

RESUME

**Dr. Nagaraja C Reddy**

Associate Professor

Department of Mechanical Engineering

Bangalore Institute of Technology (BIT), Krishna

Rajendra Road, Vishweshwarapura, Bengaluru,

Karnataka-560004

Mobile: 09449991551

Tel: 080-26615865, 26613237

Fax: 080-22426796

Email: cnraaja@gmail.comncreddy@bit-bangalore.edu.in**❖ CURRENT AREA OF RESEARCH:**

Surface Engineering, Material Characterization, Thermal Spray Coatings, Bio-materials, Machining, Wear, Erosion, Oxidation and Hot Corrosion.

❖ ACADEMIC RECORD:**□ DEGREE: Ph.D**

Institution : **Bangalore Institute of Technology (BIT)**, Bengaluru.

University : Visvesvaraya Technological University(VTU). Belagavi

Thesis Title : “Studies on Role of Thermal Sprayed Intermetallic Composite Coating in Improving Resistance to Surface Degradation of Turbine Components”

Year of completion: 2018

☛ POST GRADUATION: M.Tech (Mechanical Engineering)

Specialization : **Machine Design**

Institution : Sri Jagadguru chandrashekarathana Swamiji Institute of Technology (SJCIT), Chickballapura-562101

University : Visvesvaraya Technological University(VTU). Belagavi

Year of Passing : February 2004.

Results : **I st class @ 68% aggregate**

□ GRADUATION: B.E. (Mechanical Engineering)

Institution : **Sri Jagadguru Chandrashekarathana Swamiji Institute of Technology (SJCIT), Chickballapura-562101**

University : Bangalore University.

Year of Passing : Aug. 2000.

Results : **I st class @ 61 % aggregate**

□ PRE – DEGREE

Examination Passed: PUC

Year of Passing : 1993

Result : **50%**

Examination Passed : S.S.L.C.

Year of Passing : 1991

Result : **55 %**

❖ WORK EXPERIENCE: (present to previous)

□ Institution : Bangalore Institute of Technology (BIT), Bengaluru

Designation : Associate Professor

Duration : 08.04.2021 to till date

☛ Institution : Bangalore Institute of Technology (BIT), Bengaluru

Designation : Assistant Professor

Duration : 2012 to 0.04.2021

- Institution : Bangalore Institute of Technology (BIT), Bengaluru
 Designation : Lecturer
 Duration : Aug 2007 – 2012
- Institution : Nagarjuna College of Engineering(NCET), Bengaluru
 Designation : Lecturer
 Duration : Aug 2005 – Aug 2007

❖ **RESEARCH PUBLICATIONS/BOOKS:**

Journal Publication:

