

Indian Institute of Technology (Banaras Hindu University) Varanasi [ARI-U-0701][U-0701]

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	Yes
Institute has Action Plans for Implementation of the I&E Policy	No

Contact:

Faculty Name:	Prof. Rajnesh Tyagi
Designation:	Professor, Department of Mechanical Engineering

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
IIC 2.0 (2019-20)	2.5
IIC 3.0 (2020-21)	3
IIC 4.0 (2021-22)	3

Contact:

IIC President of the Institute:	Prof. Pramod Kumar Jain
Designation:	Director

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. Shyam Kamal	Basic	0
2	Dr. Abhisek Mudgal	Basic	0
3	Dr. Saurabh Pratap	Basic	0
4	Dr. Shivam Verma	Basic	0
5	Dr. Naveen Yalla	Basic	0

Sr. No.	Name of the Faculty IA	Level of Training	No of I&E Expert Talks/Sessions Conducted
6	Dr. Surya Deo Yadav	Basic	0
7	Dr. Hari Prabhat Gupta	Basic	0
8	Dr. Rewati Raman	Advance	0
9	Dr. Sanjeev Kumar Mahto	Advance	0
10	Dr. Amitesh Kumar	Basic	0

U-0701	No
U-0701	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

											Total Numbers		
						Course				Total	of		
						Offering				Duration	Contact		
	Title			Туре	Level	Department/	Total	Course	Course	of the	Hours of		Total Nun
	of	Course	Academic	of	of	Centre/ Unit	Credit	Start	End	Course	the	Mode of	Beneficia
Srno	Course	Code	Year	Course	Course	Name	Score	Date	Date	(in Days)	Course	Delivery	Undergon

No Data Found

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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	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode (
1	Inter thingQbator Hackathon on Code vs Covid	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Cisco thingQbator	30-04- 2020 00:00:00	03-05- 2020 00:00:00	4	32	Online
2	The thingQbator Internship Program (TIP)	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Cisco thingQbator	15-06- 2020 00:00:00	26-07- 2020 00:00:00	42	60	Online

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	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode (
3	Agripreneurship Orientation Programme (AOP)	2020-21	Short-term Certificate Program	Self Sponsored/Supported	RKVY- RAFTAAR Agri Business Incubator	19-10- 2020 00:00:00	03-12- 2020 00:00:00	46	60	Online
4	Agripreneurship Orientation Programme (AOP)	2021-22	Short-term Certificate Program	Self Sponsored/Supported	RKVY- RAFTAAR Agri Business Incubator	27-09- 2020 00:00:00	11-11- 2020 00:00:00	46	60	Online

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	Govt. Schemes
1	Tinkering Lab	I-DAPT Hub Foundation	Prof. Vikash Kumar Dubey	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development),Incubation Facility Support (Innovative Business Model to Startup and Market Linkage & Crowth Stage)

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Govt. Schemes
2	Startup Cell	Startup Cell	Amit Kumar Baheti	null

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

Sr. No.	Name of Unit	In-charge Name	Govt. Schemes
1	Ideation Innovation and Incubation Foundation	Dr. Rajnesh Tyagi	CSR/Private,Other Central/State Government
2	I-DAPT Hub Foundation	Vikash Kumar Dubey	DST/NSTEDB/NIDHI

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	Govt. Schemes
1	IPR Cell	IIT BHU IPR Cell	Prof. Vikash Kumar Dubey	Mentoring Support

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 Engagement of Team Lead in Institute	Total Grants Received (from all sources)	Grant Support Received from Institution/Incubation
1	Superconducting- Thermo-Electric- Fuel cell Engine module	Independent Assignment/Non- academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Subhankar Pandey	Entrepreneur	0	0
2	Low Maintenance pond water pump (Tejas Pump)	Independent Assignment/Non- academic Study Project	2020-21	TRL 9 : Full commercial application, technology available for consumers	Gaurav Singh	Entrepreneur	0	0
3	Self Drive Mini Sugarcane Cutter and Portable Sugarcane Stripper	Independent Assignment/Non- academic Study Project	2020-21	TRL 7: Demonstration system operating in operational environment at pre- commercial scale	Sunil Laxman Rathod	Entrepreneur	25	0

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)

