

3.2 Innovation Ecosystem

3.2.1: Institution has created an ecosystem for innovations and has initiatives for Creation and Transfer of Knowledge

Overview of Institution Ecosystem to Promote Research, Innovation, Incubation and Entrepreneurship

The details of BGS R&D centre which is monitoring Research, Innovation, Incubation and Entrepreneurial related activities are presented as per the following sections.

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1. Team Members – BGS Research and Development Centre

The following table illustrates the team member composition of BGS Research and Development Centre. Dr. T. Munikenche Gowda , Director is exclusively monitors the entire incubation, innovation, Entrepreneurial and Research related activities.

Web link: https://bgssjcitincubator.ac.in/

Sl. No.	Name of the Member	Designation	Role
1	Dr. T. MunikencheGowda	Director	Team Lead -BGS Research &Innovation center for Entrepreneurship
2	Mr. C. NarendraBabu	Asst. Professor	Coordinator
3	Mr. Harish. S	Asst. Professor,	Coordinator
4	Smt. Ashwini D S	Asst. Professor,	Coordinator – BARC activities
5	Mr Suresh Kumar	Programmer	Coordinator – Office Administration

Table1 BGS Research Centre Team Members

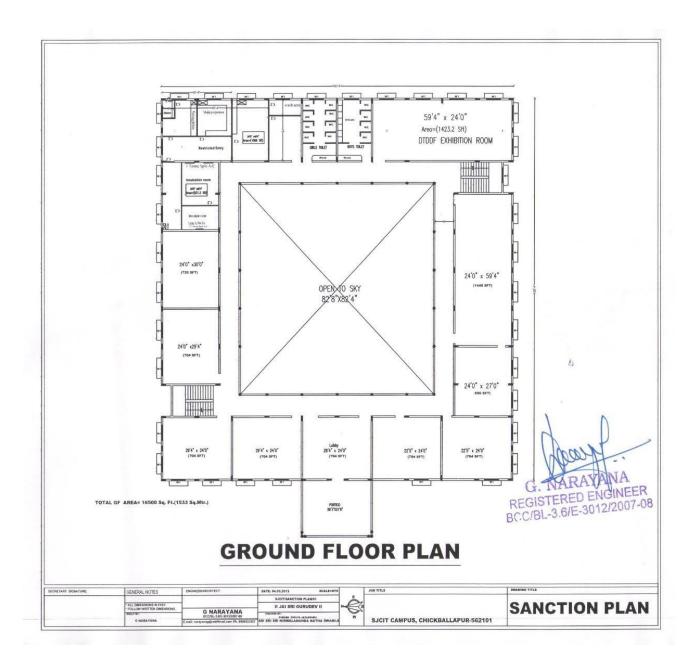
2. Infrastructure of BGS R &D Centre

The BGS Research and Development Centre has been established in a separate block which is having a working area of about 8500 square feet. This centre has state of art facilities for carrying out Incubation related activities and space for starting business incubation. The following table illustrates the facilities available at this centre. More details are visible at the following link.

Web Link: https://bgssjcitincubator.ac.in/innovation-cell/

Sl. No.	Particulars	Area in Sq ft.
1	Office Room	704
2	New Age Innovation Network(NAIN)	1784
3	Conference Room	704
4	MSME –TBI	2112
	(3 Rooms, 704 Sqft.)	
5	Tissue culture Lab (BARC)	1720
6	Department of Atomic Energy Technology Display and	1423
	Dissemination facility(DTDDF)	
	8447	

BGS Research Centre and BGSSIF has dedicated space spread in two different floors. The layout of these two floors are shown in the following images. Also, the photographs of the Infrastructure are presented in the following pages.



GROUND FLOOR

Principal J C Institute of Tochnol-Chickballapur - 562 101



FIRST FLOOR

Chickballapur - 562 101



Photographs of Office Room BGS Research Centre



Photographs showing Space for New Age Innovation Network (NAIN) Incubation Centre



Photographs showing facilities available at Conference Room



Photographs showing MoSME sponsored-TBI-ASPIRE space



Photograph showing SJCIT-TBI- Aspire Cubicle

3. BGS SJCIT INCUBATION FOUNDATION COMPANY

The Institution has formed a company BGS SJCIT INCUBATION FOUNDATION (BGSSIF) under section 8 of Ministry of Corporate Affairs, Government of India. The objective of this company is to promote Innovation, Incubation and Entrepreneurial activities. The Certificate of Incorporation issued to the Institution is shown.



