

## Personal Profile

**Name:** Dr. Jayashri Aniket Bangali

**Designation:** Coordinator, B.Sc. (Computer Science),  
Head, Electronics Department

**Educational Qualification:** M.Sc., M.Phil., Ph. D. (Electronic Science).

**Experience:** Teaching Experience: 20 years  
Industrial Experience: 3 & 1/2 years

**Contact Number:** 9423581927

**Email ID:** [jayashri789@yahoo.com](mailto:jayashri789@yahoo.com)

**Research Areas:** Low Temperature Co-fired Ceramics (LTCC), Smart Space Automation, Embedded systems, Lighting and Glare technology

### Research Experience:

#### Research Projects

Duration Year From-To	Title of the project	Name of the funding agency	Total grant Sanctioned
2012-14	Microcontroller based energy efficient system for corridor illumination	BCUD, SPPU	Rs. 3,00,000/-
2016-18	Studies on Glare Reduction Techniques for indoor illumination systems	ISRO-UoP Space Technology Cell of Savitribai Phule Pune University (SPPU)	Rs. 19,18,400/-

**Research Papers presented/published:** 40

	Number of research papers published
International Journal	15
International Conference	08
National Conference	17

**Conferences/ Seminars /Workshops attended:** 61

	Number of Conferences attended
International Conference	09
National Conference	22
National Seminar	05
State level Workshops	25

*Worked as a Coordinator/Convener for various Seminars / Conferences / Workshops / Cultural events / Competitions organized for the staff members and for the students in last 20 years.*

### **Refresher/Orientation Programme :**

1. Successfully completed **21** days long ‘**Refresher Course**’ in Electronics subject organized by Department of Electronic Science, University of Pune from 24/4/09 to 15/5/09.
2. Successfully completed **28** days long ‘**Orientation Programme**’ organized by Academic Staff College of University of Pune from 7/9/11 to 4/10/11.

### **Faculty Development Programmes attended:**

1. Two Days Faculty Development Programme on “Internet of Things (IoT), Analytics, Computing Techniques and Tools for Smart Cities”, organized by Cummins College of Engineering for Women from 17<sup>th</sup> to 18<sup>th</sup> February 2017.
2. One week Faculty Development Programme for IQAC Coordinators organized by UGC-Human Resource Development Centre, SPPU from 19<sup>th</sup> to 25<sup>th</sup> March 2018.
3. Five days Faculty Development Programme ‘Train the Trainer’ for IQAC Coordinators organized by Kishinchand Chellaram College, Mumbai and RUSA Maharashtra from 4<sup>th</sup> to 8<sup>th</sup> October 2018.
4. Eight weeks Faculty Development Programme entitled ‘Educational Leadership’ from July to September 2019 on Swayam with 88% and Silver Medal.

### **Book Publications:**

Published **19** Text Books (as a Co-author) of Electronics subject as per University curriculum for B.Sc. (Computer Science) and B.Sc.(Electronic Science) course through Nirali publications.

### **Awards Received:**

<b>Year</b>	<b>Award Details</b>	<b>Award given by</b>
2016-17	<b>Best Teacher Award in Applied Sciences</b>	Global Society of Basic & Applied Sciences (GSBAS), <b>Mumbai</b> , India and Soil & Water Conservation Society (SOWCOS), Kathmandu, <b>Nepal</b>
2012-13	<b>Best Teacher Award</b>	Kannada Sangha’s Kaveri Group of Institutes
2010-11 To 2018-19	<b>Best Achievement Award</b> (Received consecutively for 9 years)	Kannada Sangha’s Kaveri College of Arts, Science and Commerce
2015-16	<b>Sincerity Award</b>	Kannada Sangha’s Kaveri Group of Institutes
2016-17	<b>Kaveri Award for Excellence in Education</b>	Kannada Sangha’s Kaveri Group of Institutes

