



|| JAI SRI GURUDEV ||

Sri AdichunchanagiriShikshana Trust(R)



SJB INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.)

No. 67, BGS Health & Education City, Dr. Vishnuvardhan Road Kengeri, Bangalore -560060

ANNUAL REPORT 2020-21

ABOUT SJB INSTITUTE OF TECHNOLOGY

SJB Institute of Technology (SJBIT) was started by **Sri Adichunchanagiri Shikshana Trust® (SAST®)** in the year 2001 with 3 departments (CSE, ECE & ISE) with 180 students.

- SJBIT is affiliated to Visvesvaraya Technological University (**VTU**), Belagavi, Karnataka
- Approved by All India Council for Technical Education (**AICTE**), New Delhi
- Accredited by National Assessment and Accreditation Council (**NAAC**), New Delhi with 'A' Grade
- Recognized by University Grants Commission (**UGC**), New Delhi with 2(f) and 12(B)
- Certified by International Organization for Standardization (ISO 9001-2015)

SJBIT is located amidst peace and tranquillity and is spread across 13 acres of land with a built-up area of 58967.43 Sqm. SJBIT is committed to personal, social & intellectual growth emphasizing a comprehensive educational programme leading to high academic standards. SJBIT is a well-recognized technical institution fostering quality education since 21 years. This institute was established by our Poojya Maha Swamiji with a vision of providing a global education at convenience. SJBIT enables students with curriculum and also believes in overall development of students and ensure that our graduates stand-out as a good citizen of our country. Placement training, Technical skill enrichment programs, soft skill trainings equip our students to face the world with confidence. Our students are placed in many multinational and top notch companies with best CTC and have always proved to be a great asset to the organizations wherever they have joined. College fests, Department fests provide a arenas for students to showcase their talents and interests. State of art infrastructure at SJBIT substantiate the promise of good education.

OUR VISION

To become a recognized technical education center with global perspective.

OUR MISSION

To provide learning opportunities that fosters students' ethical values, intelligent development in science & technology and social responsibility so that they become sensible and contributing members of the society.

PROGRAMS OFFERED BY THE INSTITUTION

6 Under graduate programs of Bachelor of Engineering in

6 Post graduate programs of Master of Technology in

1 Post graduate program in Master of Business Administration.

9 Recognized Research Centers

VISION / MISSION OF IIC ESTABLISHED AT THE INSTITUTE

Institution Innovation Council (IIC) creating ecosystem which will foster the culture of Innovation in institution from ideas generation to work on new ideas and innovation and promote them to create start-ups and entrepreneurial ventures.

Vision

- To create a vibrant local innovation ecosystem.
- Start-up supporting mechanism in HEIs.
- Prepare institute for Atal Ranking of institutions on innovation achievements framework.
- Establish function ecosystem for scouting ideas and pre-incubation of ideas.
- Develop better cognitive ability for technology students.

Mission

- To conduct various innovation and entrepreneurship-related activities prescribed by Central MIC in time bound fashion.
- Identify and reward innovations and share success stories.
- Organize periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators.

- Network with peers and national entrepreneurship development organizations.
- Create an Institution's Innovation portal to highlight innovative projects carried out by institution's faculty and students.
- Organize Hackathons, idea competition, mini-challenges etc. with the involvement of industries.

JOURNEY OF IIC ESTABLISHED AT THE SJB INSTITUTE OF TECHNOLOGY

Institution's innovation Council (IIC) was establishment SJBIT in the academic year 2018-19 as per the norms of innovation cell, ministry of HRD, Government of India.



INSTITUTION'S INNOVATION COUNCIL -2018-19



Institution's innovation Council of SJB Institute of technology carried out various activities on innovation, Entrepreneurial and startup activities, and scored four stars during the IIC calendar year 2018-19.

INSTITUTION'S INNOVATION COUNCIL -2019-20



Institution's innovation Council of SJB Institute of technology carried out various activities on innovation, Entrepreneurial and startup, and scored four and half stars during the IIC calendar year 2019-20.