GOVERNMENT OF INDIA MINISTRY OF CORPORATE AFFAIRS

Central Registration Centre

Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014]

I hereby certify that BGS SJCIT INCUBATION FOUNDATION is incorporated on this Eleventh day of June Two thousand twenty-one under the Companies Act, 2013 (18 of 2013) and that the company is limited by guarantee.

The Corporate Identity Number of the company is U80302KA2021NPL148373.

The Permanent Account Number (PAN) of the company is AAJCB9075A

The Tax Deduction and Collection Account Number (TAN) of the company is BLRB21118G

Given under my hand at Manesar this Eleventh day of June Two thousand twenty-one .

Digital Signature Certificate KAMAL HARJANI

For and on behalf of the Jurisdictional Registrar of Companies

Registrar of Companies

Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the company on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the company can be verified on www.mca.gov.in

Mailing Address as per record available in Registrar of Companies office:



MoU with Baba Atomic Research Centre – DAE Technology Display & Dissemination Facility

Baba Atomic Research Center (BARC), Mumbai, Government of India under Technologies Display and Dissemination Facility scheme has sanctioned the following domain for setting up the laboratory facilities.

- 1. Tissue Culture
- 2. Nisargruna Bio-Gas Plant
- 3. Fluoride Detection Kit for Ground Water (FDK)
- 4. Soil Organic Carbon Detection Kit (SOCDK)
- 5. On-line Domestic Water Purifier Based on Ultrafiltration Polysulfone Membrane
- 6. Foldable Solar Dryer (FSD)

PURPOSE OF BGS SJCIT INCUBATION FOUNDATION.

 \Box Faculty to start using facilities available in the Departments/College for Research and Development by submitting the R&D proposals to various funding agencies in their specialization or field of interest.

 \Box Identify the local problems to prepare the proposals on any area as much as possible with suitable solutions.

□ Develop and maintain continuous interaction with the industries and government agencies to get best solution/input for the problems arising while carrying out the project work.

□ To focus more on preparing the technical papers to meet international journal Standards.

 \Box Involvement of the students from first year to solve the real problems of societal needs.

 \Box Induce and inculcate innovation culture among faculty and students, support faculty and students' members in filing patents and encourage innovation product to reach the level of commercial value

□ To create Startup ecosystem at campus, among student entrepreneurs by providing them with required information, building confidence through activities, and nurturing their skills by conducting workshops & amp; hackathons.

 \Box To build a vibrant student entrepreneurial community and support for required resources for start-ups to contribute for societal development through innovation - incubation activities.

 \Box To embrace the purpose of entrepreneurship which is to solve pressing problems of society, create wealth and success, develop organizations and enhance science by transforming knowledge into action.

 \Box To encourage the students to take up entrepreneurial activities by raising awareness, creating a conducive environment for startups and by offering mentorship, guidance, seed funding and institutional support.

□ To conduct hands-on workshops for developing business skills, to make networking events accessible, to impart information related to market opportunities and to create a platform to showcase technological solutions.

 \Box To create a mechanism for student entrepreneurship (a) to access the patents and research of the institute (b) to use institutes research labs and working space for developing student-based start-ups.

 \Box To nurture culture of innovation at campus, helping idea to translate into reality and upgrade them to the level of commercial value. To create start up ecosystem at campus.

□ To encourage Entrepreneurship and innovation and incubation of ideas.

 \Box To support the incubation projects.

 \Box To inculcate research culture in the institution, publish innovative research articles with high impact factor, undertake research projects of national funding agencies, motivate faculty members in filing patents foster research collaboration with external organisations.

 \Box To contribute to societal development through research extension, bring students' innovative ideas to fruition, help students' start-up idea translate into early stage businesses with a defined commercial value, build a vibrant start-up eco system by establishing a network of academia, financial institution and industries.