## Awards for Research Papers at International/National Level

Year	Award Details	Title of the Research Paper
11-12 April, 2015	Appreciated in <b>International conference</b> on 'Advances in Applied Science and Environmental Engineering' organized by Institute of Research Engineers and Doctors (IRED) at Hotel G Tower, <b>Kuala Lumpur, Malaysia.</b>	Smart Space Design Framework
17-20 May 2017	Won the <b>First Prize</b> of " <b>Best Paper Presentation</b> " of the <b>International Conference</b> on Emerging Trends in Basic and Applied Sciences (ETBAS -2017) organized by GSBAS and SOWCOS at <b>Kathmandu, Nepal</b>	Energy Efficiency of Internet of Things for Indoor Illumination Systems
27-28 December, 2012.	Secured <b>Best Paper position</b> in the 'National Conference on Emerging Technologies For Sustainable Developments' organized by Department of Technology, <b>Shivaji University, Kolhapur, Maharashtra</b>	Simulation of strategic placement of luminaries for Energy Efficient Lighting in Smart Spaces
2- 4 February, 2011.	Won the <b>First prize for Best Research Paper</b> in 'National Conference on Sensor Network and Embedded Systems' (NCSNES-2011), organized by <b>Garware College, Pune</b>	Microcontroller based Lighting control system for Energy Efficient Corridor illumination
12-13 January 2017	Won the <b>Best Paper</b> prize in, " <b>International Conference on Go Green</b> " Organized by Chandmal Tarachand Bora College, <b>Shirur.</b>	Simulation and Development of Energy Efficient Lighting Control System For Corridors of A Green Building

## Research Paper Publication Details

Published many research papers in International/National Journals/Conferences listed as below:

### International Journals

Sr. No.	Title of Research Paper	Name of Journal	Publication Details	Year
1.	Silver thick film pastes for low temperature co-fired ceramics: impact of glass frit variation	Soldering & surface mount Technology Emerald	Vol.20 No.3 pp 41-46 ISSN 0954-0911	Feb. 2008
2.	Effect of ink organics on cambering of an Ag- metalized Low Temperature Co-fired Ceramics (LTCC)	Journal of Material Science, Materials in Electronics Springer US	Vol- 20 Issue-5, pp- 455-460	May 2008
3.	Energy Efficient Lighting Control system design for corridor illumination	International Journal of Science and Engineering Research	ISSN no: ISSN 2229-5518 Vol-3 Issue -4	April 2012
4.	Automated Test Jig for Uniformity Evaluation of Luminaries	International Journal of Advances in Engineering and Technology	ISSN 2231-1963 Vol-3 Issue -1 pp 41-47	March 2012

5.	Comparative study of protocols and control methods in Energy Efficient building automation systems	Advances in Computational Science and Technology	ISSN 2231-1963 Vol-5, No.-2 2012 pp 883-891	March 2012
6.	Simulation of strategic placement of luminaries for energy efficient lighting using daylight	Global Advanced Research Journal of Engineering, Technology and Innovation	ISSN: 2315-5124 Vol. 2(2) pp. 064-068	Feb. 2013
7.	Design and Implementation of Security Systems for Smart Home based on GSM Technology	International Journal of Smart Home	ISSN: 1975-4094 IJSH Vol.7, No.6 (2013), pp.201-208	March 2012
8.	Energy efficient Smart home based on Wireless Sensor Network using LabVIEW	American Journal of Engineering Research(AJER)	e-ISSN : 2320-0847 p-ISSN : 2320-0936, Vol-02, Issue-12, pp-409-413	Dec. 2013
9.	Comparative study of e-waste generated by various lighting equipments	Environment Observer	ISSN 2320-5997 vol-17	Dec. 2013
10.	Development of Smart Common Utility Corridor for An Educational Institution Building	International Journal of Pure and Applied Research in Engineering and Technology	ISSN: 2319-507X 2014 Volume 2 (9): 327-335	May 2014
11.	Simulation and Development of Lighting Control system using Daylight for Corridor of a Building	International Journal of Innovative Research in Advanced Engineering	ISSN: 2349-2163 Vol-1, Issue-12	Dec. 2014
12.	Energy Efficiency of Internet of Things for Indoor Illumination systems	Online International Interdisciplinary Research Journal	ISSN 2249-9598, Vol-07	Sept 2017
13.	Evaluation of Discomfort Glare by using Lighting Simulation Software for Optimal Designing of Indoor Illumination Systems	International Journal of Emerging Engineering Research and Technology	ISSN 2349-4395 (Print) & ISSN 2349-4409 Vol 3 Issue 12, pp 173-178	Dec. 2017
14.	Discomfort Glare Evaluation using DIALux Lighting Simulation software and using developed Python Program model	International Journal of Sustainable Lighting	IJSL (2018) 44-50 ISSN: 2586-1247	Nov. 2018
15.	Discomfort glare prediction by using Unified Glare Rating	Australian Journal of Electrical and Electronics Engineering	ISSN: 1448-837X (Print) 2205-362X (Online) Journal	Jan 2019

