

Accredited by NAAC
ISO 9001:2015 Certified Institution
Approved by AICTE, New Delhi
Affiliated to Visvesvaraya Technological University
www.sairamce.edu.in

Annual Report-2022-2023

I. ABOUT THE INSTITUTION

Sri Sairam College of Engineering formerly Shirdi Sai Engineering College, Bengaluru, established in the year 1997 by MJF. Ln. LeoMuthu, Founder Chairman of Sapthagiri Educational and Charitable Trust, is a non-profitable and non-minority institution. Located within the Bengaluru city limits, Sri Sairam College is an inspirational place to study in which everything from classroom to laboratories, hostel to cafeteria is modernized with state-of-the art infrastructure. The labs and other facilities are among the best in the region making it one of the most sought-after institutions by parents and students.

The Ultra-modern computer labs with latest software and hardware, and techno-visionary innovative centre make the institution learning heaven for enthusiastic young engineering aspirants. ICT enabled class rooms and work areas are well furnished and equipped with modern up-to-date facilities.

II. LIBRARY

A library is source of knowledge which serves the student community, helping them learn and grow. It caters to the needs of all our students across all the departments. The library is well equipped with modern facilities and resources in the forms of books, journals, magazines, reports, databases in addition to digital media such as Internet repositories. Our library has more than 28000 volumes of books in 4700 titles. Our library is a member of e-consortium, giving access to global knowledge. Our library also encourages all the faculties in consolidating the publications of all the staff through Microsoft Research ID, Google Scholar ID, Scopus ID, Vidwan ID and it is also a part of National Digital Library of India.

Particulars of Resources	Total	
No. of Volumes	27924	
No. of Titles	4768	
No. of Books in Dept Library	5064	
No. of Journals (Print)	42	
No. of VCD's	1055	
No. of Reference Books	4085	
No. of Journals Online Packages	7	

A. INSTITUTION LEVEL LIBRARY MEMBERSHIPS

- VTU Consortium
- DELNET
- NDL National Digital Library
- e ShodhSindhu

- e Shodhganga
- CMTI library
- American Library, Chennai

For remote accessing of the library e-resources, our institution provides Remote Access Service named Knimbus and a Remote Access App named MLibrary. Turnitin – A Plagiarism Checking Software is also available in the library to check the research papers done by the faculties and also the project reports done by the students.

III. CUMULATIVE ACHIEVEMENTS

Our institution has got approval from AICTE, Visvesvaraya Technological University and also from Government of Karnataka to start the following courses and program in this and upcoming academic years.

- 1. Artificial Intelligence & Machine Learning
- 2. Information Science & Engineering

In addition to the above, our institution has got approval for 3 research Centre in addition to the existing mechanical Research Centre.

- 1. Department of Computer Science & Engineering
- 2. Department of Electronics & Communication Engineering
- 3. Department of Chemistry [Under Humanities & Science Department]

Our institution has got approval for an NCC unit and 12 students has actively participated in the first year of first year of NCC deployment.

IV. VTU E-SHIKSHANA

VTU e-learning center has taken up a new initiative in enriching knowledge and empowering education through implementing virtual interactive e-learning platform named as VTU E-Shikshana. It enables the students of VTU to interact with eminent scholars in an immersive e-learning environment. It enables seamless live video and audio streaming experience. E-Shiksha platform will be used to receive

- 1. Live lectures from the eminent personalities talk to teacher
- 2. Industry interaction programmes
- 3. Video conferencing with VTU officials
- 4. Special programmes for research scholars
- 5. Faculty enrichment programmes
- 6. Career guidance programmes for students
- 7. Special talks by Eminent experts, entrepreneurs etc.,

Our faculties have contributed in the development of E-Shikshana content for various subjects. Prof Sivaprakash.

C, Dr T N Prabakar and Prof K V Malini have handled Neural Networks and Elective Vehicles courses which will be available to all the students through VTU YouTube Channel.

V. RANKINGS

In 2022, The Week Magazine ranked our institution as 12th in Bengaluru, 19th in Karnataka and 105th rank in pan India. Outlook magazine ranked our institution at 55th position in the all-India level. India Today ranked our institution at 58th Position. Our institution has bagged the top position BAND - EXCELLENT among the private self-financing institutions in ARIIA [ATAL RANKING OF INSTITUTIONS ON INNOVATION ACHIEVEMENTS]. It is a known fact that innovation is the key focus in our institution.



Our institution has also been ranked with 4 stars in Institution's Innovation Council Rating, 2021. It is the highest star rating given by MoE's IIC for the year 2020-21 as one of the top performing institutions across the country in annual performance ratings. Sri Sairam College of Engineering" has been ranked 2nd in South Region (Zonewise) T-School Digital index survey 2021 (December 2021)" by DATAQUEST T-school 2022 Higher Education Conference & Awards - 21st December 2022, India Habitat Centre, New Delhi. (Cyber Media).