B. KEY FUNCTIONARIES AT THE IIC INSTITUTE

President: -

- The President will constitute the IIC council and Conduct Council Meeting in accordance with prescribed rules and that matters are dealt with in an orderly, efficient manner.
- He will be the main point of contact with MHRD Innovation Cell.
- He will respond to all communication from IIC National Coordination team (MHRD Innovation Cell) and will be responsible to ensure decent performance of IIC.
- He will coordinate with MHRD innovation cell and responsible for all the IIC activities in the institute.

- He will ensure Institution's participation in IIC calendar activity and take lead in the institution driven activities (own initiatives).
- He will ensure the effective implementation of IIC activities with the help of Convenor.
- He could change the council members as per the decision taken in council meetings and update the information on portal.
- *He will be responsible for submitting the monthly progress/activity reports on the IIC portal.*

Vice President:-

- It is an Honorary post for a senior expert representative from Industry/Ecosystem enablers. He/She can be from faculty representative as well in case no experts are available.

Convenor: -

- The Convenor will work in close coordination with IIC president and will provide help wherever required for smooth conduction of activities.
- He will ensure the participation in the meeting and will prepare the meeting agenda at least 10 days prior to meeting with the inputs from all valuable council members and President.
- He will ensure that the internal examination dates would not interfere with the IIC activities and coordinate with all departments to ensure the same.
- He will collect the inputs from all the members of the council at regular interval, especially external members for better planning of IIC activities and effective delivery of results.

Faculty Member/Faculty representatives/ Non teaching staff: -

Members will work in close coordination with President and Convener to develop a comprehensive ecosystem of innovation and synergy in efforts to boost entrepreneurship. They will work as per the responsibilities assigned in council meeting.

Innovation activity coordinator -

Will work to promote innovation related activities on campus or as mandated in IIC council meeting.

Start-up activity coordinator -

Will work to boost startup generation among students and related activities or as mandated in IIC council meeting.

Internship coordinator -

Will work to arrange student internships in startups, so to expose them with startup ecosystem in India, real-life challenges in startup and their success stories or as mandated in IIC council meeting.

IPR activity coordinator -

To promote awareness about IPRs and conduct related activities on campus or as mandated in IIC council meeting.

Social Media Coordinator -

Will create and manage IIC page/account on Facebook, Twitter and YouTube and other relevant social media platforms. He will be responsible for posting all the relevant information about council meeting resolution and action plan, IIC activities and follow/tag MIC/IIC page and posts on these platforms. He will also ensure that all students follow MIC/IIC page/account on social media to get first-hand information.

C. Portfolio/graphical/Tabular representation of Resource strength (human capital and Physical capital) of the IIC institution

PORTFOLIO OF THE IIC INSTITUTION

Sl no	Cell Experts/Portfolio	Name	Department
1	Head of the Institution	Dr. Ajay Chandran C. K.	---
2	President	Dr. T. Madhusudhan	Mechanical
3	Vice President	Dr. Krishna A. N.	Computer Science
4	Convener	Mr. Naveena Kumar R. R.	Mechanical
5	IPR Activity Coordinator	Mr. Anil Kumar.G	Mechanical
6	ARIIA Coordinator	Dr. Somashekar K.	Electronics and Communication
7	Internship Activity Coordinator	Dr. Chandrappa D. N.	Electronics and Communication
8	Innovation Activity Coordinator	Mr. Chetan R.	Information Science
9	NIRF Coordinator	Mr. Gowtham K.	Mechanical
10	Social Media Coordinator	Mrs. Chaithra H. K.	Computer Science
11	Startup Activity Coordinator	Mr. Puneeth H. C.	Civil
12	Member	Mrs. Chaithra B. K.	Mechanical
13	Member	Dr. Mamatha Mahesh Gowda	Electrical and Electronic Engineering
14	Member	Dr. Varun V. L.	Mathematics
15	Member	Mr. Rahul R Rai	Electronics & Communication
16	Member	Mr. Bharath T. S.	MBA
17	Member	Mr. Sachin B. V.	Civil
18	Member	Mrs. Roopa D. R.	Physics
19	Member	Mr. Paramesh M. S.	Chemistry
20	Member	Mr. Kiran Kumar V.	Information Science

IIC INNOVATION AMBASSADOR

Sl. No.	Field of Expert	Ambassador
1	Design Thinking & Innovations	Mr. Chethan.R
2	IPR & Technology Transfer	Mr. Anil kumar .G
3	Entrepreneurship Development Program	Mr. Bharath .T.S
4	Pre-Incubations & Incubation Management	Dr. Mamatha Mahesh Gowda
5	Fundamental level	Mr. Naveena kumar R. R.
6	Fundamental level	Mrs. Chaithra B. K.

