

**B. V. V. Sangha's**  
**Basaveshwar Engineering College (Autonomous), Bagalkot**  
**Department of Electronics & Communication Engineering**

**RESEARCH CENTRE DETAILS**

**I. About Research Centre:**

- Year of Establishment: **2005**
- Major Research Areas:
  - **1. Wireless Network**
  - **2. Speech Processing**
  - **3. MEMS**
  - **4. Image Processing**
  - **5. VLSI Signal Processing**
- No. of research guides enrolled at our research centre: **12**
- No. of internal faculty guiding the candidates: **06**
- Faculty with Ph. D. : **13**
- Our Faculty pursuing Ph. D. : **1. Anand Unnibhavi 2. Mamata Sataraddi 3. Poornima Chanal 4. Basavaraj Angadi 5. Sharanappa.P.H 6. Shobha Bharamagoudar 7. Somu Parande**
- Total number of registered candidates at the research centre: **31**
- No. of candidates awarded Ph. D. till date: **11**
- No. of candidates pursuing Ph. D. : **31**

## II. Research guides at the research centre

Sl.No.	Name of the Guide	Area of Specialization
1.	Dr.Shridhar.S.K	Speech Processing
2.	Dr.jayashree.D.Mallapur	Wireless Networks
3.	Dr.P.N.Kulkarni	Speech Processing
4.	Dr.B.G.Sheeparamatti	MEMS, Embedded Systems
5.	Dr.A.V.Sutagundar	Wireless Networks
6.	Dr. Mahabaleshwar S.K	Wireless Networks
7.	Dr.S.G.Kambalimath	VLSI and Signal Processing

## III. Research Scholars pursuing Ph. D program

Sl.No.	Name of the Student	Name of the Guide	Year of Registration	Research Topic
1.	Shivanand Hiremath	Dr.Jayashree.D.Mallapur	2014	QOS based dynamic resource provision and traffic scheduling in vehicular cloud computing networks
2.	Tej.C.Hiremath	Dr.Jayashree.D.Mallapur	2015	Virtual resource allocation and distributed multipath routing for mobile cloud computing networks
3.	Sagar Budihal	Dr.Jayashree.D.Mallapur	2016	Voice recognition and monitoring over internet of things (IoT)
4.	Shreekant Salotagi	Dr.Jayashree.D.Mallapur	2018	Optimization of Resource Allocation in Internet of things Application
5.	Somu Parande	Dr.Jayashree.D.Mallapur	2013	Flexible and Adaptable Secured routing for real time application

				in WSN
6.	Digamber.S.Albur	Dr.Shridhar.K	2013	Novel Speech Enhancement Algorithms for Hearing Aids
7.	Mr.Jagadeesh Jakati	Dr.Shridhar.K	2015	Efficient speech enhancement algorithms for hearing Aids
8.	Mr. Adappa Angadi	Dr.Shridhar.K	2014	Efficient structures for speech enhancement
9.	Mr.Sanjay Choudry	Dr.Shridhar.K	2016	VLSI structures for speech enhancement
10.	Mahaveer.J.Chougala	Dr.Shridhar.K	2018	Speech enhancement using Transform Domain Techniques
11.	Rashmi Yala	Dr.Shridhar.K	2017	Speech Enhancement using Improved Speech estimation Techniques
12.	Jyoti Kotagi	Dr.P.N.Kulkarni	2016	Effect of monaural and binaural hearing aids on source localization
13.	Aparna Chilakawad	Dr.P.N.Kulkarni	2017	Spectral Splitting of Speech signal to reduce effect of masking due to sensorinual using time varying filters for binaural dichotic presentation
14.	Shailaja Mudengudi	Dr.Mahabaleshwar S.K	2012	Intelligent security schemes for vehicular clouds networks
15.	Mamata Sataraddi	Dr.Mahabaleshwar S.K	2016	Intelligent Routing Algorithms for Vehicle -to-Vehicle, Vehicle-to-Infrastructure and Hybrid Communications in VANETs
16.	Ramesh Koti	Dr.Mahabaleshwar S.K	2016	Design and development of intelligent safety information dissemination schemes in VANET
17.	Gururaj.S.Kori	Dr.Mahabaleshwar S.K	2016	Design and development of intelligent resource management schemes for wireless sensor networks
18.	Mahantesh Kambalimath	Dr.Mahabaleshwar S.K	2013	Intelligent resource management schemes in vehicular cloud networks
19.	Sharanappa.P.H	Dr.Mahabaleshwar S.K	2015	Intelligent solution for information gathering validation and aggregation in Internet of Things (IoT)
20.	B.M.Angadi	Dr.Mahabaleshwar S.K	2017	Sensor nodes localization clustering and routing algorithms for wireless sensor networks

21.	Poornima Chanal	Dr.Mahabaleshwar S.K	2017	Intelligent security and privacy schemes for IoT for internet of Things (IoT)
22.	Basavaprabhu H	Dr.A.V.Sutagundar	2013	Sensor node Deployment, Localization, Topology Control, and Routing Techniques for Underwater Acoustic Sensor Networks.
23.	Vidya.S.Bennur	Dr.A.V.Sutagundar	2013	Localization, fault Tolerance and Routing in Wireless Sensor Networks
24.	Prashant.S	Dr.A.V.Sutagundar	2014	Multi-agent based fault tolerance, routing, information classification and resource management in sensor cloud
25.	Daneshwari Hatti	Dr.A.V.Sutagundar	2015	Agent Based Middleware for Resource Management in IoT
26.	Maheshwari.S.Biradar	Dr.B.G.Sheeparamatti	2012	Computer Vision based Fabric Defect Detection
27.	Shivashankar.Huddar	Dr.B.G.Sheeparamatti	2015	Modeling and Optimization of novel RF-MEMS Switch
28.	Ujwala.Nandini	Dr.B.G.Sheeparamatti	2018	Optimization of Micro pressure sensor for performance enhancement
29.	Mallikarjun.Aralimarad	Dr.Meena.M	2012	Vision based Human action recognition
30.	A.H.Unnibhavi	Dr.D.S.Jangamashetti Dr.Shridhar.K	2013	Development of Continuous Speech Recognition System for Kannada Language of Different Dialectic regions
31.	S.R.Bharamagoudar	Dr.S.V.Saboji	2017	Routing System for Mobile Opportunistic Network using Microscopic and Macroscopic Schemes

