

DR. PADMAKUMAR ANNASAB BAJAKKE

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Sadalga-591239, Chikodi, Belagavi, Karnataka.

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**CAREER OBJECTIVES**

Secure a responsible career opportunity to fully utilize my training and skills, while making a significant contribution to the success of the organization.

EDUCATIONAL QUALIFICATIONS

Degree	Specialization	Marks %	Year of Award	University/Board
Ph.D. Full-Time	Material Science	--	2023	Visvesvaraya Technological University Belagavi. (NIRF 2024 Engineering-69).
M.Tech.	Production Management	76.75	2016	Visvesvaraya Technological University Belagavi. (NIRF 2024 Engineering-69).
B.E.	Mechanical Engineering	66.69	2014	Visvesvaraya Technological University Belagavi. (NIRF 2024 Engineering-69).
PUC	PCMB	51.16	2010	Department of Pre-University Education.
SSLC	--	84.16	2008	Karnataka Secondary Education Examination Board.

TEACHING/RESEARCH EXPERIENCE: 08 Years 04 Months

Type	Designation	From	To	Institution
Teaching	Assistant Professor	07/10/2024	Present	Sharad Institute of Technology College of Engineering Yadrav.
Teaching (01 Year & 11 Months)	Assistant Professor	01/11/2022	30/09/2024	Genba Sopanrao Moze College of Engineering, Balewadi, Pune.
Research (4 Years & 10 Months)	Full-Time Research Scholar	01/01/2018	28/10/2022	Gogte Institute of Technology Belagavi.
Teaching (01 Year & 06 Months)	Lecturer	20/06/2016	30/12/2017	Jain Polytechnic Belagavi.

RESEARCH EXPERIENCE

Designation: Full-Time Research Scholar.

Research Centre: Department of Mechanical Engineering, KLS Gogte Institute of Technology, Belagavi, Karnataka, India.

Area of expertise: Friction stir welding/processing, aluminium metal matrix composites, powder metallurgy, and microwave sintering.

Total years of experience: 4 years & 10 months (From 01/01/2018 to 28/10/2022).

➤ **RESEARCH ACCOUNTS**

1. Google Scholar <https://scholar.google.com/citations?user=mA1LTuoAAAAJ&hl=en>

Total Citations: 249

h-index: 8

i-10 index: 8

2. Scopus <https://www.scopus.com/authid/detail.uri?authorId=57208800320>

3. ORCID <https://orcid.org/0000-0003-4190-8843>

➤ **AWARD OF PH.D. FELLOWSHIP**

1. **Received JRF model Fellowship from Minority Welfare Department, Directorate of Minorities, Government of Karnataka, India.**

Award letter number: DOM/FELLOWSHIP/CR-15/2018-19 and Date: 07/07/2018.

Fellowship w.e.f: 01/06/2018 to 30/05/2021.

➤ **PH.D. DETAILS**

THESIS TITLED: MANUFACTURING AND CHARACTERIZATION OF ALUMINIUM METAL MATRIX NANOCOMPOSITES BY MICROWAVE SINTERING AND FRICTION STIR PROCESSING.

Status: Awarded Doctor of Philosophy on 07/03/2024 in VTU 23rd Part-2 Annual Convocation.

Ph.D. Final Viva-Voce completed on 25/08/2023.

Research Supervisor: Dr. Anand Sharad Deshpande (B.E., M.Tech.-IIT Kanpur, and Ph.D.-NIT Surathkal)

Designation: Vice Chancellor, Bagalkot University (A State Public University of Government of Karnataka), Mudhol Road, Jamkhandi -587301, Karnataka, India.

Former Registrar, Visvesvaraya Technological University (A State Public University of Government of Karnataka), Belagavi-590018, Karnataka, India.

Former Principal, KLS Gogte Institute of Technology, Belagavi-590008, Karnataka, India.

Email: a.s.deshpande@git.edu & Mobile: +91-9449065500

Research Co-Supervisor: Dr. Vinayak R. Malik (B.E., M.Tech. and Ph.D.-IISc Bengaluru)

Designation: Associate Professor, Department of Mechanical Engineering, KLS Gogte Institute of Technology, Belagavi-590008, Karnataka, India.