- Total No. of IIC Members: 20
- Total No. of IAs: 6
- Total No. of faculty Mentors from Portal: 26
- Pre-Incubation Units: 4
- Incubation Units:4
- IP Facilitation Unit: 2

SJBIT always credence to creative thinking and innovations. We ameliorate the entire thought process and support technically to bring the idea to reality. Patents and Intellectual Rights reshows our strength in research and innovations.

#	PATENT DETAILS
1	Product Name: Eco-friendly synthesis of pyrrolo [1,2-a] quinoline-3-carboxylate derivatives & their study of antibacterial and antioxidant properties. Indian Pat. Patent filed Number: Appl.(2020), IN 201941039384 A 20200313 Filing Date: 29/09/2019 Inventors: Vijayakumar Uppar, Basavaraj Padmashali, G Banuprakash, Sandeep Chandrashekharaappa
2	Product Name: N-(4-fluorophenyl)-5-phenyl-[1,2,4] triazolo [1,5-a] pyridine-2-carboxamide derivatives and their synthesis thereof. Indian Pat. Patent filed Number: Appl.(2020), IN202041006661 A 20200313 Filing Date: 16/02/2020 Inventors: Raghu Ningegowda, Sandeep Chandrashekharaappa, G Banuprakash
3	Product Name: A Machine for Making Finger Millet Flour Balls Patent filed Number: 201741030809 Filing Date: 31/08/2017 Inventors: Madhusudhan T, Suraindir Malhotra, Vinay V Kumar J, Shashidhar, Veerangouda B A
4	Product Name: A System and A Method for Controlling Ignition of A Vehicle Patent filed Number: 201641036930

	Filing Date: 27/10/2016 Inventors: Vishnu Raveendran, Hemanth Kumar G, Manjunath K P, Priyanka K S
5	Product Name: Real Time Tire Pressure Monitoring System for A Vehicle Patent filed Number: 201641041813 Filing Date: 07/12/2017 Inventors: Abhijith Gowda A, Abhishek S, Anirudh V, Dharshan G N, Mahadev S Hummanagol
6	Product Name: A Speed Breaker Patent filed Number: 201641001964 Filing Date: 19/01/2016 Inventors: Madhusudhan T, Uday M
7	Product Name: Foot Operated Vehicle Patent filed Number: 201641005631 Filing Date: 18/02/2016 Inventors: G Anil Kumar, Bharath H R, Pramod N, Dinesh Kanth A
8	Product Name: Foldable Helmet Patent filed Number: 287277 Filing Date: 27/09/2016 Inventors: Madhusudhan T, Sanjay B S
9	Product Name: A Solar Powered Refrigeration System Patent filed Number: 6589/CHE/2015 Filing Date: 09/12/2015 Inventors: Madhusudhan T, Arujn V, Chetan Kumar, Narendra M, Vinay G
10	Product Name: IRBC-System: Intelligent rule based Classification systems to classify Discrete sets Patent filed Number: 202041027658 Filing Date: 30/06/2020 Inventors: Dr. Murali G
11	Product Name: ICD-Devices: Intelligent Clustering Digital devices in an Internet of Things (IoT) Patent filed Number: 202041028300 Filing Date: 03/07/2020 Inventors: Dr. Murali G
12	Product Name: GOI on Road Monitoring Device Patent filed Number: 202141006356A Filing Date: 16/02/2021 Inventors: Dr. Vinod H C , Mr. Santhrupth B C
13	Product Name: A Machine for Making Finger Millet Flour Balls Patent filed Number: 201741030809 Filing Date: 31/08/2017 Inventors: Madhusudhan T, SuraindirMalhothra, Vinay V Kumar J, Shashidhar, Veerangouda B A
14	Product Name: An Artificial Intelligence enabled Cryptography based Financial Analytical tool Patent filed Number: 2021101470 Filing Date: 23/03/2021 Inventors: Dr. Vinod H C, Mr. Chetan R, Mrs. Yamuna U

D. Highlight Facilities, Infrastructure of Pre-Incubation & Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus.



Highlight Facilities :

Strengthened collaborative ventures between the Institution and outside partners.