 \Box Create platform to convert innovation & amp; incubation ideas into proof of concept through the support of institution and funding organizations and encourage incubate to become entrepreneur

 $\hfill\square$ Build a conducive ecosystem which is supportive to establish at least every year two Startup's by our students/Faculty

	Work Plan and Budget	
Α.	DTDDF shall create following demo cum training fa technologies.	acilities based on DAE
	(Estimation includes installation, commissioning and open	rating expenditures.)
1.	NISARGRUNA (Max. 0.5 TPD capacity)	` 18.0 lakhs
	(* Subject to approval of the BARC Experts)	
	Digester tanks, pipes, mixer, waste handling table, solar syste Metal dome, Pump, compressor, gas burner and manure pits	em,
2.	Tissue culture facility	` 12.0 lakhs
	(* Subject to approval of the BARC Experts)	
	Laminar air flow unit	
	Refrigerator, Autoclave	
	Air conditioners Laboratory Equipments (culture tubes,	
	beakers, flask, measuring cylinders,	
	pippetes, glass rods, gloves, forceps,	
	microtips) Water distillation unit	
	Chemicals	
	Green house (hygrometer, fans, tubelights,	
	sprinklers) Workbenches, storage, growth room	
	Interior partitions, plumbing, ventilation	
3.	SOCDK (50 nos.)	0.5 lakhs
4.	FSD (25Kg – 4 nos.)	2.0 lakhs
5.	VTD (40Kg/hr capacity)	` 1.5 lakhs
6.	DWP (25 Nos.)	` 1.0 lakh
7.	FDK (25 Nos.)	` 1.0 lakh
В.	Survey, Database development & Project reports,	
	Course modules and training material preparations etc.	5.0 lakhs
C.	Training, workshops and field demos	5.0 lakhs
D	Continent of the	
D.	Contingent expenditure	` 1.5 lakhs
	Т	OTAL ` 47.50 lakhs
	Alwer .	200
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The beginning-





A MoU was signed on June 22, 2016 between BARC and SJCIT for setting up of DTDDF under the 12th Plan Project undertaken by TT&CD, BARC

At Tissue Culture Lab



Sri Guruji at Tissue Culture lab with BARC Scientists on 1st Mar 2018







Photographs showing Tissue culture Lab facility and Horizotal Laminar Flow equipments established under MoU of Baba Atomic Research Centre, Mumbai

WE ARE BLESSED BY OUR BELOVED SWAMIJI AND INSPIRED BY OUR DISTINGUISHED SCIENTISTS

Inauguration Program of DAE-Technologies Display and Dissemination Facilities of BARC, held on 1st March, 2017



His Holiness Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji, Scientists from BARC, Dr. D N Badodkar, Dr. Shrikrishna Gupta, Dr. T R Ganapathi, Dr. S Ghosh, Dr. Nutan V Khalap, Sri Salunke, College Governing Council members were present during the inauguration program.

Awareness programme for farmers September 7, 2018 LEARNING SECRETS OF TISSUES AND GENETICS

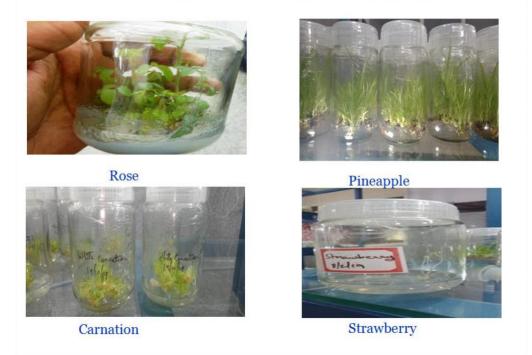


Dr T R Ganapathy gave Talk on Tissue Culture and Plant varieties on 7th sept.2018

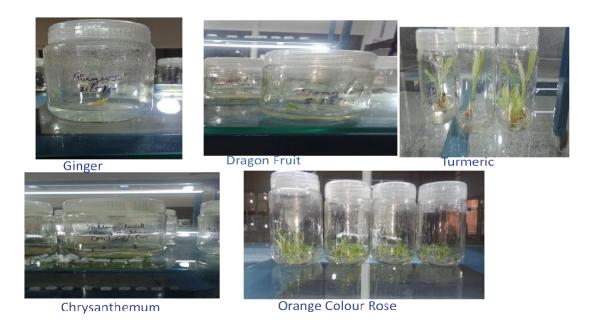


Sri Ananad M Badigannavr gave talk on "Genetics and Plant breeding, Improvement of Groundnut using mutation and recombination breeding and different Plant Varieties" on 7th Sept. 2018

R&D of Other Plant Varieties at Tissue Culture Lab



R&D of Other Plant Varieties at Tissue Culture Lab from 2018 to 2021



Internship programme at Tissue culture lab





Krishnaveni.N Asst.Professor, PSG College Coimbatore 11/11/2019 to 14/11/2019





Keerthi N L B.E Biotechnology 4/12/2019 to 20/12/2019

INTERNATIONAL INTERESTS

Professors from Japan and USA are Interested in our Efforts



Sri Kazumasa Kuboki, JCSS Consulting Pvt.Ltd, Bengaluru,Dr.S.R Subramanya, Professor, School of Engineering and Computing, National University, San Diego, USA, at the Centre.