VI. PHYSICAL EDUCATION

In our institutions, the students are encouraged not only in curriculum related activities but also in co-curricular and extra-curricular activities. A sound mind in a sound body is the mantra that makes our students excel in sports and games also. Harish R, a 6th semester student has won silver medal in 30meters and bronze medal in 50-meter categories in the VTU single zone Archery competition 2022. It is our proud say that our institution has got 5th position to receive meritorious institution in the field of sports and received a cash award of Rupees one lakh for the sports achievements in 2019-20 from VTU. Great effort by our College PED Mr. K N Manjunath and all the students who participated and won Prizes in various sports events.

Department of Physical Education and Sports, conducted VTU Bengaluru South division hockey Men Tournament - 2022 and VTU state level hockey women tournament & Selection Trials - 2022 - 2023. Mr. Saravanan R, VTU Bengaluru South Division Regional Director, Physical Education Director GAT, Bengaluru graced the function as Chief Guest. The VTU State Level Cross-country Men & Women Championship, began at 6:30am at the college campus on 28th January 2023. Management Representative Dr. Arun Kumar R, started the event.

Chief Guest, Dr. Shreerama Reddy, Director of Physical Education, BMS College of Engineering, Bengaluru, Guest of Honour Sub-Major. Nathuram, 8th KAR Battalion NCC, Bengaluru B Group and Special Invitee Mr. Sri. Saravanan R, VTU Bengaluru South Zone Regional Director, Principal, Dr. Shadaksharappa Bichagal, all the Heads of the departments, Faculty and the students of Sri Sairam College of Engineering graced the occasion.

Our Students Chethan M, Department of CSE won silver medal in 30 meters & Keerthana S, Department of CSE won bronze medal in 50 meters in VTU state level Archery Competition 2022-23. Also, Saumya Sonawane, Department of Mechanical Engineering won silver medal in 22nd VTU state level Weightlifting (Women) competition 2022-23.

NCC & NSS



NCC allotted the allotment of regiment and COY number to Sri Sairam College of Engineering. The inauguration of NCC in the campus happened on 31.08.2021. Col. Vishal Goutam, Commanding Officer, 8 Kar. Battalion NCC, Bengaluru "B" Group was the chief guest for the inaugural program.

VII. EVENTS AND ACHIEVEMENTS OF INSTITUTION AND DEPARTMENTS

A. INSTITUTION

- International Women's Day 2023 was celebrated in the campus on 8.03.23 to honor all the women in our life. The program was organized from 11AM to 1PM in AV hall.
- The best part of the program was a session on Cybercrime by the esteemed guest Adv. Sumedha Bodele
 who is a corporate lawyer presently working in Accenture. She opened the eyes of all by citing various
 national and international cases on cyberstalking, morphing, cat-fishing, cyber pornography, Boys locker
 room etc.
- Sri Sairam College of Engineering today signed a MoU with the highly esteemed Hosur Industries Association (HIA) covering various skill enhancement initiatives. This MoU is signed by our Principal Shadaksharappa Bichagal and Mr. R Rajagopalan, President, VP & CMO, Titan Company Ltd. in August amidst the presence of Mr. B Senthil Nathan, Vice president, CFO, First Steps Baby wear Pvt Ltd, Mr. S Sundariya, chairman, Skill Development center (SDC) unit head, Wendt India Ltd, Managing Committee Members Secretary Mr. Arulanantham.

- The NAAC sponsored 3 Days Online National Level Seminar on "EFFECTIVE IMPLEMENTATION OF NEP MULTIDISCIPLINARY STRATEGIES & EDUCATION" was organized by IQAC, Sri Sairam College of
 Engineering.
- Sri Sairam College of Engineering, Bengaluru was awarded as the best Performing College of the year
 and all three of our students' project has been awarded as Best project of the year under KSCST project
 exhibition at 45th series of students' project program held at Visvesvaraya Technological University
 Belagavi.
- Department of Electrical & Electronics Engineering in association with SLMIC has successfully organized CARPEDIEM22, Project Expo on 18th July 2022. Chief Guest Sri. Charatkumar Kaviyarasan, Principal Strategist, Infosys Ltd., Guest of Honor, Sri K Sundaresan, General Manager & Plant Head, Carborundum Universal Ltd. Hosur, Dr. B Shadaksharappa, Principal SSCE, Anekal, Dr. Arun Kumar R, Management representative, SSCE, headed the workshop along with coordinator Prof. Malini K V, Head, EEE.
- As part of the Margdarshan initiative by AICTE, a two days NBA WORKSHOP on CO.PO Mapping & Gap Analysis was conducted by R.V College of Engineering, Bengaluru in their mentee institution Sri Sairam College of Engineering, Bengaluru. Two experts from R V College of Engineering namely Dr. Swarna Patra & Dr Sowmya B K have been deputed to be the resource persons for the two days hands on workshop. 44 Faculties from CSE, ECE, EEE, Mechanical & Science & Humanities department attended the two-day workshop. All the sessions were very useful and Informative. Many faculties interacted with the experts and got their doubts clarified.
- Sri Sairam College of Engineering, Bengaluru in collaboration with Indian Society for Technical Education (ISTE) Karnataka Section, organized 23rd ISTE Karnataka state Faculty convention & 31st Dr. L S Chandrakanth Memorial Lecture on the theme "Role of Higher Education Institutions in Achieving the Sustainable Development Goals on 21st July 2022. This program is organized with the objective of Propagating the need and importance of Sustainable Development Goals (SDG) and role of higher education institutions (HEIs), faculty and students in implementing and achieving the goals for sustenance and overall, wellbeing of present and future generation human being on earth.
- Our beloved Principal Dr. B Shadaksharappa had been invited as a guest and special speaker during the inauguration of Marine Technological Society Students Chapter at Sri Sairam Engineering College, Chennai on 25.08.2022.