Sr. No.	Startup/Venture Name	Startup/Venture Registered as	CIN No/LLP/OPC/RC No
1	SMART POWER SOLUTIONS PRIVATE LIMITED	Private Limited Firm (Pvt. Ltd.)	U29100KA2019PTC125964 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor
2	livecow llp	Limited Liability Partnership Firm (LLP)	ABA-9707 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
3	Exflair Trade Private Limited	Private Limited Firm (Pvt. Ltd.)	U52590KA2016PTC086587 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
4	SISOURCE PRIVATE LTD	Private Limited Firm (Pvt. Ltd.)	U72900AS2022PTC022869 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcontest/idea/IC201 Innovation5057793.PDF)

Sr. No.	Startup/Venture Name	Startup/Venture Registered as	CIN No/LLP/OPC/RC No
5	NATUOS AGRILITE LLP	Limited Liability Partnership Firm (LLP)	AAW-7621 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
6	FARMISTO LLP	Limited Liability Partnership Firm (LLP)	AAS-1056 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
7	GIR ORGANICS PRIVATE LIMITED	Private Limited Firm (Pvt. Ltd.)	U01100UP2021PTC154935 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
8	ECO CHAR LLP	Limited Liability Partnership Firm (LLP)	AAV-3511 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
9	TGT GLOBAL DEVELOPMENT SERVICES PRIVATE LIMITED	Private Limited Firm (Pvt. Ltd.)	U74999UP2016PTC088809 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
10	MANWANI'S INNOVATIVE PEARL CULTURE LLP	Limited Liability Partnership Firm (LLP)	AAR-7800 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon

Sr. No.	Startup/Venture Name	Startup/Venture Registered as	CIN No/LLP/OPC/RC No
11	DIVAVI ENTERPRISES	Registered Partnership Firm	DEO3309041986011 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor
12	Unnat Krishi Evam Herbal Techo-Solutions Pvt. Ltd.	Private Limited Firm (Pvt. Ltd.)	U29297UP2020PTC139505 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor
13	Allywing Solutions Pvt. Ltd.	Private Limited Firm (Pvt. Ltd.)	U74110UP2019PTC122666 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor
14	CAN ANALYTICS PRIVATE LIMITED	Private Limited Firm (Pvt. Ltd.)	U74999UP2016PTC085977 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor
15	FRENZY FARM LLP	Limited Liability Partnership Firm (LLP)	AAS-8297 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor
16	Nathan's Agro Technology	Registered Partnership Firm	04/14/01/0138/19 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcon
17	KASHGRO ENTERPRISES PRIVATE LIMITED	Private Limited Firm (Pvt. Ltd.)	U28995UP2020PTC136847 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor

Sr. No.	Startup/Venture Name	Startup/Venture Registered as	CIN No/LLP/OPC/RC No
18	Dudh Dhara Pashu Aahar	Registered Partnership Firm	AF385476 View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcor
19	FVPLUS AGROTECH INNOVATIONS LLP	Limited Liability Partnership Firm (LLP)	View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/images/innovationcontest/idea/IC201

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
1	Rashtriya Ayureveda Vidyapeeth, Ministry of AYUSH	Govt. Agency (Central)	0005	Active	22-09-2020

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on
2	Niigata University, Japan	Educational Institute	0005	Active	01-02-2022
3	Applied Materials India Pvt. Ltd.	Corporate/Industry Association	0005	Active	15-07-2021
4	Centre for the Development of Glass industry, Firozabad	Corporate/Industry Association	0005	Active	05-02-2021
5	University of Buffalo, New York	Educational Institute	0005	Active	17-05-2022
6	Defence Research Laboratory	Govt. Agency (Central)	0010	Active	22-07-2022
7	Farmanex International Pvt. Ltd.	Corporate/Industry Association	0005	Active	02-05-2022
8	G R Infra Projects Limited	Corporate/Industry Association	0005	Active	23-03-2021
9	Hughes Global Education india Pvt. Ltd.	Knowledge/Mentoring Agency	0005	Active	01-01-2021
10	Indian Institute of Technology, Guwahati	Educational Institute	0005	Active	27-11-2020
11	Indian Space Research Organisation (ISRO)	Govt. Agency (Central)	0005	Active	23-12-2020
12	Kantas Track-Pack india Ltd.	Corporate/Industry Association	0005	Active	20-01-2021
13	Life Line Security & System	Corporate/Industry Association	0005	Active	10-03-2021
14	Ministry of Road Transport & Highways	Govt. Agency (Central)	0010	Active	03-02-2021

