

## SJB INSTITUTE OF TECHNOLOGY [ ARI-C-1271 ][ C-1271 ]

## Section 1: Policy And Institutionalization Of I&E Activities In HEIS (Academic Calendar Year 2020-21 & 2021-22)

### 1.1) Adoption Level of Innovation and Entrepreneurship (I&E) Policy in HEIs: Registration; Policy Formulation; Policy Implementation

Completion of Action Items (status as on 7th November 2022 )	Status
Registered in the NISP portal for I&E Policy Adoption	Yes
Institute has Formulated an Innovation and Entrepreneurship (I&E) Policy	No
Institute has Action Plans for Implementation of the I&E Policy	No

#### Contact:

Faculty Name:	Dr. T. Madhusudhan
Designation:	Professor & HOD, Mechanical Engineering
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Mobile No.	9916101233

### 1.2) Performance Level of Institution's Innovation Councils (IICs) Established in HEIs: Scores and Stars Obtained

Annual Performances of IIC Institute	Stars Secured
IIC 1.0 (2018-19)	1,2,3,4
IIC 2.0 (2019-20)	4.5
IIC 3.0 (2020-21)	4
IIC 4.0 (2021-22)	4

#### Contact:

IIC President of the Institute:	Dr . T Madhusudhan	

Designation:	Head of the Department
Email ID:	t.madhusudan2015@gmail.com
Mobile No.	9916101233

# 1.3) Activeness of Trained Innovation Ambassadors in Driving Campus I&E Ecosystems in HEIs: Trained IA/HEI and Nos of Prescribed Activities undertaken by IA

Sr. No.	Name of the Faculty IA	Level of Training	No of I&E Expert Talks/Sessions Conducted
1	Dr. MAMATHA MAHESH GOWDA	Advance	0
2	Mr. Chetan R	Advance	0
3	ANIL KUMAR.G	Advance	0
4	Bharath T.S	Advance	0
5	Mr. Naveena Kumar R. R.	Advance	1
6	Mrs. Chaithra B.K.	Basic	0
7	Mrs. Chaitra H K	Basic	0
8	Dr. Varun V L	Basic	0
9	RAHUL R RAI	Basic	0
10	Puneeth H.C	Basic	0
11	Mr. SACHIN B V	Basic	0
12	Mrs.Roopa D R	Advance	0
13	MR.Paramesh M.S.	Basic	0
14	Kiran Kumar V	Basic	0
15	Dr. Chandrashekar M J	Basic	0
16	Mr. Naveena Kumar R. R.	Advance	1
17	H NARENDRA KUMAR	Basic	0

### 1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-1271	Yes
HEI Participated in the Smart India Hackathon (2022)	C-1271	Yes

## Section 2: Teaching and Learning: Academic Programs related to Innovation and Entrepreneurship (I&E) Offered by the HEI

### 2.1) Academic Courses in Innovation, Entrepreneurship and IPR

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date
1	Entrepreneurship And Legal Aspects	20MBA26	2020-21	Core Course	Master	МВА	4	10-05- 2021 00:00:00
2	Entrepreneurship And Legal Aspects	20MBA26	2021-22	Core Course	Master	МВА	4	27-06- 2022 00:00:00
3	Management and Entrepreneurship	18CS51	2020-21	Core Course	Bachelor	Information Science Engineering	4	01-09- 2020 00:00:00
4	Management and Entrepreneurship	18CS51	2021-22	Core Course	Bachelor	Information Science Engineering	4	01-10- 2021 00:00:00
5	Construction Management and Entrepreneurship	18CV51	2020-21	Core Course	Bachelor	CIVIL ENGINEERING	4	01-09- 2020 00:00:00
6	Construction Management and Entrepreneurship	18CV51	2021-22	Core Course	Bachelor	CIVIL ENGINEERING	4	01-10- 2021 00:00:00
7	Management and Entrepreneurship for IT Industry	18CS51	2020-21	Core Course	Bachelor	CSE	4	01-09- 2020 00:00:00