We are proud that Sri Sairam College of Engineering, Bengaluru was awarded as best Performing
 College of the year and all three of our students' projects had been awarded as Best Project of the

year under KSCST project exhibition at 45th series of students' project program held at VTU Belagavi.



B. SMART & GREEN CAMPUS

- All India Council for Technical Education (AICTE) conducted national level clean & smart campus award 2020. Sri Sairam College of Engineering participated for this national level clean & smart campus award 2020. From Karnataka only 3 colleges secured position among top 10 campuses. Sri Sairam College of Engineering is one among them.
- Sri Sairam College of Engineering is following Sustainable Development Goals. Under this SDG, college started bicycles inside the campus to reduce the pollution & improve "Green Mobility". The college has inducted a bicycle fleet in the campus for students and staff community.
- Sri Sairam College of Engineering has inaugurated and maintained Butterfly Park inside the campus to maintain eco-friendly environment. As Sri Sairam College of Engineering following sustainable development goals, under goal No.15 (Life on Land) we initiated Butterfly Park inside the campus.

C. STEP [SAIRAM TRAINING, ENTREPRENEURSHIP AND PLACEMENT CELL]

DEPARTMENT	STUDENTS COUNT	OFFERED	TOTAL OFFERS	PERCENTAGE
		STUDENTS		
CSE	79	67	104	84.81
ECE	42	32	51	76.19
EEE	26	15	21	57.69
MECH	41	20	22	48.78
TOTAL	188	134	198	71.27
	71.27%			

Top 10 Salary Packages

S. No	Company Name	No. of Students Placed	СТС
1.	BYJUS	4	10 LPA

2.	HP Inc	1	7 LPA
3.	ZOHO	1	6.52 LPA
4.	Apisero	2	6 LPA
5.	No Broker	1	5.16 LPA
6.	Virtusa	2	5 LPA
7.	FIS	3	5 LPA
8.	Cognizant	9	4 LPA
9.	EMTEC	2	4LPA
10.	SenseForth.ai	2	3.6 LPA

D. NITTT [NATIONAL INSTITUTE OF TECHNICAL TEACHER TRAINING INSTITUTE] AICTE

- Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) jointly proposed an initiative called "National Initiative for Technical Teachers Training (NITTT)" to address the technical teachers of the country who play an active role in the technical education system.
 To enhance the delivery skills of teachers and to communicate the knowledge and skills to the students, our faculties have been encouraged to register for the modules under AICTE-NITTT.
- All the faculties are encouraged to register under different modules. For each module a coordinator was
 assigned. Around 23 faculties have completed the assignments and have got the eligibility to take the
 external exam. Those faculties who have not got eligibility to take the external exam are instructed to
 take the same course next semester and complete the module.

E. SAIRAM BUSINESS INCUBATION CENTRE

Sairam Business Incubation center was established in the year 2019 under Sri Sairam College of Engineering in collaboration with Innovation & Entrepreneurship Development Cell (IEDC) and MSME in order to nurture the Entrepreneurship and Startup Eco- System in the students' minds and motivate the next generation to become employer rather than employee.

The following are the successful startups:

S. No.	Name	Name of the Start-up
1	MAHESH M	HEXIQON TECHNOLOGIES PRIVATE LIMITED
2	SIVASANKAR C R	R&D INFINITY CREATORS
3	SANDEEP SINGH R	ELECTRO PRO
4	SANTHOSH KUMAR CHINNAPPA	VIDIYAL FINANCIAL MANAGEMENT
5	VIGNESH G	OTTRAN CHANNELS

F. ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

- Learning, organized one-week training program on Soft Skill for the 2nd year students of SCE, Bengaluru from 28th February to 7th March, 2023 in association with ICT Academy & PayPal, Bengaluru for the benefit of our students. Mr. V S Ramakrishnan, Certified OMI Trainer, Chennai and Mr. Dhruva Das Binani, Soft Skill Behavioral Trainer Bengaluru were the resource persons for this training program. The one-week training program on soft skills was a success, and participants reported significant improvements in their soft skills.
- Learning organized a webinar on "The Importance of Personal Branding on LinkedIn" for the students to build their LinkedInprofile for their career purpose on 03.03.2023 by the resource person Mr. Akash Tomaselli, Digital Marketing & LinkedIn Expert, CEO & Founder, Digisnare Technologies, Bengaluru.
- The webinar lasted for approximately 75 minutes and was attended by all 1st year & 2nd Year students.
- The session was informative, engaging, and well-organized, making it a worthwhile investment of time.
- Along with Department of Information Science & Engineering organized a one day workshop on "Cyber Security & Ethical Hacking" for all First-year students to educate on
- the fundamentals of cybersecurity and ethicalhacking on 07.03.2023 by the resource persons Mr.
 Srinath Gopinath, Director, CMO TECHBYHEART India Private Limited, Kerala and Mr. Ressal, Associate
 Member, National Cyber Defence Research Centre, New Delhi.
- Overall, the workshop was informative and engaging. The session provided students with a solid foundation of cybersecurity principles and ethical hacking techniques.