- Promotion of Research in emerging areas and with Societal Relevance.
- Monitoring of research work progress and facilitate Research associates
- Undertaken Research activities and develop projects offered by the agencies
- Financial support for the Man power, Equipment's & Services used in the Research activities
- Encourage and motivation for quality & Innovative projects and paper publications.
- Support for conduction of Technical Talks, FDP, Workshops connected to Research
- Motivation and guidance in developing of products, processes and technologies to improve the quality of human life
- Support in building Infrastructure and encourage faculties for consultancy work

Institutional strategies for planning, upgrading and creating infrastructural facilities

- Established separate Laboratories for research activities in each Department (R&D Cell).
- Computers with internet facility is provided to the research scholars and faculty members.
- Accessibility of renowned Publications.
- Required funds to upgrade and create infrastructural facilities required for research.
- PG students are encouraged to undertake industry based problems for their dissertation work under the guidance of expert faculty.
- Encourages faculties for external funding proposals.
- Holds institutional membership of various professional.
- Financial support to faculties to for research connected activities and file Patents for their inventions.

Pr-incubation and incubation:

1. BOSCH REXORTH

2. ETHNOTECH

3. DESI GOU

4. MECHANICAL AND ELECTRICAL VEHICLE

Internships are offered by the companies signed MoU with SJBIT (Students also take up Internships in Public sector companies.)

#	Company Name	Domain	Contact Person
1	Data Lore Labs	ML, AI	Dr. Srikantiah K C, CSE
2	Zero Zilla Pvt. Ltd	Web, Mobile, ML	Dr. Ajay Prakash B V, CSE
3	MODO EduLabs	Robotics and AI	Dr Bindiya M K, CSE
4	Ethnotech Academic Solutions	Web, Mobile, ML, Cyber security	Dr. Ajay Prakash B V, CSE
5	Genesis	Python, Java, Machine Learning	Mrs. Shubha T V, CSE
6	Live Wire	Data Science	Dr. Murali G, ISE
7	Vishwajyothi Technologies	Data Science and AI	Dr. Mohan H S, ISE
8	DHS Informatics Pvt. Ltd	Android App Development	Dr. Murali G, ISE
9	Rectopage	Application Development, Machine Learning	Mrs. Poornima M, ISE
10	Rexroth Bosch Group	PLC and Sensoric	Mr. Bhaskar B, ECE
11	NI Systems (India) Private Ltd.	Embedded System Design Automation and IoT	Dr Ravikumar A V, ECE
12	Knowx Innovation Pvt Ltd	Embedded System Design Automation and IoT	Dr. Chandrappa D N, ECE
13	Tequed Lab	AI and ML, Big Data	Dr Mahantesh K, ECE
14	Loginware Pvt. Ltd	Automation and IoT	Dr Mahantesh K, ECE
15	Training world 360 Solutions Pvt. Ltd	Wireless communications	Dr. Mahendra Prashanth K V, ECE
16	Dlithe	Embedded Systems IoT	Dr. Supreeth H S G, ECE
17	Elekpro Electrical Engineers (P) Ltd	High voltage relays Testing,	Dr. Sandeep S R, EEE
18	Mahatma Gandhi Institute of Rural Energy & Development (MGIRED)	Rural Energy and sustainable rural development	Dr. J P Sridhar, EEE
19	VV Technologies	Embedded systems and IoT	Dr. M J Chandrashekar, EEE
20	Viswajothi Technologies pvt.	Power electronics	Mrs. Tharakeshwari V

	Ltd.		K, EEE
21	VV Systems and Power Panels PVT. LTD	PLC and Software development	Dr. Mamatha Mahesh Gowda, EEE
22	BOSCH REXROTH -SJBIT	Hydraulics and Pneumatics	Dr. Kiran kumar.P, MECH
23	PM Tools and Manufacturing Pvt. Ltd	Manufacturing	Dr. H K Srinivas, MECH
24	Central Manufacturing Technological Institute	Nanotechnology and material characterisation	Mr. Ganagadhar T G, MECH
25	Quest Auto Engineering	Manufacturer of tipper trucks, truck load bodies box & truck containers	Mr. Manjunath Naik, MECH
26	Prayojana Construction Management and Training Institute	Construction Management	Mr. H. Narendra Kumar, CIVIL
27	G 2 G Consultancy, Bangalore.	Construction and Project Management	Dr. Lakshmi C, CIVIL
28	Prakruthi – Institute of Environmental studies	Environmental Planning and Management	Dr. R Sridhar, CIVIL
29	Enstructura Consultants Pvt.Ltd	Construction and Project Management	Dr. Lakshmi C, CIVIL

