

Faculty Profile



Faculty Photo

Dr. Gangadhar Angadi is an accomplished Assistant Professor in the Department of Mechanical Engineering at RV College of Engineering, Bengaluru. With a robust academic background including a Ph.D. in Mechanical Engineering Sciences from Visvesvaraya Technological University, his core research expertise lies in polymer nanocomposites, tool design, and advanced manufacturing techniques. He holds an M.Tech in Tool Engineering from RVCE, a B.E. in Mechanical Engineering, and a Diploma in Tool and Die Making, showcasing a strong foundation in both academic and practical aspects of engineering design and manufacturing.

Dr. Angadi has made significant contributions to research through his extensive publication record, including over 25 peer-reviewed journal papers and multiple conference presentations. His research spans areas such as nanotechnology, composite materials, rapid tooling, and energy harvesting applications using electrospun nanofibers. He is also an inventor with one granted patent and two published patents, reflecting his focus on applied research and innovation.

In addition to academic research, he is actively involved in funded research and consultancy projects from reputed organizations such as KSCST and NSTL, Visakhapatnam. These projects focus on mechanical design, structural analysis, sensor development, and IoT-based industrial solutions. He also serves as the Co-coordinator of the Boeing–RVCE-AICTE IDEA Lab at RVCE, promoting innovation and hands-on learning among students.

Dr. Angadi is a recipient of the Gold Medal for his M.Tech, the Young Researcher Award from RVCE-ISTE, and multiple academic excellence awards. He is an active member of several professional bodies including ASM International, ISTE, and IAENG. His commitment to education is evident through his guidance of numerous M.Tech and undergraduate research projects, editorial board memberships, and his active role in academic leadership and curriculum development.

Personal Information

- **Name:** Gangadhar Angadi
- **Designation:** Assistant Professor
- **Department:** Department of Mechanical Engineering
- **Email:** gangadharangadi@rvce.edu.in
- **Phone:** [Office Phone]

Google Scholar / ResearchGate / LinkedIn/ ORCID:

Google Scholar: <https://scholar.google.co.in/citations?user=nDk0TwsAAAAJ&hl=en>

ResearchGate: <https://www.researchgate.net/profile/Gangadhar-Angadi>

LinkedIn: <https://www.linkedin.com/in/dr-gangadhar-angadi-049b794a/?originalSubdomain=in>

ORCID: <https://orcid.org/0000-0001-7245-5088>

Domain of Expertise

Research Focus

- **Primary Area:** Polymer Nanocomposites, Tool Design and Engineering, and Advanced Manufacturing Techniques
- **Allied Areas:**
 - Composite Materials
 - Nanotechnology
 - Product Design and Development
 - Manufacturing Processes
 - Rapid Tooling
 - Die and Mold Design

Academic Qualifications

- **Ph.D.:** Mechanical Engineering Sciences, Visvesvaraya Technological University-Belagavi, 2019 (Effect of Intermesh, Co-Rotating Twin Screw Extrusion Parameters on Dispersion Uniformity of Nanofillers in Polymers)
- **M.Tech:** Tool Engineering, RV College of Engineering-Bengaluru, Visvesvaraya Technological University-Belagavi, 2012
- **B.E.:** Mechanical Engineering, Dr. Ambedkar Institute of Technology-Bengaluru, Visvesvaraya Technological University-Belagavi, 2010
- **Diploma:** Tool and Die Making, GT&TC Kudal Sangama, DTE, 2007

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	INDO-US MIM Tech Pvt. Ltd.	In-Plant Trainee	31 st May 2006 to 31 st May 2007
2.	EIGEN (KDDL Ltd.)	Design Engineer	1 st Feb 2012 to 21 th Aug 2012

