

B. V. V. Sangha's
Basaveshwar Engineering College (Autonomous), Bagalkot
Department of Electrical and Electronics Engineering

RESEARCH CENTRE DETAILS

I. About Research Centre:

- Year of Establishment: 1963
- Major Research Areas (5 Nos.) :
 1. Wind & Solar Energy Sources
 2. Image & Signal Processing
 3. Multilevel Inverters
 4. Power Electronics
 5. SPV Irrigation systems
- No. of research guides enrolled at our research centre : 04
- No. of internal faculty guiding the candidates : 04
- Faculty with Ph. D. : 04
- Our Faculty pursuing Ph. D. : 03
- Total number of registered candidates at the research centre : 08
- No. of candidates awarded Ph. D. till date : 13
- No. of candidates pursuing Ph. D. : 08

II. Research guides at the research centre

Sl.No.	Name of the Guide	Area of Specialization
1.	Dr. Suresh H. Jangamshetti	Wind Energy Sources
2.	Dr. D. S. Jangamshetti	Signal Processing
3.	Dr. R. L. Naik	Multi-level Inverters
4.	Dr. B. F. Ronad	Solar irrigation systems

III. Research Scholars pursuing Ph. D program

Sl.No.	Name of the Student	Name of the Guide	Year of Registration	Research Topic
1.	Anand H. Unnibhavi	Dr.D.S. Jangamshetti	2013	Automatic speech recognition for Kannada Language
2.	S.Y. Goudappanavar	Dr.S.H. Jangamshetti	2015	Modelling & Performance Analysis of Small Wind Turbine Generators in Microgrid
3.	Seema P Diwan	Dr.S.H. Jangamshetti	2016	Design of novel wavelet transform based controller for distribution static compensator (DSTATCOM) and performance comparison with traditional controller
4.	Shoib Mohhammad	Dr. R.L.Naik	2017	Design & Fabrication of Grid Connected Wind Turbine Blade for Low Wind Speed Regime
5.	Suvarna Kolli	Dr. R.L.Naik	2017	Reactive Power Pricing using Fuzzy Logic
6.	Vikas Jainkeri	Dr.S.H. Jangamshetti	2019	Design and Implementation of Model Based Control for Battery Energy Management
7.	Mahantesh L. Chikkadesai	Dr.S.H. Jangamshetti	2019	Design of smart controller for SPV-Wind Powered Home Microgrid
8.	Basavaraj Hadapad	Dr. R.L.Naik	2019	Design and Implementation of Controller for Switched Reluctance Motor Employed in Electric Vehicle Application

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.	D. R. Joshi	Dr.S.H. Jangamshetti	Optimum Site Selection for Wind Power Plant based on Financial Assessment	2010
2.	P. N. Kulkarni	Dr.D.S. Jangamshetti	Speech processing for reducing the effects of spectral masking in sensorineural hearing loss	2010
3.	S. C. Byalihal	Dr.S.H. Jangamshetti	Genetic Algorithm based Optimization Techniques to determine Location and Rating of FACTS Controllers in Transmission and Distribution Systems – A Case Study Approach	2011
4.	R. L. Naik	Dr.S.H. Jangamshetti	Three Level Neutral Point Clamped Voltage Source Converter for Grid Connection of Wind Turbine	2015
5.	G. Suchitra	Dr.S.H. Jangamshetti	Reliability and Economic Viability of Yes Wind-SPV Hybrid Systems for Electricity Generation	2016
6.	B. F. Ronad	Dr.S.H. Jangamshetti	Optimum Sizing of SPV Powered Irrigation Systems based on Field Conditions – A Case Study of Riverbed Pumpsets	2018
7.	Muttakka Bannur	Dr.S.H. Jangamshetti	Optimal hybrid energy system for electrification of a farm house in North Karnataka	2019
8.	Shivappa Sobarad	Dr.S.H. Jangamshetti	Short term wind forecasting model for planning of wind plants and scheduling of power	2020
9.	A Sreedevi	Dr.D.S. Jangamshetti	Efficient Signal processing techniques for DNA Microarray image Analysis for Bioinformatics Applications	2013
10.	Chayalakshmi C L	Dr.D.S. Jangamshetti	Design, Development and Analysis of Embedded based Data Acquisition and Control for an Industrial Boiler	2018
11.	Manjula Sutagundar	Dr.D.S. Jangamshetti	Modelling, simulation and optimization of novel mems resonator structures for communication applications	2019
12.	Vijayalakshmi S. Jigajinni	Dr.D.S. Jangamshetti	Simulation and Modelling of Faults and Predicting the Functional Behaviour of a Typical Aircraft Fuel System	2019

V. Research Projects carried out in the department

Sl.No.	Title	Funding Agency	Amount	Year
1.	SCADA for distribution automation laboratory for PG studies and Research activities	TEQIP-II	27 lakhs	2012-14
2.	Conical Collector Solar Water Heater for Rural Application	VGST Technology Related Innovative Project (TRIP)	0.40 lakhs	2012
3.	Renewable Energy (2010-11) and SCADA for distribution automation (2011-12) Laboratories	K-FIST Level-II from Vision Group on Science and Technology	40 lakhs	2010-2012
4.	Development of FPGA-DSP based controller for three level Inverter for Grid Connection of Wind Turbine Generators	All Indian Council for Technical Education, New Delhi	16.60 lakhs	2008-09
5.	development of Wind Data Logger using Wireless Transmission	Technical Education Quality Improvement Program (TEQIP)	8 lakhs	2006-07
6.	Conical Collector Solar Water Heater	Technical Education Quality Improvement Program (TEQIP)	0.20 lakhs	2005-06
7.	District Level Renewable Energy Park	Ministry of New and Renewable Energy Sources, GoI, New Delhi &KREDL Bangalore	10 lakhs	2005-06
8.	Waste Heat Recovery from SPV using Thermo Electric	KSCST	5500.00	2013-14

	System			
9.	Design and development of novel method of embedded based data acquisition and control system for process industry	AICTE sponsored RPS scheme	11.63 lakhs	2013-14
10.	Signal processing lab	TEQIP-II	5 lakhs	
11.	Design of economic energy efficient wind-solar hybrid system for irrigation pump sets	TEQIP-II	1,75,000.00	2016
12.	Grid-Tie Inverter with bidirectional FCU for Small wind turbine generator	TEQIP-II	1,85,834.00	2016
13.	Automatic Flood monitoring and protection of dam	KSCST	6000	2012
14.	Design and Development of SPV source for RO system	KSCST	3000	2017
15.	Impact analysis of sound level in BEC campus and implementation of IoT based noise alerting system	TEQIP-III	15000	2018