G. COMPUTER SCIENCE & ENGINEERING

- Department Computer Science and Engineering of SSCE organized a Seminar on Recent trends in Bigdata and Machine Learning on 22.12.2022. Mr. Sujith Pradeepan. R, Senior Manager of BOEING Technologies Pvt. Ltd, Bangalore is the chief guest for the seminar.
- Centre of Excellence for DRONE innovation of SSCE organized a workshop for UAV and its applications on 30.11.2022. Mr. Yuvaraj CEO, Skyrider Aero solutions, Chennai is the Chief guest for this workshop.
 He explained about the different parts of DRONE and also described how to assemble a drone. 120 students participated and they clarified their doubts with the chief guest.
- We are glad to share that student team of Dept. of CSE-Madhumitha and Balasaravan bagged FIRSTPRIZE for their Poster-Presentations on Sustainable Development and Green Chemistry in the National Level Symposium SCIHUM2022 organized by Dept. of S & H, SIT, Chennai on 07.06.2022. The total number of participants were 300+ all over south India.
- "Design is an opportunity to continue telling the story, not just to sum everything up." In this regard, Department of Computer Science Engineering and Coding Club of Sri Sairam College of Engineering has jointly organized an intra collegiate competition Webathon (web designing contest) on 25th May 2022 for all department students. Webathon has three Rounds as follows: Online Quiz, UI Design and Frontend design. Participants must develop website with regards to the user interaction and responses.
- "A good idea is something that does not solve just one single problem, but rather can solve multiple problems at once." In this connection, departments of Computer Science & Engineering and Artificial

- Intelligence and Machine Learning organized one day workshop on the title of "Design Thinking" with an eminent resource person Mr. Adithya B. S, UX designer, Infosys Pvt. Ltd, Bangalore.
- The session was loaded with 18 different teams with each one problem statement and instructed them to solve problem statements in design thinking strategies.
- "Innovation 2K21-A Virtual National level 24 hours continuous hackathon" held on 6th & 7th May 2021.
 Department of CSE organized innovation 2K21 with an objective of encouraging students to think out of box & provide innovative and suitable solutions using latest trending technologies more than 50 teams were registered and 250+ students participated.

H. ELECTRONICS & COMMUNICATION ENGINEERING

- IQAC Sri Sairam College of Engineering & Department of Electronics and Communication Engineering organized an online workshop on "Machine Learning using Python" on 28.11.2022.
- Prof. Arinjit Chowdhury, Chief guest, explained about AI simulation of human behavior. Totally 207 students were participated for this workshop from 2nd,3rd and 4th year ECE department. The workshop enlightened students in the domain of AI and machine learning. It provided deep insights on the process that machine learning incorporates. Department of ECE organized 2 Days Workshop on Embedded systems and IOT Design on 19th and 20th of August 2022.
- Department of ECE in association Sairam Bengaluru-Institution Innovation Council organized a Session on "Innovation. Protype validation- Converting Innovation to Start-up" for first year students of ECE department on 23.08.2022 at 2pm by Mr. Harish Babu L, Innovation Ambassador. He explained all the stages involved from prototype development to conversion into a commercial startup. Students were able to relate to the concept and understand the process of converting a prototype into start-up. We thank Mr. Harish Babu L for his valuable inputs to students in achieving business fit products.
- Sri Sairam College of Engineering, Bangalore Bagged First Prize under Chhatra Vishwakarma award for best innovative project titled Medical Assistance Droid for the Team Phenoms with the cash prize of Rupees 51000/-.



ELECTRICAL & ELECTRONICS ENGINEERING

- The Department of Electrical and Electronics Engineering organized 5-day Workshop on the topic
 "Building Core skills for industry 4.0" for 3rd and 4th year students from 21.12.2022 to 25.12.2022 at
 Sri Sairam College of Engineering under SDG4. Sri. Uday Bharghav, Founder, GenEd Technologies,
 Bengaluru addressed the students on technical aptitude, Reasoning, Resume creation, Communication
 skills, Group discussion etc.,
- "One Student One Tree" an AICTE Initiative was taken up in Campus in association with Nature and Wildlife Club, NSS, NCC and EEE Department had organized a program on 21st December 2022 near the Campus. Keerthi Chowdary from 2nd Year EEE Department is the finalist in "The UNLEASH Innovation Lab" Global Challenge on SDG organized by Infosys global university from 3.12.2022 to 10.02.2022 at Infosys campus, Mysore.