#### IV. Ph. D`s awarded from Research Centre

Sl.No.	Name of the Student	Name of the Guide	Title of Thesis	Year of Degree Awarded
1.	R.C.Biradar	Dr.S.S.Manvi	Reliable and QoS based multicast routing in mobile ad-Hoc network for group communication	2011
2.	Nandini Sidnal	Dr.S.S.Manvi	Agent based auction services discovery in relevant auction identification and bidding in mobile e-commerce	2012
3.	M.N.Birje	Dr.S.S.Manvi	Multi agent System based solutions to resolve sum of the issues in wireless mobile semantic grid	2012
4.	Mahabaleshwar S.K	Dr.S.S.Manvi	Multiagent System based Safety Information Gathering Aggregation and Dissemination in Vehicular ad-Hoc Networks	2012
5.	A.V.Sutagundar	Dr.S.S.Manvi	Multiagent System based Information Gathering , Fusion and Aggregation in Wireless Sensor networks	2013
6.	Nagaratna.R	Dr.Jayashree.D.Mallapur	An energy efficient time synchronization in wireless sensor networks	2018
7.	S.K.Padaganur	Dr.Jayashree.D.Mallapur	Topology scaling and resource allocation in heterogeneous wireless multimedia networks	2019
8.	Rajani.S.Pujar	Dr.P.N.Kulkarni	Effect of Noise Reaction Algorithms in improving speech perception for monaural and binaural hearing aids	2020
9.	Manjula Sutagundar	Dr.B.G.Sheeparamatti	Modeling , simulation and optimization micro resonator	2020
10.	Ajayakumar.C.Katageri	Dr.B.G.Sheeparamatti	Design and Fabrication of Novel MEMS Piezoresistive Pressure Sensor for Application in Health Care	2020
11.	Kirankumar.B.Balavalad	Dr.B.G.Sheeparamatti	Design, Modeling and simulation of highly sensitive piezoresistive pressure sensor the high temperature applications	2020
12.	R.C.Biradar	Dr.S.S.Manvi	Reliable and QoS based multicast routing in mobile	2011

			ad-Hoc network for group communication	
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## V. Research Projects carried out in the department

Sl.No.	Title	Funding Agency	Amount	Year
1.	Microwave Communication Laboratory (Modrob)	Dr.S.G.Hiremath	No.F.17-1/92TD.VI, dtd 06-01-1992	10
2.	Infrastructural facilities in Electronics (Area of Weakness)	Dr.S.G.Hiremath	No.F.1-2/91-TD.VI dtd 10.03.1992	07
3.	Electronics and Communication Laboratory (Modrob)	Dr.S.G.Hiremath	No.F.3-1/92T.D.VI dtd 12-01-1993	12
4.	Semiconductor Electronics and Digital Electronics (Thrust Area)	Dr.S.G.Hiremath	No.F.2-2/93-TD.VI dtd 24-03-1994	08
5.	Centre for Electronic system Design Automation (Integrated scheme)	Dr.S.G.Hiremath	No.800- 1/RDII/THA/REC366/94 dtd 08-06-1995	15
6.	Modernization of Communication Laboratory	Prof.S.M.Iddalagi	No.9017/RDII/ ELE/REC163/98 dtd, 20-03-1998	06
7.	Modernization of Electronic Design Automation Lab	Dr.S.G.Hiremath	No8020/RID/ MODROB-337/ 2001-02 dtd 23-03-2002	15
8.	QoS Support in mobile Communication Networks	Dr.S.S.Manvi	No.8023/RID/BOR/RPS- 43/2005-06 dtd 06-03-2006	7.57
9.	Design and Development of Fuzzy based Algorithms for Resource Allocation and Routing in wireless Network	Dr.Jayashree D.Mallapur	No.8023/BOR/RID/RPS- 66/2007-08 dtd 05-03-2008	09
10.	Speech Processing for Improving speech perception and production	Dr.P.N.Kulkarni	No.8023/RID/RPS-11/ 2011-12	5.50

			dtd 13-12-2011	
<b>11.</b>	Design and Fabrication of low cost polymer micro cantilevers.	Dr.B.G.Sheeparmatti	No.8023/RID/RSP-008/PVT (II Policy) /2011-12	7.00
<b>12.</b>	Design and Development of Intelligent routing Algorithms for Vehicular Ad hoc Networks	Dr,M.S.Kakkasageri	VGST/ SMYSR (2014-15)/ GRD-453/2015-16 Dated: 11-11-2015	4.00
<b>13.</b>	Sustainable Agriculture	Prof.K.Y.Bendigeri	SERB/F/8589/2015-16 Dated: 15-03-2016	5.5
<b>14.</b>	Resource Management in Internet of Things	Dr.A.V.Sutagundar	File No.8-40/RIFD/RPS/ Policy-1/ 2016-17 Dated: 02-08-2017	5.765
<b>15.</b>	Intelligent Authentication Scheme for Internet things	Prof.Poornima.Chanal	No.VGST/RGS-F/GRD-908/2019-20 Date: 10-11-2020	03