STUDENT BODIES CLUB:

1. EDC CELL
2. MHRD-IIC CELL
3. EEE CELL

ENTREPRENEURSHIP DEVELOPMENT CELL

Entrepreneurship Development Cell (EDC) at SJBIT was established in 2012 in association with MSME, Ministry of HRD and Govt. of India. The functioning with the intention of nurturing entrepreneurship skills of the students and provides a platform for the students to pursue entrepreneurial activities and also provide assistance to potential entrepreneurs. It assists every aspiring entrepreneur on every single step and promotes and revitalizes the entrepreneurial culture in the college.

OBJECTIVES:

- To act as an institutional mechanism for providing various services including information to budding entrepreneurs.
- To create Entrepreneurial culture among students of the Institution and other institutions in the region and to also promote the programs catering to different classes of people such as related to women and weaker sections of the society.

- To act as a better linkage between the College, Industries and R&D institutions in the region and other related organizations engaged in promoting Small & Medium Enterprises (SMEs) including NGOs and other Voluntary Organization.
- To respond effectively to the emerging challenges and opportunities both at national and international level relating to SMEs and micro enterprises.
- To inculcate within the faculty and the students the need and importance of Enterprise Development.

Activities to support flourishing of EDC at SJBIT

- International Webinars on Entrepreneur development
- Seminar on “Motivational Talk on Entrepreneurship
- Seminar on “Patent – Fantastic idea how to protect them”
- Seminar on “Motivation to become an entrepreneur”
- Guest Lecture on “ Future trends in automotive engineering
- National Conclave for startups

E. Highlight Achievements (Narrative/Graphical/tabular representation)

- Number and Different types of I&E and IPR activities Conducted: 10
- No. of student's & faculty ideas generated:52
- No. of student's & faculty Innovation/prototypes developed:25
- No. of IPs generated, published and granted:2
- No. of Student & Faculty Start-ups/Ventures established:3
- Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the campus :15000

F. Highlight few best IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum

Innovation ambassadors conducted various activities in different departments
About Innovation, Start up and Entrepreneurship

1. Anil Kumar G
2. Chetan R
3. Bharath T.S
4. Mamatha M Gowda
5. Chaithra B K
6. Nvaeen Kumar R R

G. Highlight selected best Innovations & images with mention of inventor/innovation name

S.No.	Title	Lead Name /Email /Phone
1	MANUAL OPERATED MULTI SEED SOWING WITH INTERCROPPING AND FERTILIZER SPREADER	Name: Pavan Kumar C Email: pavankumargowda97@gmail.com Phone: 9113650370
2	Multi-purpose Autonomous Car-Copter	Name: Manish S A Email: manishsacoc@gmail.com Phone: 8310439812
3	A Sustainable Approach for Producing Bio-fuel Utilizing Withered Flower Waste	Name: Dr. LAKSHMI.C Email: clakshmi@sjbit.edu.in Phone: 9886742758
4	EARLY FLOOD DETECTION AND DISASTER VICTIM IDENTIFICATION	Name: Kiran S Email: kirankanna12345@gmail.com Phone: 8073375400
5	Controlling of Stepper motor Linear Actuator Slide Mechanism using Arduino Board	Name: Mahesh V Email: maheshv3333@gmail.com Phone: 8660101784

GLIMPSES OF ACTIVITIES CARRIED OUT BY IIC SJBIT



Innovation day celebration in SJBIT Institute of Technology



Yoga day celebration in SJBIT Institute of Technology



IIC Coordinator's during innovation day celebration in SJBIT Institute of Technology



Innovation & Entrepreneurship invited talk with SJBIT Alumni Mr. Dheeraj



An invited talk was organized from SJBIT Innovation Centre



Leadership talk series online sessions in SJBIT Classroom