- A team from EEE participated Singapore AUV Challenge in Singapore. Team Varuna from Sri Sairam
 College of Engineering, Bangalore, India, finished their task in 12.1 seconds. First time at the
 competition, they are thrilled to be here and qualify. Congratulations, team!
- Department of EEE in association with Sairam Bengaluru-Institution Innovation Council has organized a
 workshop on "Design Thinking" for first year students of EEE & MECH department on 18.08.2022.
 Program coordinator was Mr. Harish Babu L, Innovation Ambassador. The main objective of this
 Workshop was to provide a platform to improve their knowledge about Design Thinking Process. The
 students were divided into six groups, each group identified a problem statement and carried out design
 thinking process for finding the solutions. Students presented their solutions during the closing session.
- The department of Electrical and Electronics Engineering organized 2 days Techno Cultural Fest "Milagro22" on 12th and 13th July2022. The event was inaugurated by the Chief guest Ms. Kruthika Lakshmi K, Sub Inspector of Police south east division of Bangalore city police.
- Dept. of EEE- Ms. Pallavi and Mr. Syed Adnan bagged THIRDPRIZE for their Poster Presentations on Sustainable Development and Green Chemistry in the National Level Symposium SCIHUM2022 organized by Dept. of S & H, SIT, Chennai on 07.06.2022. The total number of participants were 300+ all over south India.

I. MECHNICAL ENGINEERING

- The Institution of Engineers (IEI) India, Karnataka State Centre, Bengaluru in association with Sri Sairam College of Engineering, Department of Mechanical Engineering organized All India Seminar on "Alternative energy Systems" on 16th and 17th November 2022 at Sir M. V. Auditorium, IEI, Bengaluru. Reputed Resource persons from various Organizations presented valuable information on Alternative energies and provided valuable suggestions to improve the alternative energy systems. More than 130 participants attended all the sessions and clarified all their queries from resource persons.
- The Institution of Engineers India, Karnataka State Centre, Bengaluru in association with Sri Sairam College of Engineering, Department of Mechanical Engineering organized an All India Seminar on "Alternative energy Systems" on 16th and 17th November 2022 at Sir M. V. Auditorium, IEI, Bengaluru.
- Department of Mechanical Engineering along with Institution's Innovation council, Sri Sairam College
 of Engineering, has organized webinar on "Lean Start-up & Minimum Viable Product" for all students &
 faculty of our institution on 23.07.2021. Resource Person Dr. K Sivasakthi Balan, Head, Sairam Business
 Incubator, SSCE, explained about the opportunities in start-up. He explained about importance of lean
 start-up with examples.

J. SCIENCE & HUMANITIES

- IQAC and Department of Science and Humanities in association with ICT Academy conducted 3 days
 Faculty Development Program on "Advanced Presentation Skills" in connection with SDG Goal Number
 4 "Quality Education" from 19.09.2022 to 21.09.2022. Chief Guest was Ms. Simi Kalakamb, Senior
 trainer, ICT Academy. She enlightened about the Presentation skills to various Participants from Sairam
 college of Engineering along with External participants.
- All India Council for Technical Education (AICTE) book translation into regional language under National Education Policy (NEP) and AICTE was allotted to Prof. Jyothi. B & Prof. Venkatesha. P. The faculties translated diploma course Mathematics-1 subject into Kannada Language.

VIII. ALUMNI ASSOCIATION & SENIOR TALKS

- As a part silver jubilee celebration, Sri Sairam College of Engineering organized Alumni Sports Meet-2022 on 23.04.2022. Alumni from 2004 batches to recently passed out batch students participated in various sports events. Six Teams for cricket, 7 teams for Volley Ball, 10 for Shuttle Badminton & 12 for participants for Table tennis had participated. Prizes were distributed for winners & runners of all events. Alumni enjoyed the day and thanked Principal & management for organizing the event.
- Alumni Meet, Savinenapu-2022, of Sri Sairam College of Engineering, was organized in college campus
 on 20.08.2022 for all the Alumni. Dr. B. Shadaksharappa, Principal & President of the Association
 proposed the presidential address followed by a brief presentation of the institution. Dr Hari Krishna S,
 Secretary of the Association presented Annual report of the Association for all the Alumni present.
- Along with Alumni Meet, 2nd Annual General meet of the Association was conducted. Alumni came
 forward & shared their experience as what industry expects & were ready to share the same with their
 juniors. Dr R Arun Kumar thanked the Alumni for investing their time and for their active involvement
 and participation in the meet. Hundreds of Alumni from a cross section of batches, starting from as early

as 2003 to as recent as 2021, attended the meeting. Several games were organized to entertain the crowd. Gifts were distributed to all the Alumni present.



IX. RESEARCH PROPOSALS SANCTIONED

S. No.	TITLE	INVESTIGATORS	SPONSORING	AMOUNT	
			AGENCY	SANCTIONED	
1	Human Motivated Vision for	Dr T N Prabakar &	VTU – RGS	10,00,000	
	Smart autonomous Vehicles	Prof Sivaprakash			
2	Smart Farming	Prof Aruna & Prof N	VGST	2,00,000	
		Santosh Kumar			
3	Smart Dust Bin	Dr Srilatha & Prof	VGST	3,00,000	
		Halesha			
4	Tribological studies aluminum	Dr Harikrishna &	VGST	3,00,000	
	Composite Materials	Prof Harish Babu			
5	Future trends in Industrial	Prof K V Malini	VGST	2,00,000	
	Automation				