Email: vrm@git.edu & Mobile: +91-9886406375

Doctoral Committee Member

1. Dr. Vinayak N. Gaitonde

Affiliation: Professor, Department of Mechanical Engineering, KLE Technological University Hubballi Campus.

Email: vngaitonde@kletech.ac.in & Mobile: +91-9480556558

Thesis evaluated by and assigned external examiner for Ph.D. Final Viva-Voce

1. Dr. Vipin

Affiliation: Professor, Department of Mechanical Engineering, Delhi Technological University, Bawana Road, Shahbad Daultpur Village, Rohini, New Delhi, Delhi-110042.

Email: vipin@dce.ac.in & Mobile: +91-9968161916

➤ **PATENT**

1. The patent titled **Synthesis of Metal Matrix Composites** granted from Indian Patent Office.

Status: **Granted**.

Patent No: **484471**.

Application No: **201941003340**.

Inventors: **Padmakumar A. Bajakke**, Vinayak R. Malik, A. S. Deshpande, Prakash Mugali, and Vivekanand Hiremath.

Assignees: KLS Gogte Institute of Technology Belagavi and Enerzi Microwave Systems Pvt. Ltd Belagavi.

Keynote: The idea discusses fabricating the composites by un-usual techniques and possessing unique properties.

➤ **SCIE PUBLICATIONS**

1. **Padmakumar A. Bajakke**, Vinayak R. Malik, Sudhakar C. Jambagi, Vishwanath Bhajantri, and Anand S. Deshpande; Unidirectional Flipped Multiple-Pass Friction Stir Process an Innovative Step in the Fabrication of In-Situ Al-Cu Composites; The International Journal of Advanced Manufacturing Technology; year 2024.

<https://doi.org/10.1007/s00170-024-14248-6>

Article Type: Research Article

Publisher: Springer Nature

Journal: JAMT
Index: SCIE

Impact Factor: 2.9 (2023)
Quartile: Q2

2. **Padmakumar A. Bajakke**, Vinayak R. Malik and Anand S. Deshpande; Particulate metal matrix composites and their fabrication via friction stir processing – a review; *Materials and Manufacturing Processes*; volume 34, issue 8, pages 833–881, year 2019. <https://doi.org/10.1080/10426914.2019.1605181>

Article Type: Review Article
Journal: *Materials and Manufacturing Processes*
Index: SCIE

Publisher: Taylor & Francis
Impact Factor: 4.1 (2023)
Quartile: Q1

3. **Padmakumar A. Bajakke**, Vinayak R. Malik, Sudhakar C. Jambagi, and Anand S. Deshpande; Corrosion behavior of novel AA1050/ZnO surface composite: A potential material for ship hull; *Materials Letters*; volume 281, pages 128602, year 2020. <https://doi.org/10.1016/j.matlet.2020.128602>

Article Type: Research Article
Journal: *Materials Letters*
Index: SCIE

Publisher: Elsevier
Impact Factor: 2.7 (2023)
Quartile: Q2

4. Vinayak R. Malik, **Padmakumar A. Bajakke**, Sudhakar C. Jambagi, Chavana Nagarjuna, and Anand S. Deshpande; Investigating Mechanical and Corrosion Behavior of Plain and Reinforced AA1050 Sheets Fabricated by Friction Stir Processing; *JOM*; volume 72, pages 3582–3593, year 2020. <https://doi.org/10.1007/s11837-020-04323-0>

Article Type: Research Article
Journal: *JOM*
Index: SCIE

Publisher: Springer Nature
Impact Factor: 2.1 (2023)
Quartile: Q2

5. Vinayak R. Malik, **Padmakumar A. Bajakke**, Kuldeep K. Saxena, Avinash Lakshmiathan, Anand S. Deshpande, Sipokazi Mabuwa and Velaphi Masomi; Energy-efficient method for developing in-situ Al-Cu metal matrix composites using microwave sintering and friction stir processing; *Materials Research Express*; Volume 9, Number 6, pages 066507, year 2022. <https://doi.org/10.1088/2053-1591/ac7638>

Article Type: Research Article
Journal: *Materials Research Express*
Index: SCIE

Publisher: IOP Science
Impact Factor: 1.8 (2023)
Quartile: Q2

➤ **ESCI PUBLICATIONS**

6. Vinayak R. Malik, **Padmakumar A. Bajakke**, Sudhakar C. Jambagi, Vishwanath Bhajantri & Anand S. Deshpande; Comparative analysis of flipped and overlapped microwave sintered

plus friction stir processed in-situ Al-Cu composites; Emergent Materials; year 2024.