Publications & Patents

Journal Publications

1.	SK Muniyappa, B Achutarao, M Venkatram, G Angadi , S Solaiachari, Effect of laser ablation on mechanical performance of graphene-filled glass fibre reinforced polymer repaired composites, International Journal of Materials Research 115 (10), 836-849, 2024
2.	Roopa T S, H N Narasimha Murthy, Krishna B, D V N Harish, Gangadhar Angadi , Improving beta phase of spin coated PVDF thin films by doping with silver nanoparticles, Ferroelectrics-2023, 613 (1), 194-201
3.	Prakash Hadimani, H N Narasimha Murthy, Rajalakshmi Mudbidre, Gangadhar Angadi , Effect of melamine cyanurate on thermal and flame-retardant behaviour of Chopped glass fibre reinforced Polyphenylene ether/Polystyrene/Nylon-6, Polymers and Polymer composites - 2022, https://doi.org/10.1177/09673911221093165
4.	R Sridhar, V Amith, S Aditya, A Gangadhar , KA Vishnumurthy, Electrospun PVDF/Cloisite-30B and PVDF/BaTiO ₃ /graphene nanofiber mats for development of nanogenerators, Journal of the Indian Chemical Society (Elsevier) - 2022, 99 (6), 2022, 100501, https://doi.org/10.1016/j.jics.2022.100501
5.	Roopa T S, H N Narasimha Murthy, Pradeep P, Prasanna Badiger, Swapnil Savarn, Utsav Majumdar, Gangadhar Angadi , Development of Poly (vinylidene fluoride)/Silver nanoparticle Electrospun Nanofiber mats for Energy Harvesting, Polymers and Polymer Composites-2021, https://doi.org/10.1177/09673911211042005
6.	Amith V, Sridhar R, Gangadhar A , Vishnumurthy K A, Design and synthesis of PVDF-cloisite-30B nanocomposite fibers for energy harvesting applications, Surface and Interfaces, 22 - 2021, 100869, DOI: 10.1016/j.surfin.2020.100869
7.	G S Nanjundaswamy, Mahesh B, Channe Gowda D, Gangadhar Angadi , Examination of miscibility characteristics of the synthetic plastic-mimetic peptide with polyacrylamide: development of nonwoven mats by electrospinning, Journal Polymer-Plastics Technology and Materials -2021, 60(4), 405-418, DOI: 10.1080/25740881.2020.1811322
8.	Roopa T S, H N Narasimha Murthy, D V N Harish, Anjana Jain, Gangadhar Angadi Properties of PVDF films stretched in Machine direction, Polymers and Polymer Composites – 2021, 29(3) DOI: 10.1177/0967391120910592
9.	Gangadhar Angadi , H N Narasimha Murthy, Sridhar R, Salim Firdosh, Roopa T S, “Study of Mechanical and Moisture Absorption Behavior of Epoxy / Cloisite-15A Nanocomposites Processed Using Twin Screw Extruder”. International Polymer Processing – 2020, 35(3), 242-265.
10.	Subhash R Patil, H N Narasimha Murthy, Viketh Yandigeri, Ramanraj, Basavaraj Meti, Gangadhar Angadi , D V N Harish, Study of Vibration Behavior of stiffened Polymer Composite Shells for Under Structural Applications, Defense Science Journal-2020, 70(3):342-350, DOI: 10.14429/dsj.70.14703
11.	V Amith, R Sridhar, Gangadhar Angadi , Narasimha Murthy HN. Comprehensive Review Summarizing the Effect of Electrospinning Parameters and Potential Applications of Nanofibers. Journal of Nanoscience Nanoengineering and Applications-2019, 9(3), 1-6
12.	Moin Ahmed Khan, Gangadhar Angadi , Ankush Raina, Metal Air Battery Shell Unit Redesign with DFMA Aspect and Rapid prototyping, International Journal of Recent Technology and Engineering-2019, 8 (1), 1738-1742
13.	Sunny Sainoore, Gangadhar Angadi , Moin Ahmed Khan, Modelling and Analysis of Springback Effect on Rotavator Blade Using Deform 3D, International Research Journal of Engineering and Technology-2019, 6 (7), 319-324