Innoculations by present Incubatee





Tissue Culture Internship Poster

Incubatee Team





5. New Age Incubation Network Innovative Ideas Incubated at the Incubation Center under Karnataka Innovation and Technology Society (KITS)

Proposals Approved by Karnataka innovation and Technology Society (KITS), Department of Electronics, IT, BT and S&T Government of Karnataka.

Table: Sanctioned entrepreneurship ideas in the academic year 2018-19	9
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Sl. No.	IDEAS	Branch	Amount in Lakhs
1.	Coconut and Areca Nut Harvesting Drone	AE	2,50,000
2.	Sustainable Power Project To Remote Areas	ECE	2,50,000
3.	Automation in Cars to Alert Drivers	CSE	2,31,000
4.	Controlled Use of Water For Irrigation and Fertilisers in Farming	CSE	2,41,000
5.	Air Conditioning By Geothermal Heat Pump	CE	1,88,000
6.	Brain Computer Interface For Patients With Disorder Of Consciousness And Stroke	ECE	2,40,000
7.	Smart Traffic Handling System	ISE	2,50,000
8.	A-Drishti-A Step Towards Alternate Vision	ECE	2,22,000
9.	Smart Helmets For Bikes	TCE	2,30,000
10.	Design and Fabrication of Road Cleaning Machine	ME	2,10,237
11.	Poorni-The Public Assistant	CSE	2,17,513
12.	Virtual SIM	ISE	2,37,250
13.	An Application To Pay Fine For Traffic Rules Violation	CSE	2,33,000
	Total Rupees Thirty Lakh	30,00,000	

Sl. No.	IDEAS	Department	Amount in INR
1.	Academeasy- Your Academic Friend	CSE	1,46,000
2.	Exo-Skeleton	ME	2,30,000
3.	Andriod Based Intelligent Smart Vehicle for Disables Using Brain Computer Interface and Voice Assistant	CSE	2,45,000
4.	Book Market Inside the Campus	CSE	1,67,890
5.	Design and Development of Semi-Automatic Manhole Cleaning Machine	ME	2,73,900
6.	Tissue culture - A Helping Hand in Agriculture	ME	2,65,730
7.	Automated Overhead Tank Cleaning System	ME	2,56,650
8.	Innovative and Effective Use of Resources Along with Advanced Home Automation System	CSE	2,27,000
9.	Notatia - The Solution of The People	CSE	2,78,000
10.	Low Cost Manually Operated Seed Sowing Machine	ME	2,65,000
Fotal Ru	pees Twenty three lakh fifty five thousand one hundred	d and seventy only	23,55,170

Table: Ideas approved during academic year 2020-21

K-tech

ಕರ್ನಾಟಕ ಅವಿಷ್ಯಾರ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಸೊಸೈಟಿ Kamataka Innovation & Technology Society Department of Information Technology. Biotechnology and Science & Technology

Date: 11-03-2019

To The Principal, Sri Jagadguru Chandrasekaranathaswamiji Institute of Technology, Chickballapur - 562101

Dear Sir,

Sub: Declaration of project evaluation results reg.

We are pleased to inform you that the projects submitted by the NAIN centre of your college have been evaluated. Please find enclosed hereby the list of projects that have qualified for the Students Project Fund under the NAIN scheme.

Kindly ensure that the project cost should not surpass the grant limit of Rs. 3 lakh per project.

Thanking You

Yours faithfully

[Dr. Sandhyn R Anvekar] Head: Skilling

> Principal J Clastitute of Technoli Chickballapur - 562 101

	Evaluation Details:		
SI. No.	Project Title	Project Cost	
1	Coconut and Areca Nut Harvesting Drone	2,50,000/- //	
2	Sustainable Power Project to Remote Areas	2.50.000/- /	
3	Automation in Cars to Alert Drivers	2.31.000/- /	
4	Controlled Use Of Water For Irrigation And Fertilisers In Farming	2,41,000/- 🖌	
5	Air Conditioning by Geothermal Heat Pumps	1,88,000/-	
6	Brain Computer Interface for Patients with Disorder of Consciousness and Stroke	2.40,000/-	
121	Smart Traffic Handling System	2.50.000- /	
8	"A-DRISHTI"	1.11.0000+ /	
9	Smart Helmet for Bike Riders	2,30,000/- 🧹	
10	Design and fabrication of road cleaning machine	2,10,237/- 4	
11	Poorn'I'	2,17,513/- 🗸	
12	Virtual SIM	2.37.250/- /	
13	An application to pay the fine for traffic rules violation	2,33,000/- 🤳	_
	Total	30,00,000/- /	