<https://doi.org/10.1007/s42247-024-00781-3>

Article Type: Research Article
Journal: Emergent Materials
Index: ESCI

Publisher: Springer Nature
Impact Factor: 4.8
Quartile: Q1

7. **Padmakumar A. Bajakke**, Vinayak R. Malik, Avinash Lakshmikanthan, Kuldeep K Saxena, and Anand S. Deshpande; A Novel Ultrahigh Conductive Al-Cu Composite Produced via Microwave Sintering and Post-Treated by Friction Stir Process; Advances in Materials and Processing Technologies, Pages 575-584, year 2021.

<https://doi.org/10.1080/2374068X.2021.1945270>

Article Type: Research Article
Journal: AMPT
Index: ESCI

Publisher: Taylor & Francis
Impact Factor: 2 (2023)
Quartile: Q2

8. Srinivas Prabhu M, **Padmakumar A. Bajakke**, and Vinayak R. Malik; A Review on In-Situ Aluminum Metal Matrix Composites Manufactured via Friction Stir Processing: Meeting on-ground industrial applications; World Journal of Engineering, volume 18, No. 6, pages 956-970, year 2021. <https://doi.org/10.1108/WJE-01-2021-0001>

Article Type: Review Article
Journal: World Journal of Engineering
Index: ESCI

Publisher: Emerald
Impact Factor: 1.4 (2023)
Quartile: Q3

9. Vinayak Malik, N.K. Sanjeev, and **Padmakumar A. Bajakke**; Review on modelling of friction stir welding using finite element approach and significance of formulations in simulation; International Journal of Manufacturing Research; volume 15, issue 2, pages 107–135, year 2020. <https://doi.org/10.1504/IJMR.2020.106851>

Article Type: Review Article
Journal: IJMR
Index: ESCI

Publisher: Inder Science
Impact Factor: 0.9 (2023)
Quartile: Q3

➤ ***SCOPUS PUBLICATIONS***

10. **Padmakumar A. Bajakke**, Ananthakrishna Somayajia, Vinayak R. Malik, Ajit M. Hebbale, Anand S. Deshpande, Narasimha Marakala; Friction stir processing of commercially pure aluminium in bare and reinforced conditions; Materials Today: Proceedings; volume 92, part 1, 2023, pages 388-392, year 2023. <https://doi.org/10.1016/j.matpr.2023.05.304>

Article Type: Research Article
Journal: Materials Today Proceedings
Index: Scopus

Publisher: Elsevier
Cite Score: 4.9 (2023)
Quartile: Q2

➤ **BOOK CHAPTERS**

1. **Padmakumar A. Bajakke**, Sudhakar C. Jambagi, Vinayak R. Malik and Anand S. Deshpande; Friction Stir Processing: An Emerging Surface Engineering Technique; In Gupta K. (eds) Surface Engineering of Modern Materials, Engineering Materials, Springer Nature 2020. https://doi.org/10.1007/978-3-030-43232-4_1

Article Type: Book Chapter

Publisher: Springer Nature

Book Title: Surface Engineering of Modern Materials, Engineering Materials

Editor: Kapil Gupta

2. **Padmakumar A. Bajakke**, Vinayak R. Malik, Prakash Mugali and Anand S. Deshpande; Microwave Processing of Engineering Materials; In Kumar K., Babu B.S., Davim J.P. (eds) Coatings; Materials Forming, Machining and Tribology, Springer Nature 2021. https://doi.org/10.1007/978-3-030-62163-6_2

Article Type: Book Chapter

Publisher: Springer Nature

Book Title: Materials Forming, Machining and Tribology

Editor: Kumar K., Babu B.S., Davim J.P.

TEACHING EXPERIENCE

Institution: Genba Sopanrao Moze College of Engineering, Balewadi, Pune.

Department: Mechanical Engineering.

Designation: Assistant Professor.

Date of Joining: 01/11/2022 to 30/09/2024.

Total years of experience: 01 Year and 11 Months.