IX. PATENTS FILED

Faculties are encouraged to publish research papers and patents to improve the R & D culture of the institution. More than 30 patents are filed in these years and are listed below:

S. No	Title of the invention	Application no	Publication
			date
1	Design and development of mishap detection and astute	202141005564	02-12-2021
	action smart system using IOT		

2		2021/10017E0 A	22.01.2021
	Design Using Image Recognition for low-Traffic-Long-Roads	202141001750 A	22.01.2021
_	Illumination Control System		
3	A Portable Apparatus for cadmium removal from battery	202141000443 A	01-08-2021
	wastes		
4	A Touchless Flushing method in Corona Isolation ward	202141000386 A	01-08-2021
5	A IOT Integrated wearable patient Healthcare Monitoring	202141000446 A	01-08-2021
	Apparatus		
6	AN IOT Based Drone on sewage water testing Process	202141000445 A	01-08-2021
Ŭ	Aut 101 Based Brone on sewage water testing 1100css	20214100044370	01 00 2021
7	An Adaptive Technique Digital Signal Filtering for Image	202141000444 A	01-08-2021
	Processing		
8	A System and method for air pressure stabilizing and pumping	202041056406 A	01-01-2021
	Apparatus in Vehicles tires		
9	Smart beamforming on Visible Light Communication to	202041056173 A	01-01-2021
	secure the Network against Eavesdropping from Anonymous		
	Location		
10	Electric vehicle charge management and monitoring system	2020102995	24.12.2020
	based on IOT		
11	Smart Energy Efficient IOT Health Monitoring system using	202041029468 A	31.07.2020
	estimated		
12	Design of Novel Electrostatic spray machine for killing locust	202041028546 A	17.7.2020
13	An Approach for Empowering edge Computing for source	202041023028 A	06-12-2020
	allocation-based Learning for Industrial IOT		
14	Method and apparatus for rescuing a child trapped in a bore	201941026214	Applied
	well		
15	Bore well child rescue Robot	201941026215	Applied
16	Customized arm design for the bore well child rescue robot	201941026212	Applied
17	Quantum Computing system and method for Geometry	201941001501 A	25.01.2019
	Recognition of an object	2015410013017	25.01.2015
18	Domestic birds' protective system	201941001507 A	18.01.2019
10	bomestic birds protective system	201541001507 A	10.01.2013
19	A data storage device	201841047222 A	21.12.2018
20	Flood draining system	201841042709 A	23.11.2018
21	Vehicle braking system in hill station	201841038947 A	19.10.2018
22	A Wheezing detection device	201841036882 A	10-12-2018
23	Power generation in rail cars by inverted type wind turbine	201741039495 A	15.12.2017

24	SNGE-Smart new gen Electricity for smart city	201741023902 A	28.07.2017
25	A Smart hybrid cooking system	201641037185 A	11-11-2016
26	Method and system for IOT based irrigation utilizing moisture and humidity sensors	2021100323	31.03.2021
27	A method of Characterizing the flow field of practical grinds inject turbulence	202141012668 A	04-02-2021
28	Design and Development of real time automated routing algorithm for computer networks	2021101685	05.05.2021

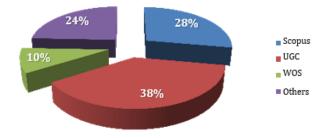
XI. FACULTIES PURSUING. COMPLETED THEIR DOCTORAL DEGREES

S. No	Name	DEPARTMENT	UNIVERSITY	STATUS
1	Dr A Poonguzhali	ECE	Pondicherry University	Completed
2	Dr R Gunasekari	EEE	Saveetha University	Completed
3	Dr Ramya R	EEE	Periyar University	Completed
4	Dr Rathna	Librarian	Bharathiyar University	Completed
5	Prof Sivaprakash	AIML	VTU	Pursuing
6	Prof Raghavendra Rao	ISE	JNTU	Pursuing
7	Prof P Kalamani	CSE	Amrita University	Pursuing
8	Prof Madhava Rao J	EEE	VTU	Pursuing
9	Prof Balaji V	MECH	VTU	Pursuing
10	Prof Ramkumar P	CSE	VTU	Pursuing
11	Prof Martin Joel Rathnam	ECE	VTU	Pursuing

XII. PAPER PUBLICATIONS

All the faculties are encouraged to publish research articles in refereed research publications. The following is the categorization of publications and the list of publications.