### International Conferences

Presented research papers in various International Conferences as listed below:

<b>Sr. No.</b>	<b>Title of Research Paper</b>	<b>Details of Conference</b>	<b>Organizers</b>	<b>Year</b>
1.	Development of Smart Common Utility Corridor for An Educational Institution Building	2 <sup>nd</sup> International conference on Emerging Trends and Research in Engineering and Technology	IBSS College of Engineering Amravati, M.S. India	29 <sup>th</sup> March 2014
2.	Occupant Density Model for Smart Space of a Corridor of an Educational Institution Building for supporting Smart Services	International Conference on Signal Processing, Control and Data Analytics – 2015 (ICSCD-2015)	San Diego, USA	14 <sup>th</sup> March 2015
3.	Smart Space Design Framework	Third International Conference on Advances in Applied Science and Environmental Engineering' - ASEE 2015	IRED Kuala Lumpur, Malaysia	11 -12 April 2015
4.	Glare Evaluation and Reduction Techniques	International Conference on Research Advancements in Engineering Sciences, Technology and Innovations (RETI-DEC-2018)	Society of Computers, Engineering Technology & and Applied Sciences at Singapore	3-4 Dec 2018
5.	Simulation and Development of Energy Efficient Lighting Control System For Corridors of A Green Building	International Conference on Go Green	Tarachand Bora College, Shirur.	12-13 Jan. 2017
6.	Energy Efficiency of Internet of Things for Indoor Illumination systems	International Conference on Emerging Trends in Basic and Applied Sciences (ETBAS -2017)	GSBAS and SOWCOS Kathmandu, Nepal	17-20 May 2017
7.	“Industrial Internet of Things IIoT: Applications, Issues and Challenges”	International conference on “ Changing Perspectives of Industries with Industry 4.0	MAEER’S MIT-SOM College Pune	15- 17 Jan 2018
8.	Challenges of IoT and IIoT	4 <sup>th</sup> International Conference on Emerging Technologies: Micro to Nano	Department of Electronic Science, SPPU	16-17 Dec 2019

### National Conferences

Presented research paper in various National conferences as listed below:

<b>Sr. No.</b>	<b>Title of Research Paper</b>	<b>Conference Details</b>	<b>Organizers</b>	<b>Year</b>
1.	Formulation of conducting paste suitable for LTCC	National seminar on sensors and Instrumentation	Shankarrao Mohite Mahavidyalaya Akhuj	2007