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date
8	Management and Entrepreneurship for IT Industry	18CS51	2021-22	Core Course	Bachelor	CSE	4	01-10- 2021 00:00:00
9	Technological Innovation Management and Entrepreneurship	18ES51	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3	01-09- 2020 00:00:00
10	Technological Innovation Management and Entrepreneurship	18ES51	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	3	01-10- 2021 00:00:00
11	Entrepreneurship And Development	18ME46	2020-21	Elective Course	Bachelor	Mechanical Engineering	3	19-04- 2021 00:00:00
12	Management and Entrepreneurship	18EE51	2020-21	Core Course	Bachelor	Electrical and Electronics Engineering	3	01-09- 2020 00:00:00
13	Management and Entrepreneurship	18EE51		Core Course	Bachelor	Electrical and Electronics Engineering	3	01-10- 2021 00:00:00

### 2.2) Non-Academic Courses in Innovation, Entrepreneurship and IPR

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Program Start Date	Pi Ei D
1	3Ds Max	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Department of Civil Engineering	23-05- 2022 00:00:00	28 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Program Start Date	Pi Ei Di
2	Project Management Ready	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Department of Civil Engineering	18-04- 2022 00:00:00	2: 2( 0(
3	Autocad for Civil	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Department of Civil Engineering	26-04- 2021 00:00:00	03 20 00
4	AutoCAD for Mechanical	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	21-12- 2021 00:00:00	2! 2( 0(
5	Java Python Android and Cyber Security	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	26-04- 2021 00:00:00	0: 2( 0(
6	Java Python Android and Cyber Security	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	26-04- 2021 00:00:00	03 20 00
7	c Java Python Programming	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Information Science	26-04- 2020 00:00:00	0: 2( 0(
8	Cyber Security	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	18-04- 2022 00:00:00	2! 2( 0(
9	AudoCAD Electrical	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	03-01- 2022 00:00:00	08 20 00
10	Cyber Security	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	18-04- 2022 00:00:00	23 20 00
11	AWS Cloud	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Science Engineering	18-04- 2022 00:00:00	2: 2( 0(
12	Microsoft Azure	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Science	03-01- 2022 00:00:00	08 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Program Start Date	Pi Ei Di
13	AWS Cloud	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Science Engineering	25-04- 2022 00:00:00	3( 2( 0(

# Section 3: Pre-Incubation and Incubation Infrastructure & Facilities are Currently in Operation to Promote I&E Agenda (AY 2020-21 & 2021-22)

# 3.1) Existence of Pre-Incubation Facility (Tinkering Lab/Makers' Space/Design Centre/New Gen IEDC/IEDC/EDC/Innovation Cell/Startup Cell) (>= 600 Sq. Ft. Floor Area)

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
1	EDC	Entrepreneurship Development Cell	Dr. Gangadhar T G	9535550222	gangadhartg@sjbit.edu.in	Mentoring Support,Pre- Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)

### 3.2) Existence of Incubation Facility (>= 1500 Sq. Ft. Floor Area)

Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
1	NI LABVIEW ACADEMY	Dr. Ravi Kumar A V	9538920010	avravikumar@sjbit.edu.in	Own Resource

Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
2	Industrial Automation Centre of Excellence	Gowtham k	9844369153	gowthamk@sjbit.edu.in	Own Resource
3	SJB Incubation Centre	Dr. G Banuprakash	9742988988	gbanuprakash@sjbit.edu.in	Own Resource
4	Advanced Structural Engineering lab	Dr. Sridhar R	9844064286	sridharr@sjbot.edu.in	Own Resource
5	Ethnotech Center of Excellence	Dr. Kiran Rajanna	8067935886	director@ethnotech.in	Own Resource

### 3.3) Existence of IPR Cell / Patent Facilitation Unit / Technology Transfer Centre at the institute

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
1	IPR Cell	IPR CELL SJBIT	Dr. G Banuprakash	974298898	gbanuprakash@sjbit.edu.in	Mentoring Support,Pre- Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)

# Section 4: Generation and Support of Prototypes / Innovations at HEI and Recognition received (AY 2020-21 & 2021-22)

# 4) Total no. of Innovations (Verified and Recommended) in Different TRLs (4-9) are Recorded in the YUKTI National Innovation Repository of the IIC Institute ( Status as on 7th November 2022 )