CATEGORIZATION OF PUBLICATIONS



LIST OF PUBLICATIONS

S. No.	Name of Faculty Member	Name of the Research Paper	Year of Publication	Name of the Journal
1	Balaji V	Mechanical properties of Roystonea regia – Glass/epoxy composites with SiC particles	2021	Materials Today: Proceedings
2	V. Balaji, R. Vijai, N. Rajesh Kumar	Computational flow dynamics analysis of c15arburettor for different throttle angle	2022	AIP Conference Proceedings
3	Balaji V	Synthesis and Characterization of Epoxy based Hybrid Composite Reinforced with Glass fiber, Royal Palm fiber and Titania Fillers	2022	NeuroQuantology
4	Balaji V	Effect of ceramic fillers on Mechanical and Wear Properties of Royal palm – Glass/Epoxy Composites: A Comparative Study	2022	NeuroQuantology
5	Dr.T.N.Prabakar and Prof.G.V Raja	Implementation of hybrid methods for vehicles monitoring and control design experimental systems	2022	AIP Conference Proceedings 239302108
6	Dr.T.N.Prabakar	Novel Routing Structure with new local monitoring, route scheduling and planning manager in ecological wireless sensor networks	2021	Journal of Environmental Protection and Ecology
7	Dr.T.N.Prabakar	A Novel approach to measure the progress of pterigium from the diagnosed eyes	2022	International journal of Health Sciences.
8	Dr.T.N.Prabakar	Prediction of diabetic diseases using data analysis	2022	International journal of Health Sciences.
9	Dr.T.N.Prabakar	Analysis of Power Quality progress in hybrid cascaded H-bridges multilevel invertor	2021	Natural Volatiles and Essential oils
11	Dr.A.Poonguzhali	Authorization Method of Control in Android Application using Adminio with Context-based Access Devices.	2022	IEEE Conference
12	Dr.A.Poonguzhali	"Novel Enhanced Intelligent System for optimal selection of VM in cloud using APSO (Analogous Particle Swarm Optimization)	2022	Neuro Quantology
13	Dr.C.Raja	Scalable extension of HEVC with adaptive de-blocking filter for bandwidth-limited applications	2022	Science Direct ICT Express

14	Dr.C.Raja	Retinopathy grading with deep learning and wavelet hyper analytic activations	2022	Springer Germany	
15	Dr.S.Ramkumar	Stock Market Prediction via twitter sentiment analysis using bi directional encoder representations from transformers	2022	"Handbook on Federated Learning - Advances, Applications and Opportunities",	
16	Dr.S.Ramkumar	Routine Irrigation System Controlled and Monitored by IOT Using Sensors	2022	IEEEXPLORE	
17	Dr.S.Ramkumar Dr.T.N.Prabakar Prof.G.V Raja Ms.K.Mohanthi Prof.Venugopal P	"Intellectual transport system for human safety using machine learning approach"	2022	Measurement: sensors Elsevier	
18	Dr.S.Ramkumar	Fabrication and characterization of nano-particle biomaterial scaffold for treating burn wounds	2022	Journal of Materials Research	
19	Dr.S.Ramkumar	Investigative and Analysis Guidance In Walking Pattern For Orthopedic Subjects	2022	IEEEXPLORE	
20	Dr.S.Ramkumar	A Novel Interference Mitigation Technique and Signal Strength Prediction in future Wireless Communication	2022	IEEEXPLORE	
21	Dr.S.Ramkumar	Programmed for Automatic Bone Disorder Clustering Based On Cumulative Calcium Prediction for Feature Extraction	2022	Clinical Laboratory	
22	Dr.S.Ramkumar	Ensemble Deep Learning Optimization And Medical Image Classification With Convolutional Neural Networks	2022	Neuro Quantology	
23	Dr.S.Ramkumar	Diagnosis of Cardiovascular Disorder by CT Images Using Machine Learning Technique	2022 2022	IEEEXPLORE	
23	Dr.S.Ramkumar	Analysis through Different Rehabilitation Exercises for Muscular Dystrophy	2022	IEEEXPLORE	
24	Dr.S.Ramkumar	Log System For Mass Crowd and Live Tracking Using Radio Frequency Based on IOT	2022	IEEEXPLORE	
25	Dr.S.Ramkumar	Synthesis of ZnO nanoparticles and its characterization techniques using XRD and FTIR	2022	AIP Conference Proceedings	
26	Dr.S.Jayakumar	Encapsulated 3Ø converter for power loss minimization in a grid-connected system	2022	Journal for control, measurements electronics computing and communications	
27		Investigation analysis of open circuit and short circuit fault on		International Journal of Electrical and Electronics Research	

	Dr.S.Jayakumar	cascaded H-bridged multilevel inverter using artificial neural network approach	2022	
28	Ms.Geetha. S	Automatic Attendance Register based on face recognition	2021	International Journal of Advanced research in Management, Architecture, Technology and Engineering
29	Mr. Martin Joel Rathnam	A Novel Method for Cataract Detection and Segmentation Using Nakagami Distribution	2022	International Journal of Medical Imaging and Health Informatics.
30	Dr.Suresha	A Smart Automated Meeting Room Solution Management System	2021	(IJIRSET),
31	Dr.Suresha	Studies on Titanium Oxide Nanoparticles as Fuel Additive for Improving Performance and Combustion ELSEVIER- Science Direct Parameters of CI Engine Fueled with Biodiesel Blends	2021	ELSEVIER
32	Dr.Suresha	Edge Enabled Identification of Vehicle Emergency Situation using Data Aggregation and Filtering Approach	2021	IJIRSET
33	Dr.Suresha	"Comparative study of Intelligent Computing Technologies in VANET for Delay Sensitive Applications",	2021	Elsevier Journal,
34	Dr.Suresha	Energy Saving Hierarchical Routing Protocol in WSN	2021	IJRAR
35	Dr.B.Shadakshara ppa , Dr.P.Bindhu Madhavi, P.Ramkumar	Attack Prediction By Using Greedy Algorithm For Diminishing the Drop and Delay in Wireless Sensor Networks	Apr-21	Turkish Journal of Computer and Mathematics Education
36	P Ramkumar , P Kalamani , M Sheela Devi	A study of CNN Based Brain Tumor Detection Using Deep Learning	Apr-21	SCOPUS
37	Dr.I.George Fernandez	Universal Sensitivity Lifi Receiver For Digital Library	Oct-21	SCOPUS INDEXED JOURNAL(Natural Volatiles and Essential Oils)
38	P.Ram kumar ,R Valarmathi	Detection of Disease of Tomato Plant Based on Convolution Neural Network	Dec-21	2021 4th International Conference on Computing and Communication Technologies (ICCCT)
39	Dr. RAMYA K	'Investigations on the effect of micro-grid using improved NFIS- PID with hybrid algorithms"	2021	International Journal, COMPUTING. Springer 2021. DOI: 0.1007/s00607- 021-01006-9. SCIE.