2.	Development of silver thick film pastes for surface conductors in LTCC applications	National Seminar of Physics and Technology of Sensors (NSPTS-12)	BARC, Mumbai	2007
3.	Effect of ink organics on cambering of an Ag-metallized low temperature co- Fired ceramics (LTCC)	National Seminar of Physics and Technology of Sensors (NSPTS-13)	Dept. of Electronic Science University of Pune	2008
4.	Technological study of contemporary Home Automation Systems	National Conference on Emerging Trends in Electronics	D.Y.Patil College, Pune	10 <sup>th</sup> Feb. 2010
5.	Energy Efficient Lighting Control System Using LED tubes - a Case Study	National Conference on Instrumentation (NSI-35)	Dept. of Instrumentation, Belgaum.	7- 9 Jan. 2011
6.	Microcontroller based Lighting control system for Energy Efficient Corridor illumination	National Conference on Sensor Network and Embedded Systems (NCSNES-2011)	MES, Abasaheb Garware College, Pune	2- 4 Feb. 2011
7.	Comparative study of protocols and control methods used for BAS	Emerging Trends in Engineering, Science and Management	JSPM's Rajashri Shahu College of Engineering.	2012
8.	Simulation of strategic placement of luminaries for Energy Efficient Lighting in Smart Spaces	National Conference on Emerging Technologies for Sustainable Developments	Department of Technology Shivaji University, Kolhapur, Maharashtra	27-28 Dec. 2012
9.	Development of Lighting Design Software Tool based on MATLAB for optimization of indoor artificial lighting	National Conference on Emerging Trends in Computer Science and Computer Application	Fergusson College, Pune.	7-8 Dec. 2013
10.	Comparative study of e-waste generated by various lighting equipments	National conference on Hazardous E-waste Management	Modern College of Arts, Science and Commerce, Shivajinagar, Pune.	23- 24 Dec. 2013
11.	Energy saving Lighting Control System for conference room based on Atmega Microcontroller	1 <sup>st</sup> National Conference on Energy and Environment (NC2E-2014)	University of Pune, Pune.	20-22 Feb. 2014.
12.	Spreadsheet based Decision support system for luminary replacement strategy in an Educational Institute	1 <sup>st</sup> National Conference on Energy and Environment (NC2E-2014)	University of Pune, Pune.	20-22 Feb. 2014
13.	Development of Interactive Smart Notice Board based on MATLAB	National conference on Advances in Electronics and its Interdisciplinary Applications	Department of Electronics Science, Fergusson College, Pune	19-20 Sept. 2014
14.	Comparative study on glare effect and luminous intensity distribution due to positional changes of luminaries.	Recent and Innovation Trends in Computing and Communication	Department of Electronics, College of Engineering, Shegaon	2016

15.	Glare Evaluation of Electronics Laboratory using DIALux Lighting Simulation Software	National Level conference on Applications of Electronic and Computer Science	Kaveri college of Arts, Science and Commerce, Erandwane, Pune.	20- 21 Jan. 2017
16.	Challenges faced in the Implementation of ICT for Quality Enhancement in Higher Education Institutions	National conference on Academic and Administrative Audits through ICT	B.G. Gholap College, Pune	7-8 Jan. 2017
17.	Study of Glare for Indoor Illumination system	Raman Memorial Conference - 2018	Department of Physics Savitribai Phule Pune University	23-24 Feb 2018

### **University Examination related Work Experience:**

- **Paper Setter** and **Moderator** for Electronics subject of S.Y.B.Sc.(Computer Science) for Pune University Examination.
- **Paper Setter** and **Moderator** for Electronics subject of F.Y.B.Sc. (Computer Science) for St. Mira Autonomous College
- **Examiner** for University Common Assessment Programme (CAP) of F.Y.B.Sc. and S.Y.B.Sc.(Computer Science) University Examination.
- **External Examiner** for University Practical Examinations.
- Major contribution in restructuring the University syllabus of M.Sc. (Electronic Science) and Electronics subject of B.Sc.(Computer Science). Invited as a **Resource Person** in Syllabus restructuring workshops.
- Worked as a '**College Examination Officer**' (CEO) of Kaveri College (from 2012 to 2016).

### **Invitations:**

- Delivered many **Guest lecturers** at various colleges on Electronics topics such as Smart Space, Smart Homes, IoT, IIoT, Use of Electronics in real life etc.
- Worked as **Judge** for many technical Competitions such as Paper presentations Competitions, Project competition etc.
- Appointed as a one of the **Local Inquiry Committee (LIC) member** by Savitribai Phule Pune University for the inspection of continuation of affiliation of the college.
- Invited as a **Subject Expert** in Electronics for selection interviews of Assistant Professor in Modern College, Warje.
- Provided **consultancy** for designing lighting control systems to industry. Designed and developed Energy Efficient Lighting Control Systems for corridors of a building and for virtual classroom.