14.	Roopa T S, Narasimha Murthy H N, Swathi H S, Gangadhar Angadi , Harish D V N, Synthesis and Characterization of spin coated Clay / PVDF Thin Films, Bulletin of Materials Science-2019, 42 (1), 1-15
15.	Gangadhar Angadi , H N Narasimha Murthy, Sridhar R, N Raghavendra, Salim Firdosh, Simulation of Epoxy/Cloisite-15A Multifunctional Nanocomposites using Twin Screw Extruders, Materials Today: Proceedings-2018, 5 (10), 21127-21134.
16.	Amith V, Sridhar R, Gangadhar Angadi , Mamatha V, Vishnumurthy K A, Narasimha Murthy H N, Prajwal D, Development of Electrospinning System for Synthesis of Polyvinylpyrrolidone Thin Films for Sensor Applications. Materials Today: Proceedings-2018, 5(10), 20920–20926
17.	Salim Firdosh, H N Narasimha Murthy, Gangadhar Angadi , N Raghavendra, Investigation of water absorption characteristics of Nano gelcoat for marine application, Progress in Organic Coatings-2018, 114, 173-187.
18.	Gangadhar Angadi , H N Narasimha Murthy, Sridhar R, Salim Firdosh, N Raghavendra, M Krishna, “Effect of screw configuration on the dispersion of nanofillers in thermoset polymers”, Journal of Polymer Engineering-2017, 37 (8), 815-825
19.	Amith V, Sridhar R, Gangadhar Angadi , Mamatha V, Vishnumurthy K A, Narasimha Murthy H N, Krishna M, “Development of Polyvinyl Acetate Thin Films by Electrospinning for Sensor Applications”. Applied Nanoscience-2017, 7(7), 355-363.
20.	N Raghavendra, H N Narasimha Murthy, Vishnu Mahesh K R, Sridhar R, M Krishna, Gangadhar Angadi , Salim Firdosh, “Moisture Diffusion Through (Hexa decyltrim ethylammonium Bromide–Indian Bentonite)/(vinylester) Nanocomposites in Artificial Seawater and Demineralized Water”, Journal of Vinyl and Additive technology-2016, 22(4), 441–451.
21.	Salim Firdosh, H N Narasimha Murthy, Ratna Pal, Gangadhar Angadi , N Raghavendra, M Krishna, “Durability of GFRP Nanocomposites Subjected to Hygrothermal Ageing”, Composite Part B-2015, 69, 443–451.
22.	N Raghavendra, H N Narasimha Murthy, Vishnu Mahesh K R, Sridhar R, M Krishna, Gangadhar Angadi , Salim Firdosh, “Combined influence of organo-modified Indian bentonite nanoclay and fire retardants on thermal and fire behavior of vinylester”, Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems-2015, 231(1), 34-42
23.	Roopa.T.S, H N Narasimha Murthy, K Sudarshan, O R Nandagopan, Ajithkumar, Gangadhar Angadi , M, Krishna, “Mechanical Properties of Vinylester/Glass and Polyester/Glass Composites Fabricated by RTM and Hand Lay-Up Techniques”, Journal of Vinyl and Additive Technology-2015, 21 (3), 166-173.
24.	Sridhar R, H N Narasimha Murthy, Gangadhar Angadi , N Raghavendra, Salim Firdosh, M Krishna, ‘Effect of Nanoclay Addition on the Erosion Wear of Glass/vinylester Composites Using Taguchi’s Orthogonal Array Technique, Procedia of Materials Science-2014, 5, 1174 – 1181.
25.	N Raghavendra, H N Narasimha Murthy, Vishnu Mahesh K R, Sridhar R, M Krishna, Gangadhar Angadi , Salim Firdosh, S C Sharma, “Mechanical Behavior of Organomodified Indian Bentonite Nanoclay Fibre Reinforced Plastic Nanocomposites”, Journal of Frontiers of Materials Science-2013, 7(4), 396-404.

Conference Papers

1.	Neetha M V, Gangadhar Angadi , M Krishna, Roopa T S, Metal-Reinforced Thermoplastics: A New Frontier in Structural Materials, 8th International Conference on Computational Systems and Information Technology for Sustainable Solutions (IEEE), RVCE, 7-9 Nov 2024
2.	Yashwanth R, Param Kotturshettar, Hemanth B. S, Gangadhar Angadi , Roopa T S, Nataraj J R, Study of Heat Treatment Effects on Al6061, 8th International Conference on Computational Systems and Information Technology for Sustainable Solutions (IEEE), RVCE, 7-9 Nov 2024
3.	Bandaru Jnyanadeep, S Sahana, Rohit Suresh, Roopa T S, Gangadhar Angadi , Machine Learning for Predictive Modeling and Personalized Treatment in Magnesium-based Biomedical Applications, 8th International Conference on Computational Systems and Information Technology for Sustainable Solutions (IEEE), RVCE, 7-9 Nov 2024, RVCE, Bangalore
4.	Achal Adiga, Avaneesh B Ballal, P Dileep, M Harishgowda, TS Roopa, Gangadhar Angadi , Smart Automated Guided Vehicle for Flexible Manufacturing Systems, ECS Transactions-2022, 107(1), 13205
5.	Amith V, Sridhar R, Gangadhar Angadi , Narashima Murthy H.N Recent Advancement in Electrospun nanofibrous mats with emphasis on their applications, IOP Conf. Series: Materials Science and Engineering-2021, 1065 (2021), 012008, DOI: 10.1088/1757-899X/1065/1/012008
6.	A C Prapul Chandra, H V Byregowda, T G Gangadhar, Gangadhar Angadi , M Krishna, Investigation the effect of electroplating and filler material on the tensile properties of wollastonite reinforced ABS composites, Journal of Physics: Conf. Series-2019, 1240 (2019) 012105, DOI: 10.1088/1742-6596/1240/1/012105
7.	Amith.V, Sridhar.R, Gangadhar Angadi , Narashima Murthy H N, Synthesis and Characterization of Polyvinylpyrrolidone (PVP) Nanofibrous Thin Films, IOP Conf. Series: Materials Science and Engineering-2018, 376 (2018), 012139, DOI:10.1088/1757-899X/376/1/012139