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020- 21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagemo of Team Lead in Institute
1	Multipurpose High Voltage Laboratory Assistance Robot	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	SANDEEP S R	Faculty
2	SMART VOTING SYTEM USING FINGERPRINT	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr. M J Chandrashekar	Faculty
3	Smart Voting System Using Fingerprint	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr. M J Chandrashekar	Faculty
4	Inductive Coupled Wireless Charging Stations for Electric Vehicles	Academic Requirement/Study Project	2021-22	TRL 6: Prototype system tested in intended environment close to expected performance	Tarakeshwari V	Faculty

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020- 21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagemo of Team Lead in Institute
5	IOT BASED AIR POLLUTION MONITORING SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Vimala C S	Faculty
6	"Face Retection in a multimodel background for a real-time images using open CV"	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
7	Indian Sign Language recognition and translation	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
8	Indian Sign Language recognition and translation	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
9	"Crop Recommendation system using machine learning alogorihms"	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020- 21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagemo of Team Lead in Institute
10	"A tool for secure communication using encrypted data embedded in image"	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
11	VOTING APPLICATION USING BLOCKCHAIN TECHNOLOGY	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	RANJITH J	Faculty
12	IOT BASED ADVANCED VEHICLE ACCIDENT DETECTION, ALERT AND PREVENTION SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Rekha P S	Faculty
13	INTELLIGENT SAFE AND SECURE PACKAGING SYSTEM USING IOT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	RANJITH J	Faculty
14	Power Generation on Highways using Vertical Axis Wind Turbine and Solar Energy	Academic Requirement/Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr. J P Sridhar	Faculty

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020- 21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagemon of Team Lead in Institute
15	Development of DESI GOU product for rural development	Independent Assignment/Non- academic Study Project	2021-22	TRL 4: Small scale prototype built in a laboratory environment ("ugly" prototype)	UDAY M	Faculty

## Section 5: Start-ups/Ventures Established and Supported at HEI and & Recognitions Received (AY 2020-21 & 2021-22)

5) Total no of Ventures/Startups (Verified and Recommended) are Recorded in the YUKTI National Innovation Repository of the IIC Institute (Status as on 7th November 2022) Startup/Venture CIN Recognized by Startup/Venture Startup/Venture No/LLP/OPC/RC GST FY of DPIIT/Startup Sr. No. Name Registered as Nο No Establishment India No Data Found

Section 6: Collaboration with Other Incubation Units, HEIs and Industry Associations to Strengthen Better Services and Support to Innovation & Startups at HEI (AY 2020-21 & 2021-22)

# 6) Collaboration with Other Incubation Units, HEIs and Industry Associations to Strengthen Better Services and Support to Innovation & Startups at HEI (AY 2020-21 & 2021-22)

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on	View
1	Eduskills	Educational Institute	3	Active	08-10-2021	View (/Uploads/Insti
2	Water Institute University Visveswaraya College of Engineering Bengaluru	Educational Institute	5	Active	29-10-2021	View (/Uploads/Insti

## Section 7: Intellectually Property (IP) Generated and Commercialization

### 7.1) IPR Filed and Published (Copyrights & Design only)

Sr. No.	Title/Name of IP (Copyright/Design Only)	Type of IP	IP Registration Number of Copyright/Design	Date of Filed/Published	Has this IP(Copyright & Designs Only) been Commercialized/Transferred to Industry/Startup/Society?
1	AN UNMANNED AUTOMATIC LAWNMOWER ASSEMBLY	Copy Right	L-109564/2021	21-12-2021	No

### 7.2) Patents Filed by HEI

Sr.	Title/Name of Patent	IP Registration	Date of
No.		Number	Filed/Published
1	N-(4-FLUOROPHENYL)-5-PHENYL-[1,2,4] TRIAZOLO [1,5-A] PYRIDINE-2-CARBOXAMIDE DERIVATIVES AND THEIR SYNTHESIS THEREOF	: 20204100666	16-02-2020

