

## Faculty Profile Format

### 1. Basic Information

- Name: Dr. Geeta K
- Designation: Associate Professor
- Department: Electrical and Electronics Engineering
- University/Institution: Sharnbasva University, Kalaburagi
- Email: geeta.u.kamalapur@gmail.com
- Phone (if applicable): 8884179560

### 2. Academic Qualifications

- Ph.D. (if applicable): VTU, 2024
- M.Tech / M.E.: VTU, 2016
- B.Tech / B.E.: VTU, 2011

### 3. Research Interests

- Power Electronics
- Electrical Drives

### 4. Publications & Patents (*Optional: Highlight Top 3-5 Publications*)

- Selected Publications: (*Include DOI/Link if possible*)
  - Paper Published Titled: "*Direct Torque Control and Dynamic Performance of Induction Motor using Fractional order Fuzzy logic Controller*" is accepted in International Journal of Electrical and Computer Engineering (IJECE), ISSN-2088-8708, Volume 13, issue 4, Institute of advanced engineering and science (IAES) publisher Q3 Scopus indexed.
  - Published paper: Titled "*Model Predictive torque Ripple Reduction for Induction Motor Drive*" GradivaReviewJournal, Volume 7, Issue 8, August 2021, UGC\_CARE approved Group-II Journal, ISSN No-0363-8057.
  - Published Paper Titled: "*Torque Ripple Reduction using Model Predictive torque control method for induction motor drive*" Strad Research, UGC\_CARE approved Group-II Journal, Volume 8, Issue 9, September 2021.
  - Published paper: Titled "*Direct Torque Control of Induction Motor with Reduced Torque Ripples*" Gradiva Review Journal, Volume 7, Issue 8, August

2021, UGC\_CARE approved Group-II Journal, ISSN No-0363-8057.

- Published Paper Titled: *“Direct Torque Control of Induction Motor with Reduced Torque Ripples using space vector Modulation Scheme”* Strad Research, UGC\_CARE approved Group-II Journal, Volume 8, Issue 9, September 2021.
- Paper published title *“A carrier space vector pulse width modulation based Direct Torque Control of three phase induction motor”* Gradiva Review Journal, Volume 7, Issue 8, August 2021, UGC\_CARE approved Group-II Journal, ISSN No-0363-8057.
- Paper Published *“Direct Torque control of a three phase Induction motor using Carrier space vector pulse width modulation”* Strad Research, UGC\_CARE approved Group-II Journal, Volume 8, Issue 9, September 2021.
- Geeta K *“Optimization of Spectrum Sensing Parameters in Cognitive Radio Environments”* COMSIGRO, Kishkinda University, Ballari, Jan 3, 2025.
- Geeta K *“Cooperative Communication BY Using Cognitive Radio Networks”* IEEE International Conference 2023.
- Published paper: Titled *“A Novel Neuro Fuzzy method DTC of Induction Motor Drive for Efficient Torque Response”* IEEE 3<sup>rd</sup> International Conference for Emerging Technology (INCET), Belgaum, India 978-1-6654-9499-1/22/\$31.00 © 2022 IEEE, May 27-29, 2022, IEEE Indexed in Scopus.
- Published paper: Titled *“A single phase AC-AC Converter with Extinction angle control for single phase AC motor”* Second International Conference on Power Electronics & IOT Applications in Renewable Energy and its Control, GLA University, Mathura, UP, India, 978-1-6654-3215-3/22/\$31.00 © 2022 IEEE, Jan 21-22, 2022, IEEE indexed in Scopus.
- Geeta K and Dr. M S Aspalli *“Proportional Resonant Controller for semi Converter Three Phase VSI Fed Induction Motor Drive To Enhance Time Response”*, International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC) GLA University, Mathura, UP, India. Feb 28-29, 2020, IEEE indexed in Scopus.
- Geeta K and Dr. M S Aspalli *“Reduced Torque Pulsation of induction motor drives by integrated direct torque control with sliding mode control and space vector modulation”* International conference on Power, Circuit and Information Technology, 20-21 May 2016, RRCE, Bangalore.
- **Patents (if any): [Patent Title, Status (Granted/File), Year]**
- Title-A novel three phase multilevel inverter cascaded by two level and single phase boosted H-bridge inverters, Patent No-202341049606, year -2023 India.

- Title-Generation of E-bill transaction number using block chain technology, Patent NO-202141007828, Year-2021 India.
- Title- Heat Dissipating Power Resistor, Patent No- 431809-001, Year-2024 India.

## 5. Teaching & Courses (*Mention subjects taught*)

1. Basic Electrical Engineering
2. Transformer and Induction Machines
3. Control Systems
4. Modern Control Theory
5. Electromagnetic Field Theory
6. Industrial Drives and Applications
7. Universal Human Values
8. Industrial Psychology and Organizational Behaviour

## 6. Awards & Recognitions (*If applicable*)

1. Received **BEST RESEARCH AWARD** from **NOVEL RESEARCH ACADEMY 2021-22**, Puducherry, India, ISO 9001:2015 certified, Ref: NRA/BRA/0112047/2021-2022.

## 7. Professional Memberships & Collaborations (*If applicable*)

1. IETE –Membership No—503237
2. IAENG-Membership No—315629

## 8. Additional Information (*If applicable - Links to Google Scholar, Research Gate, LinkedIn, etc.*)

- [https://scholar.google.com/citations?user=XhRe\\_1kAAAAJ&hl=en](https://scholar.google.com/citations?user=XhRe_1kAAAAJ&hl=en)
- <https://www.scopus.com/authid/detail.uri?authorId=24829165800>

## 9. Work Experience

- 13 Years

## 10. Research Contributions

- **Papers Published:**
  - National: 01
  - International: 13
- **Grants Received (Projects, etc.):**  
A Project is selected for **Karnataka State Council for Science and Technology** for “Student Project Program -40<sup>th</sup> Series” year 2016-2017. Project Title “An Efficient Energy Monitoring and load Control using AMR with Distributed WSN.
- **Ph.D. Guidance:-**

## 11. Patent Information

- **Status: Published**
- Title- Heat Dissipating Power Resistor, Patent No- 431809-001, Year-2024 India.
- Title-A novel three phase multilevel inverter cascaded by two level and single phase boosted H-bridge inverters, Patent No-202341049606, year -2023 India.
- Title-Generation of E-bill transaction number using block chain technology, Patent NO-202141007828, Year-2021 India.