40	Dr. RAMYA K	'Intelligent Fuzzy Based High Gain Non-Isolated Converter for DC Micro-Grids"	2022	International Journal, CMC-COMPUTERS, MATERIALS & CONTINUA. Vol 71, No.2, 2022. Tech Science Press, SCIE.
41	Dr. RAMYA K	Cybercrime Detection using C SVM and KNN Techniques"	2022	International Journal, WIRELESS COMMUNICATIONS AND MOBILE COMPUTING. Volume 2022. HINDAWI. SCIE.
42	Dr. RAMYA K	A Novel Strategy for Waste Prediction Using Machine Learning Algorithm with IoT Based Intelligent Waste Management System"	2022	International Journal, WIRELESS COMMUNICATIONS AND MOBILE COMPUTING. Article ID 2063372, vol. 2022, 10 pages, 2022. HINDAWI. SCIE.
43	Mala B A, Saranya C, Lavanya K	AN AI NEURAL LINK FOR HUMAN STORAGE AND PROCESSING	2022	International Journal of Trendy Research in Engineering and Technology
44	Reji Thomas, Ram Kumar	Prediction of Diabetes mellitus using Machine learning	2022	Arabian Journal for Science and Engineering
45	VIJAI.R	ELSEVIER - MATERIALS TODAY: PROCEEDINGS	5.2 2021	Ductile behaviour and dynamic mechanical analysis of hybrid bio composites
46	RAJESH KUMAR N	ELSEVIER - MATERIALS TODAY: PROCEEDINGS	5 FEBRUARY 2021	Ductile behaviour and dynamic mechanical analysis of hybrid bio composites
47	Balaji V	Material's Today Proceedings, Science direct	Dec 2021	Mechanical Properties of Roystonea Regia – Glass/Epoxy composites filled with SiC Particles
48	MALINI K V	Solid State Technology	2021	Comparison of Technology- DC Plating, Pulse Plating and Pulse Reverse Plating on Printed Circuit Board
49	MALINI K V	International journal of advanced science and technology	2021	Design of Multivariable PI Controller for Distillation Column using Simulated Annealing Algorithm
50	MALINI K V	Materials Science	2021	Design & Development of Smart dustbin

XIII. BOOKS PUBLICATIONS

- 1. A Text Book of Engineering Physics Prof. V. Prakash Physics (Subhas Stores)
- 2. A Text Book of Engineering Physics Prof. V. Prakash Physics (Kumar and Kumar Publications (P) Ltd.
- 3. Data base management systems Prof. P. Kalamani CSE (Charulata Publications)

- 4. Additional Mathematics -1 Dr. Gangavathi & Prof. Venkatesha P Mathematics (Paragas Publications LLP)
- 5. Engineering Chemistry Hand Book Dr. Harikrishna S Chemistry (Book Rivers)
- 6. Programming with JAVA Prof. P. Ramkumar CSE (Book Rivers)
- 7. Instrumentation and Control System Prof. Malini K.V EEE (Fors Chung)
- 8. Self-Learning approaches of Operating System Dr. B. Shadaksharappa & Prof. P. Ramkumar CSE (Book Rivers)
- 9. Design and Analysis of Algorithm Dr. B. Shadaksharappa.
- 10. Python Programming and its Applications Dr. B. Shadaksharappa, Dr. Balakrishna R & Prof. P. Ramkumar
- 11. Organic Chemistry-1 Dr. Harikrishna S
- 12. Data Warehousing & Data mining, Dr. B. Shadaksharappa, Mr. P. Ramkumar, Dr. T.N. Prabakar, Book Rivers
- 13. A Quick guide on Artificial Intelligence, Dr. B. Shadaksharappa, Dr. T.N.Prabakar, Scientific International Publishing house
- 14. Understanding Cryptography and Security Principles, Dr T. N. Prabakar, Dr. B. Shadaksharappa, Scientific International Publishing House
- 15. Machine learning Techniques, S. Venkatasubramanian, Dr. A. Suhasini, S. Hariprasath, Dr. T.N. Prabakar, Alpha International Publication