1. P Koppad, RC Suryanarayana, **N C Reddy**, D Sethuram “Experimental Studies on Mechanical and Failure Behaviour of Single Lap Joints of Woven Jute-Hemp Fabric Reinforced Polymeric Composite Laminates”, SAE Technical Paper,03-2024
2. Raghavendra Govind Galgali, B. M. Satish, B. M. Girish, Mahesh B. Davanagere, L. Girisha, E. R. Babu, **Nagaraja C. Reddy** and Chithirai Pon Selvan “Evaluation of Mechanical and Wear Assessment of Al- 1.2Si-0.75Fe/Mullite MMCs for Industrial Applications” Journal of Mines, Metals and Fuels, Vol 71 (12) | December 2023 |. DOI: 10.18311/jmmf/2023/35154, www.informaticsjournals.com/index.php/jmmf
3. E.R. Babu, **Nagaraja C. Reddy**, Atul Babbar, A. Chandrashekar, Raman Kumar, Pardeep Singh Bains, Majed Alsubih, Saiful Islam, Sanjeev Kumar Joshi, Achmad Rizal, Muhammad Imam Ammarullahj “Characteristics of pulsating heat pipe with variation of tube diameter, filling ratio, and SiO₂ nanoparticles: Biomedical and engineering implications” Case Studies in Thermal Engineering, *Elsevier*, volume-55, 03/2024.104065. <https://doi.org/10.1016/j.csite.2024.104065>
4. **Nagaraja C Reddy**, BM Girish, BM Satish, Mahesh B Davanagere, L Girisha, ER Babu, Chithirai Pon Selvan” Investigation of Mechanical and Wear Behaviour of Al5056-Carbon Nanotube-Graphene Hybrid MMCs using Powder Metallurgy Route” Journal of Mines, Metals & Fuels, Volume-71(11): 1906-1918; 2023. DOI: 10.18311/jmmf/2023/35156.
5. Mohammad Alipour, R. Keshavamurthy, Praveennath G. Koppad, Ali Shakiba, **N C. Reddy** “Investigation of microstructure and mechanical properties of cast Al–10Zn–3.5Mg–2.5Cu nanocomposite reinforced with graphene nano Sheets produced by ultrasonic assisted stir casting” International Journal of Metal casting, ISSN: 19395981, Volume 17,pages:935-946 June-2023, <https://link.springer.com/article/10.1007/s40962-022-00826-5>
6. M Ravikumar, H N Reddappa, R Suresh, **N C Reddy** “Optimization of wear behaviour of Al7075/SiC/ Al₂O₃ MMCs Using statistical method”. ADVANCES IN MATERIALS AND PROCESSING TECHNOLOGIES, ISSN- 23740698, Volume-8, Taylor & Francis.2022 DOI: 10.1080/2374068X.2022.2036583 <https://doi.org/10.1080/2374068X.2022.2036583>
7. M Ravikumar, H N Reddappa, R Suresh, **N C Reddy** “Evaluation of Corrosion Properties of Al₂O₃ and SiC Reinforced Aluminium Metal Matrix Composites Using Taguchi’s Techniques”. Journal of Scientific Research, ISSN- 2070-0245 Volume 65, DOI: 10.37398/JSR.2021.650132 2021. https://www.bhu.ac.in/research_pub/jsr/Volumes/JSR_65_01_2021/32.pdf
8. M Ravikumar, H N Reddappa, R Suresh, **N C Reddy** “Investigations on tensile fractography and wear characteristics of Al7075-Al₂O₃-SiC Hybrid Metal Matrix Composites routed through liquid metallurgical techniques” Fratturaed Integrità Strutturale, 56 (2021) 160-170;ISSN- 1971-8993, DOI: 10.3221/IGF-ESIS.56.13, file:///C:/Users/SRI/Downloads/Investigations_on_tensile_fractography_and_wear_ch.pdf
9. M. Gangadharappa, H.N. Reddappa, R. Shobha, K.V.S. Murthy, **N C Reddy**, E.R. Babu, R. Suresh, “Corrosion behaviour of Al6061 hybrid composites reinforced with red mud particles and E-glass fiber”, Materials Today: Proceedings, Article reference MATPR23943.2021,ISSN- 2214-7853, Volume-46,Elsevier,2021. <https://doi.org/10.1016/j.matpr.2021.03.159>