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
2	INTELLIGENT CLUSTERING DIGITAL DEVICES IN AN INTERNET OF THINGS (IOT)	202041028300	30-07-2020
3	IRBC-SYSTEM: INTELLIGENT RULE-BASED CLASSIFICATION SYSTEMS TO CLASSIFY DISCRETE SETS.	202041027658	30-06-2020
4	ROAD MONITORING DEVICE	202141006356	16-02-2021
5	Flower Briquette-A source of Bio-energy	202141040162	09-04-2021
6	Design of Novel Multi-Purpose Study Table for Educational Institution	202141040166	09-04-2021
7	Implementation of green IoT for efficient resource utilization and the creation of sustainable materials	202141046122	10-10-2021
8	Investigative Studies Of Wilcox Diagram In Irrigation Water Samples	202141056808	24-12-2021
9	IOT BASED VEHICLE THEFT PROTECTION AND ENGINE CONTROL SYSTEM	202041039472	02-10-2020
10	IMPLEMENTATION OF INTELLIGENT CHATBOT USING DEEP LEARNING TECHNIQUES	202141048457	05-11-2021

### 7.3) Patent Published / Granted Data

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
1	202041006661	N-(4- FLUOROPHENYL)-5- PHENYL- [1,2,4] TRIAZOLO [1,5-A] PYRIDINE-2- CARBOXAMIDE DERIVATIVES AND THEIR SYNTHESIS THEREOF	16-02-2020	Granted	2022	Other(Individual)
2	201641041813	A REAL-TIME TIRE PRESSURE MONITORING SYSTEM FOR A VEHICLE	07-12-2016	Granted	2022	Other(Individual)