Books/Book Chapters

1.	T. G. Gangadhar, D. P. Girish, A. C. Prapul Chandra, Gangadhar Angadi , K. V. Karthik Raj, Study on Tensile and Hardness Properties of Aluminium 7075 Alloy Reinforced with Graphite, Mica and E-Glass, Intelligent Manufacturing and Energy Sustainability, Spinger - 2020, 169, 533-541, DOI: 10.1007/978-981-15-1616-0_52 (ISBN 978-981-15-1616-0)
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Patents

Granted:

1. Tractor mounted aerial work Platform for Areca-nut farming, 436273, 2023

Published:

1. Hand Operated Lower Extremity Exoskeleton for Climbing Stairs, 202241028671, 2023
2. A Retrofit System for a Vehicle to Convert a Manual Transmission into an Automatic Transmission, 202341007982, 2024

R & D Grants & Consultancy Projects

Ongoing & Completed Research Projects

1. Design And Fabrication of Adjustable Mounting Fixtures for Mean Value Articulator for Dental Applications, KSCST, 2024, PI
2. Design validation development of Suspension band of container and Compatible studies of container with aircraft, NSTL- Visakhapatnam, 2021, Co-PI
3. Strain Measurement of Loading Platform of ALWT, NSTL- Visakhapatnam, 2019, Co-PI
4. Structural Analysis of SK42B hard points through modelling & FEM studies to qualify the carriage of a 350 kg payload on these points under different flight conditions, NSTL- Visakhapatnam, 2019, Co-PI
5. Design, Analysis, Fabrication and Testing of ALWT Composite Battery Shell with Metallic End Flanges, NSTL- Visakhapatnam, 2018, Co-PI
6. Design and fabrication of low-cost thin film stretching machine for sensor applications, CoE (TEQIP 1.2.1), 2015-16, PI

Ongoing & Completed Consultancy Projects

1. Live Stock Management S/W with IOT based Automated Weighscale Hardware Integration, Profive Infotech, 2024-2025, Co-PI
2. Machine building for Panchakarma Treatment in Particular to the Mtra/Anuvasana Basti Devices, Kalash MedTech Pvt. Ltd. Bengaluru, 2023-24, PI
3. Applications of Machine Learning Manufacturing Toyota Engine Block, Toyota Industries Engine India Private Limited (TIEI), 2021-22, Co-PI
4. Design and development of Torque Multiplier Lug Nut Buster, TOPAZ, 2018, Co-PI
5. Fabrication of shear off pin and cap assembly for torque multiplier, TOPAZ, 2018, Co-PI
6. Design and fabrication of sprocket test rig, Class India, 2014, Co-PI

Professional Memberships

1. ASM Membership (C-06265354)
2. Indian Society for Technical Education (LM 125229)
3. International Association of Engineers (156590)
4. International Society for Research and Development (M4151904331)

Awards & Recognitions

1. **Gold Medal** (M.Tech), Visvesvaraya Technology University-Belgaum, 2012
2. **Academic Excellence Award**, RSST-RVCE, 2018 (Top 2% Topper in NPTEL Course)
3. **Academic Excellence Award**, RSST-RVCE, 2019 (PhD)
4. **Young Researcher Award**, RVCE-ISTE, 2020

Student Supervision

- **Ph.D. Candidates:** 01
- **M.Tech Students:** 20
- **Undergraduate Research Mentees:** 15

Professional Roles

- **Editorial Board:**
 - RV Journal of Science Technology Engineering Arts and Management- RVJSTEAM (ISSN:2582-8819)
 - Journal from ASM, INC Material Processing (Peer-reviewed, open access, online and print journal, published biannually)
- **Chair/Committee Member:** EC member-ASM India, Bengaluru chapter
- **Industry Advisor:** -

Teaching

Core Courses:

1. Design of Jigs and Fixtures
2. Computer Aided Engineering Graphics

Advanced/Lab Courses:

- Design Lab, FEM

Professional Roles Responsibilities

- **Academic:** RVCE, AICTE IDEA Lab Co-coordinator
- **Administrative:** -

External Connect

- EC member- ASM International, Bengaluru chapter