10. M. Gangadharappa, Babu E. R., **N C Reddy**, H. N. Reddappa, "Bulk hardness and compressive strength of Al6061/red-mud/E-glass fiber composite developed using stir casting technique", High Technology Letters, Volume 26, Issue 12, 2020, 623-631. <https://doi.org/10.37896/HTL26.12/2309>.
11. M. Gangadharappa, **N C Reddy**, E.R. Babu, H. N. Reddappa, "Microstructure and impact characteristics of Al6061/red-mud/E-glass fiber composite developed using stir casting technique", High Technology Letters, Volume 26, Issue 12, ISSN: 10066748, 2020, 681-688. <https://doi.org/10.37896/HTL26.12/2313>.
12. Babu E. R., **N C Reddy**, H. N. Reddappa, "Influence of Al₂O₃ Nanoparticles on Thermal Performance of Closed Loop Pulsating Heat Pipe", FME Transactions (2020) 48, 143-148, ISSN 1451-2092, July 2020. doi: 10.5937/fmet2001143B
13. N Nagabhushana, S Rajanna, Mahantayya Mathapati , M R Ramesh , P G Koppad and **N C Reddy**, Microstructure and tribological characteristics of APS sprayed NiCrBSi/flyash cenosphere/Cr₂O₃ and NiCrBSi/flyash cenosphere/ Mo composite coatings at elevated temperatures, Material Research Express, IOP Publishing, Vol.6-2019. <https://iopscience.iop.org/article/10.1088/2053-1591/ab24f1>
14. **Nagaraja C Reddy**, H.N. Reddappa, Babu E R, M.R. Ramesh, P.G. Koppad, T Varol, Hot corrosion behavior of HVOF sprayed Ni₃Ti and Ni₃Ti + (Cr₃C₂+20NiCr) coatings in presence of Na₂SO₄-40%V₂O₅ at 650°C, Surface Topography: Metrology and Properties, IOP Publishing, Vol.7,2019. <https://doi.org/10.1088/2051-672X/ab23d2>
15. **Nagaraja C Reddy**, B.S. Ajay Kumar, M.R. Ramesh, P.G. Koppad, Microstructure and Adhesion strength of Ni₃Ti coating prepared by mechanical alloying and HVOF, *Physics of Metals and Metallography*, Springer, ISSN: 1687-8132, Vol. 119, 462-468 2018. <https://link.springer.com/article/10.1134/S0031918X18050113>
16. **Nagaraja C Reddy**, B.S. Ajay Kumar, H.N. Reddappa, M.R. Ramesh, P.G. Koppad, HVOF sprayed Ni₃Ti coatings: Microstructure, microhardness and oxidation behavior, *Journal of Alloys and Compounds*, Elsevier, ISSN:0925-8388, Volume:736, Pages 236-245, 2018. <https://www.sciencedirect.com/science/article/abs/pii/S0925838817338896>
17. **Nagaraja C Reddy**, Babu E. R., B.S. Ajay Kumar, H.N. Reddappa, Nano Indentation studies on Ni₃Ti and Ni₃Ti+(Cr₃C₂+20nicr) based coatings developed using mechanical alloying and HVOF technique, *International Journal of Engineering Research & Technology*, Vol 6, 193-197, 2017. <https://www.ijert.org/nano-indentation-studies-on-ni3ti-and-ni3ticr3c220nicr-based-coatings-developed-using-mechanical-alloying-and-hvof-technique>
18. **Nagaraja C Reddy**, B.S. Ajay Kumar, H.N. Reddappa, Review on the part of HVOF thermal spray coating in protection to corrosion, *Journal of Material Science & Manufacturing Technology* 2 -16, 2017.

❖ BOOKS / BOOK CHAPTER:

1. Title: **Finite Element Analysis** - A Text Book for VI Semester, BE, Mechanical Engineering of VTU, Sunstar, Publications, Bengaluru.
2. Title: **Functionally Graded Materials (FGMS)** by CRC Press, Chapter-4 "Gaseous Phase Processing Techniques for Functionally Graded Materials". Page No. 47-58, DOI: 10.1201/9781003097976-4,

❖ PATENTS:

1. Title of Invention: "**Device, System and Method of a Self-Powered, Cordless Electric Heating Cup for Travel**"
Application No.- 202241045081, Date-19.08.2022. Status-Published.

❖ PERSONAL DETAILS:

Father's Name : Channarayappa.
 Date of Birth : 16.04.1974
 Nationality : Indian
 Gender : Male
 Marital Status : Married
 Languages Known : Kannada, English and Telugu.

Yours Sincerely
(Dr. NCR)