

PROFESSIONAL MEMBERSHIPS: Associate Member of the Institution of Engineers (AMIE)

HONORS/AWARDS: Nil

OTHER SIGNIFICANT ACHIEVEMENTS (if any):

CONTACT DETAILS:

Dr. KUMARASWAMY J

Assistant Professor

Department of Mechanical Engineering,

R. L. Jalappa Institute of Technology,

Doddaballapur-561203

Mobile No: +91-8197734764

Email ID: kumaraswamyj@rljit.in

: kumaraswamyj1985@gmail.com