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
3	202141056808	INVESTIGATIVE STUDIES OF WILCOX DIAGRAM IN IRRIGATION WATER SAMPLES	07-12-2021	Published	2021	
4	202141052902	Big Data and Cloud Bursting Real- Time Intelligent scheduling using Machine Learning.	17-11-2021	Published	2021	
5	202141049461	Information technology's role in the Indian banking sector's digital transition.	28-10-2021	Published	2021	
6	202141049065	A METHOD FOR CONTROLLING ACOUSTIC NOISE IN SWITCHED RELUCTANCE MOTOR	27-10-2021	Published	2021	
7	202141048457	IMPLEMENTATION OF INTELLIGENT CHATBOT USING DEEP LEARNING TECHNIQUES.	25-10-2021	Published	2021	
8	202141048085	CATEGORICAL RADIAL BASIS FUNCTION BASED NEURAL NETWORK ARCHITECTURES TO HANDLE CATEGORICAL AND MIXED DATA AS INPUTS	22-10-2021	Published	2021	
9	202141046348	Design of a machine learning-based intelligent drowsiness detection system to avoid accidents.	11-10-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
10	202141043271	The contribution of electronic commerce to the reduction of operational costs of an organization	23-09-2021	Published	2021	
11	202141042397	PASSIVE LOCATION TRACKING SYSTEM FOR CROWD MANAGEMENT	20-09-2021	Published	2021	
12	202141041759	AN EXPERIMENTAL STUDY CARRIED OUT IN ORTHOGONAL SECTION ON THE TITANIUM ALLOY TI- 6AL-4V USING THE KINEMATI	15-09-2021	Published	2021	
13	202141041223	ARTIFICIAL INTELLIGENCE BASED SMART POWERING TECHNIQUE USING SOLAR TRACKING SYSTEM	14-09-2021	Published	2021	
14	202141040166	DESIGN OF NOVEL MULTIPURPOSE STUDY TABLE FOR EDUCATIONAL INSTITUTIONS	04-09-2021	Published	2021	
15	202141040162	FLOWER BRIQUETTES –A SOURCE OF BIOENERGY	04-09-2021	Published	2021	
16	202141038532	A CLUTCH LEVER RESTRICTION ASSEMBLY	25-08-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
17	202141037949	Image Processing based paddy leaf disease detection using Adaboost classifier.	21-08-2021	Published	2021	
18	202141037721	Real time visual object detection for intelligent video surveillance using IoT	19-08-2021	Published	2021	
19	202141036938	PERSON RE- IDENTIFICATION USING MACHINE LEARNING APPROACHES IN VIDEO SURVEILLANCE	15-08-2021	Published	2021	
20	202141035802	APPARATUS AND A METHOD FOR BEAMFORMING USING PHASED ARRAY ANTENNA	09-08-2021	Published	2021	
21	202141033400	AN AUXILARY RAILWAY PLATFORM BRIDGE AND AN IOT BASED METHOD TO OPERATE THE SAME	26-07-2021	Published	2021	
22	202141030571	MACHINE LEARNING AND IOT BASED SMART WEARABLE SYSTEM FOR AUTONOMOUS MANAGEMENT OF DIABETES MELLITUS	07-07-2021	Published	2021	
23	202141029268	AN ENERGY- EFFICIENT THERMODYNAMICS CYCLE TO LIQUIFY BIOMETHANE ON A MICRO SCALE	29-06-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
24	202111027550	MACHINE LEARNING BASED SMART GRID POWER SYSTEM INTEGRATED WITH WIRELESS COMMUNICATION NETWORKS	19-06-2021	Published	2021	
25	202141027419	INTELLIGENT TEMPORAL EXTRACTION AND ANALYSIS MODEL BASED WEB PERSONALIZED RECOMMENDATION	18-06-2021	Published	2021	
26	202141023568	Kannada Text Detection and Recognition from Natural Scene Images using AksharaNet CNN Model	27-05-2021	Published	2021	