College: Sri Jagadguru Chandra Shekaranatha Swamiji Institute of Technology, Chikkaballapur

SI. No	Project Name	Amount Approved by GoK
1	Academeasy- Your Academic Friend	146000
2	Exo-Skeleton	230000
3	Andriod Based Intelligent Smart Vehicle For Disables Using Brain Computer Interface And Voice Assistant	245000
4	Book market inside the campus	167890
5	Design and Development of Semi-Automatic Manhole Cleaning Machine	273900
6	Tissue culture - A Helping Hand In Agriculture	265730
7	Automated Overhead Tank Cleaning System	256650
8	Innovative and effective use of resources along with advanced home automation system	227000
9	Notatia - The solution of the people	278000
10	Low Cost Manually Operated Seed Sowing Machine	265000
	Total	2355170

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J C Institute of Technol-Chickballapur - 562 101

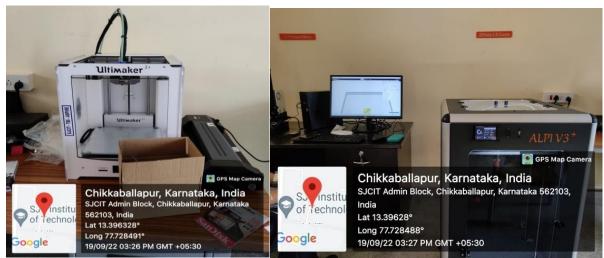
6. Utilization of Funds under the Scheme for Providing Support for Entrepreneurial and Managerial Development of MoSMEs through Incubators

Link: https://bgssjcitincubator.ac.in/msme/

Ministry of Micro, Small & Medium Enterprises, Government of India has sanctioned Rs. 45 lakh to establish "Technology Business Incubator (TBI)" – A Scheme for promotion of innovation, Rural Industry and Entrepreneurship and received Rs.36 lakhs till date and college also contributed matching grant of Rs.36 lakhs to create facilities and for incubation activities.

The following are the Machines, Equipments and accessories procured and established a laboratory at the Incubation Centre.

SI. NO.	Equipment	Specifications	Cost of equipments (Rupees in Lakh)
1	Fusion deposition Modelling Ultimaker2+	222mmx223mmx205mm Nether Land	2.75
2	FDM 3D printer-Dual Nozzle–ALPI V3+	Dual Nozzle Build Volume = $305X305X605 \text{ mm}^3$	6.85
3	3D sense scanner	Scan Volume: Min: 0.2m x 0.2m x 0.2m Max: 2m x 2m x 2m	0.77
4	CNC Router	8"x8"x6"	7.25
5	Laser Engraver and Cutting-Epilog USA	42"X12" 40W	12.95
8	Sublimation Printer	510x490x470mm 420v	0.335
6	Laminar Air Flow model 2322-H	900x600x600 mm ³	0.77747
7	Laminar Air flow model- LAF2622-H	1800x600x600mm mm ³	1.15
8	Vertical Autoclave	IVAC-200 Capacity 220ltr Inner Chamber 18'x30'	0.77



Photograph of Fusion deposition Modelling Ultimaker2 + FDM 3D printer-Dual Nozzle ALPI available at MSME laboratory



Photograph showing 3D Sense Scanner and CNC Router at MSME laboratory



Photograph of Laser Engraver and Cutting-Epilog USA Sublimation Printer



Photograph showing i. Laminar Air flow model-LAF2622-H and ii. Laminar AirFlow model 2322-H



Photograph of Vertical Autoclave

7. Start-ups established at Institution.

One Start –up is established at the Incubation Centre of the Institution. The name of the company is Software PRO. This company was established in April 2019 and presently involved in providing services like Website development, Mobile Application development, Content Management, Search engine optimization and Social media marketing. The following photograph shows the Team Members involved in this Startup.



Photograph depicting Team Members of Software PRO Startup