➤ **SUBJECTS HANDLED**

Theory: Systems in Mechanical Engineering, and Engineering Graphics.

Lab: Workshop Practice, and Project-Based Learning.

➤ **RESPONSIBILITIES UNDERTOOK**

- Institution's Innovation Cell (IIC) committee member.
- Institute Intellectual Property Rights (IPR) Cell Head.
- Institute Internal Quality Assurance Cell (IQAC) coordinator.
- First-year department NAAC coordinator for Criteria 1.
- First-year department Academic Monitoring Committee (AMC) coordinator.
- First-year department In-Sem and End-Sem exam coordinator.

➤ **ADDITIONAL ACTIVITY**

- Organized various sessions for in-house faculty members.

Session 1: Introduction to Research, Innovation & IPR.

Session 2: Literature Survey & Basic Research Tools.

Session 3: Manuscript Drafting.

Session 4: Publishing in a SCI Journal.

Session 5: Patent Filing.

TEACHING EXPERIENCE

Institution Name: JGI, Jain Polytechnic Belagavi, Peeranwadi 590014.

Department: Mechanical Engineering.

Designation: Lecturer.

Date of Joining: 20/06/2016 and Date of Reliving: 30/12/2017.

Total years of experience: 01 year & 06 months 11 days.

➤ **SUBJECTS HANDLED**

Theory: Mechanics of Machines, Strength of Materials, Computer Integrated Manufacturing, Industrial Management, Mechatronics, and Professional Ethics & Indian Constitution.

Lab: Mechanical Testing & Quality Control Lab, Mechatronics Lab, C-Programming Lab, Basic Skills in Computer Lab.

➤ **RESPONSIBILITIES UNDERTOOK**

Institute Coordinator for

- Industrial interactions, industrial visits, and in-plant training.
- Board of Technical Education's practical & theory exams.
- Continuous internal assessment.
- Department association activities.
- E-Marketing.

➤ **STUDENT'S ACHIEVEMENTS UNDER MY GUIDANCE**

1. Virendra Kadam & group of Mechanical Engineering, Jain Polytechnic Belagavi, bagged **1st Prizes** for the project entitled **Fabrication of 3D Printer by Delta Mechanism**, in the following events:

- 1.1 **DO IT YOURSELF** State Level Project Competition 2017, organized by the Government of Karnataka, Department of Technical Education in association with Government Polytechnic, Bagalkot on 5th and 6th March 2017.

1.2 **AVISHKAAR 2017** State Level Diploma Project Expo & Technical Paper Presentation, organized by SAE Foundation's Angadi Institute of Technology and Management Belagavi, on 18th March 2017.

1.3 **AVISHKAR 2017** National Level Project Competition, organized by Bharatesh Education Trust's Motichand Lengade Bharatesh Polytechnic Belagavi, on 24th March 2017.

1.4 **TECHNOVISION 2K17** 10th National Level Technical Paper Presentation & Project Competition, organized by KLE Society's Chidanand B. Kore Polytechnic, Chikodi on 7th April 2017.

2. Virendra Kadam & Muralidhar Sutar started their careers as an entrepreneur and registered the firm **Deltasys E-Forming**, Plot No.69, Kapeel Founders Compound, Udyambag, Belagavi, Karnataka 590008.

3. Omkar Haldankar & Chaitanya Kulkarni of Mechanical Engineering, Jain Polytechnic Belagavi, bagged **1st Prize in State Level Technical Paper Presentation Competition** on the topic **Friction Stir Welding of Aluminum**, held at Maratha Mandal Polytechnic Belagavi on 17th Sept 2016.

PERSONAL DETAILS

Name : Padmakumar Annasab Bajakke
Father's Name : Annasab Appanna Bajakke
Mother's Name : Lalita Annasab Bajakke
Email ID : bajakkeempire@gmail.com
Mobile No : +91-8296841008
Date of Birth : 27/07/1992
Gender : Male
Marital Status : Married
Religion : Jain
Nationality : Indian
Language Known : English, Hindi, Kannada, and Marathi
Native Place : Sadalga (Holy birthplace-Acharya Shri 108 Vidyasagar Maharaj)

DECLARATION

I hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

Date: 13/11/2024

Place: Sadalga

(Padmakumar Annasab Bajakke)