27	202141023368	A compact IOT based Indoor air monitoring system	25-05-2021	Published	2021	
28	202141022963	A Novel Data Security System using Hybrid Cloud Computing	23-05-2021	Published	2021	
29	202111021983	SYSTEM FOR INTEGRATED MONITORING AND MANAGEMENT OF AGRICULTURE AND RELATED PARAMETERS USING INTERNET OF THINGS	16-05-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
30	202141019068	DESIGN OF N-BY-1 RECTANGULAR PATCH ANTENNA FOR 2.45 GHZ AND 5 GHZ GEOMETRY	26-04-2021	Published	2021	
31	202141018627	DESIGN AND DEVELOPMENT OF SOLAR POWER BASED ELECTRIC VEHICLE CHARGING BOOTHS	22-04-2021	Published	2021	
32	202141010921	METHOD FOR DIAGNOSE AND MANAGEMENT OF FAULTS IN SMART CITY CLEANLINESS ADMINISTRATION USING SELF- ADAPTIVE MACHINE LEARNING	15-03-2021	Published	2021	
33	202111009493	TITLE OF INVENTION: ROTATING BIRD FEEDER	07-03-2021	Published	2021	
34	202141006356	ROAD MONITORING DEVICE	16-02-2021	Published	2021	
35	287277	Foldable Helmet	27-09-2016	Granted	2019	
36	201741030809	A Machine for Making Finger Millet Flour Balls	30-09-2017	Published	2019	
37	201941037377	Automatic Product Identification For The Shopping Cart By Using Smart Wireless Technology	17-09-2019	Published	2019	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
38	202041048855 A	Recommendation Models For Big Data Analysis Using Multi- Criteria Andhybrid Collaborative Filter	09-11-2020	Published	2020	
39	202041046240 A	Gaze Controlled Electric Iron Box	23-10-2020	Published	2020	
40	202021038153	Automatic Fruit Sorting Using Image processing	09-04-2020	Published	2020	
41	202041028300	IPR Patent 2 - "ICD- Devices: Intelligent Clustering Digital Devices in an Internet of Things (IOT)".	07-03-2020	Published	2020	
42	202041027658	Intelligent Rule- Based Classification Systems To Classify Discrete Sets	30-06-2020	Published	2020	
43	202041006661 A	: N-(4- Fluorophenyl)-5- Phenyl-[1,2,4] Triazolo [1,5-A] Pyridine-2- Carboxamide Derivatives And Their Synthesis Thereof	16-02-2020	Published	2020	
44	202141056808	INVESTIGATIVE STUDIES OF WILCOX DIAGRAM IN IRRIGATION WATER SAMPLES	12-07-2021	Published	2021	
45	202141052902	Big Data and Cloud Bursting Real- Time Intelligent scheduling using Machine Learning.	17-11-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
46	202141049532	AI- BASED ADVANCED TECHNIQUE TO TREAT DOMESTIC SEWAGE IN WATER BODIES AND REAL TIME MONITOR USING SENSOR INTEGRATED USV (UNMANNED SURFACE VEHICLE)	29-10-2021	Published	2021	
47	202141049461	Information technology's role in the Indian banking sector's digital transition.	28-10-2021	Published	2021	
48	202141049065	A METHOD FOR CONTROLLING ACOUSTIC NOISE IN SWITCHED RELUCTANCE MOTOR	27-10-2021	Published	2021	
49	202141048457	IMPLEMENTATION OF INTELLIGENT CHATBOT USING DEEP LEARNING TECHNIQUES.	25-10-2021	Published	2021	
50	202141048085	CATEGORICAL RADIAL BASIS FUNCTION BASED NEURAL NETWORK ARCHITECTURES TO HANDLE CATEGORICAL AND MIXED DATA AS INPUTS	22-10-2021	Published	2021	
51	202141046348	Design of a machine learning-based intelligent drowsiness detection system to avoid accidents.	10-11-2021	Published	2021	

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52	202141043271	The contribution of electronic commerce to the reduction of operational costs of an organization	23-09-2021	Published	2021	
53	202141042397	PASSIVE LOCATION TRACKING SYSTEM FOR CROWD MANAGEMENT	20-09-2021	Published	2021	
54	202141041759	AN EXPERIMENTAL STUDY CARRIED OUT IN ORTHOGONAL SECTION ON THE TITANIUM ALLOY TI- 6AL-4V USING THE KINEMATI	15-09-2021	Published	2021	
55	202141041223	ARTIFICIAL INTELLIGENCE BASED SMART POWERING TECHNIQUE USING SOLAR TRACKING SYSTEM	14-09-2021	Published	2021	
56	202141040166	DESIGN OF NOVEL MULTIPURPOSE STUDY TABLE FOR EDUCATIONAL INSTITUTIONS	09-04-2021	Published	2021	
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59	202141037949	Image Processing based paddy leaf disease detection using Adaboost classifier.	21-08-2021	Published	2021	
60	202141037721	Real time visual object detection for intelligent video surveillance using IoT	19-08-2021	Published	2021	
61	202141036938	PERSON RE- IDENTIFICATION USING MACHINE LEARNING APPROACHES IN VIDEO SURVEILLANCE	15-08-2021	Published	2021	
62	202141035802	APPARATUS AND A METHOD FOR BEAMFORMING USING PHASED ARRAY ANTENNA	08-09-2021	Published	2021	
63	202141033400	AN AUXILARY RAILWAY PLATFORM BRIDGE AND AN IOT BASED METHOD TO OPERATE THE SAME	26-07-2021	Published	2021	
64	202141030571	MACHINE LEARNING AND IOT BASED SMART WEARABLE SYSTEM FOR AUTONOMOUS MANAGEMENT OF DIABETES MELLITUS	07-07-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
65	202141029724	ARTIFICIAL INTELLIGENCE IOT BASED RESPIRATION RATE, OXYGEN VOLUME AND SLEEP MONITORING WEARABLE DEVICE FOR COVID PATIENTS USING SENSORS	07-02-2021	Published	2021	
66	202141029268	AN ENERGY- EFFICIENT THERMODYNAMICS CYCLE TO LIQUIFY BIOMETHANE ON A MICRO SCALE	29-06-2021	Published	2021	
67	202111027550	MACHINE LEARNING BASED SMART GRID POWER SYSTEM INTEGRATED WITH WIRELESS COMMUNICATION NETWORKS	19-06-2021	Published	2021	
68	202141027419	INTELLIGENT TEMPORAL EXTRACTION AND ANALYSIS MODEL BASED WEB PERSONALIZED RECOMMENDATION	18-06-2021	Published	2021	
69	202141027064	STUDY OF THE BEHAVIOUR AND PERFORMANCE OF A SOLAR STEAM TURBINE BY CALCULATING THREE VARIANTS BASED ON THE AVAILABLE TECHNOLOGIES	17-06-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
70	202141023568	Kannada Text Detection and Recognition from Natural Scene Images using AksharaNet CNN Model	27-05-2021	Published	2021	
71	202141023368	A compact IOT based Indoor air monitoring system	25-05-2021	Published	2021	
72	202141022963	A Novel Data Security System using Hybrid Cloud Computing	23-05-2021	Published	2021	
73	202141022163	A POWER QUALITY AND DEMAND SIDE MANAGEMENT SYSTEM FOR A SMART GRID USING MACHINE LEARNING FOR PROVIDING EFFICIENT RESOURCE UTILIZATION AND THE METHOD THEREOF	17-05-2021	Published	2021	
74	202111021983	SYSTEM FOR INTEGRATED MONITORING AND MANAGEMENT OF AGRICULTURE AND RELATED PARAMETERS USING INTERNET OF THINGS	16-05-2021	Published	2021	
75	202141019068	DESIGN OF N-BY-1 RECTANGULAR PATCH ANTENNA FOR 2.45 GHZ AND 5 GHZ GEOMETRY	26-04-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
76	202141018627	DESIGN AND DEVELOPMENT OF SOLAR POWER BASED ELECTRIC VEHICLE CHARGING BOOTHS	22-04-2021	Published	2021	
77	202141010921	METHOD FOR DIAGNOSE AND MANAGEMENT OF FAULTS IN SMART CITY CLEANLINESS ADMINISTRATION USING SELF- ADAPTIVE MACHINE LEARNING	15-03-2021	Published	2021	
78	202111009493	TITLE OF INVENTION: ROTATING BIRD FEEDER	03-07-2021	Published	2021	
79	202141006356	ROAD MONITORING DEVICE	16-02-2021	Published	2021	
80	202041042387	SYNTHESIS AND CHARACTERIZATION OF (S)-3-(5- FLUOROPYRIDIN-2- YL)-5-(PIPERIDIN-3- YL)-1,2,4- OXADIAZOLE DERIVATIVES AND THEIR SECRETORY PHOSPHOLIPASE A2 (SPLA2) INHIBITOR ACTIVITY	29-09-2020	Published	2021	
81	202041048855 A	Recommendation Models For Big Data Analysis Using Multi- Criteria Andhybrid Collaborative Filter	11-09-2020	Published	2020	
82	202041046240 A	Gaze Controlled Electric Iron Box	23-10-2020	Published	2020	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
83	201941039384 A	Eco-Friendly Synthesis Of Pyrrolo [1,2-A] Quinoline-3- Carboxylate Derivatives & Their Study Of Antibacterial And Antioxidant Properties	29-09-2019	Published	2020	
84	202021038153	Automatic Fruit Sorting Using Image processing	04-09-2020	Published	2020	
85	202041028300	IPR Patent 2 - "ICD- Devices: Intelligent Clustering Digital Devices in an Internet of Things (IOT)".	03-07-2020	Published	2020	
86	202041027658	Intelligent Rule- Based Classification Systems To Classify Discrete Sets	30-06-2020	Published	2020	
87	202041006661 A	: N-(4- Fluorophenyl)-5- Phenyl-[1,2,4] Triazolo [1,5-A] Pyridine-2- Carboxamide Derivatives And Their Synthesis Thereof	16-02-2020	Published	2020	

Sr. No.	Name of Technology Licenced/Transferred/Commercialized	Technology Type	Patent/Licence Holder name (Institute Co- ownership is Must)	Technology Transferred to	Name of Licensee
Νο Γ	Pata Found				

### **Declaration**

To, The ARIIA Committee MHRD's Innovation Cell New Delhi

### Joint Declaration by the Head of the Institute and Nodal Officer

#### Dear Sir,

Herewith, myself **Dr. Mahendra Prashanth K V** (Head of Institute) and **Mr. H Narendra Kumar** (Nodal Officer) jointly declaring on behalf of our institute is that all the information submitted are true and correct to best of our knowledge.

Thank you

The Head of Institute

J25 15.10.2022

> Dr. Mahendra Prashanth K V , Head of the Institution, SJB INSTITUTE OF TECHNOLOGY, Bengaluru, Karnataka

Nodal officer

J 6 e 15.10.2022

Mr. H Narendra Kumar, Nodal Officer, SJB INSTITUTE OF TECHNOLOGY, Bengaluru, Karnataka