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on
15	Adroitec Information Systems Pvt. Ltd.	Corporate/Industry Association	0005	Active	11-11-2021
16	Ministry of Micro Small and Medium Enterprises, GoI	Govt. Agency (Central)	0005	Active	15-06-2022
17	Ministry of Micro Small and Medium Enterprises, GoI	Govt. Agency (Central)	0005	Active	06-10-2020
18	National Cheng Kung University, Taiwan	International Agency	0005	Active	25-09-2021
19	National Institute of Materials Science, Japan	International Agency	0005	Active	19-10-2021
20	National Highways Authority of India, (NHAI)	Govt. Agency (Central)	0005	Active	21-07-2020
21	National Highways Authority of India, (NHAI)	Govt. Agency (Central)	0005	Active	11-08-2020
22	University of Siegen, Germany	International Agency	0005	Active	06-05-2022
23	Premas Biotech Pvt. Ltd.	Corporate/Industry Association	0005	Active	06-12-2021
24	Raytheon Intelligence & Space company	International Agency	0005	Active	30-07-2020
25	RI Instruments & Innovations India and group company RINZTECH, New Zealand	International Agency	0005	Active	28-12-2020
26	The University Court of the University of Edinburgh & The University of Dundee	International Agency	0005	Active	12-11-2021
27	Ministry of Science & Technology, DST	Govt. Agency (Central)	0005	Active	30-12-2020

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on
28	University of West Bohemia	International Agency	0005	Active	02-02-2021

Section 7: Intellectually Property (IP) Generated and Commercialization

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

					Has this IP(Copyright & Designs Only) been
Sr.	Title/Name of IP	Туре	IP Registration Number	Date of	Commercialized/Transferred to
No.	(Copyright/Design Only)	of IP	of Copyright/Design	Filed/Published	Industry/Startup/Society?

No Data Found

7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
1	A NOVEL POROUS SCAFFOLD FOR ORTHOPEDIC APPLICATION AND A METHOD OF PREPARATION THEREOF	202011001700	14-01-2020
2	SOLAR AIR HEATER WITH TROMBE WALL	202011003336	24-01-2020
3	A BIOMETRIC BASED SYSTEM AND METHOD FOR MANAGEMENT OF PET ANIMAL	202011003639	27-01-2020
4	AN ARSENIC RESISTANT BACTERIUM STRAIN	202011003640	27-01-2020

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
5	A METHOD OF PREPARING BENZALDEHYDE THROUGH CATALYTIC OXIDATION	202011005531	07-02-2020
6	METHOD FOR FABRICATING A GAS SENSOR BY DEVELOPING THIN SOLID POLYMERIC FILM	202011005745	10-02-2020
7	A METHOD FOR PREPARING THREE DIMENSIONAL NANOFIBROUS COMPOSITE SCAFFOLD AND A PRODUCT THEREOF	202011006354	13-02-2020
8	EXTENDED LARGER AREA HETEROJUNCTION BASED BIO-SENSING DEVICE	202011014307	31-03-2020
9	A COMPOSITION OF AUSTENITIC STAINLESS STEEL FOR MEDICAL IMPLANTS	202011015355	07-04-2020
10	AN ECO-FRIENDLY METHOD OF FABRICATING MULLITE FOAM AND A PRODUCT THEREOF	202011015428	08-04-2020
11	THREE ELECTRODE SYSTEM FOR INACTIVATION OF BACTERIAL CELLS	202011015621	09-04-2020
12	AN ELECTROCHEMICAL SENSOR AND A DUAL SENSING PLATFORM FOR DETECTION OF CORONA VIRUSES AND A PROCESS FOR THEIR DEVELOPMENT	202011020946	18-05-2020
13	AN IMPROVED HIGH FLOW SOLAR CHIMNEY POWER PLANT	202011033120	01-08-2020
14	ANALYTE DETECTION BASED ON ENHANCED CHEMILUMINESCENCE AND SMARTPHONE IMAGING IN BIOLOGICAL FLUIDS AND METHOD THEREOF	202111051598	10-11-2021
15	PREPARATION OF CARBON NANOCAPSULES FROM AZADIRACHTA INDICA SEED FOR THE TREATMENT OF BREAST CANCER	202111060434	23-12-2021

7.3 & 7.4) 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	202111057640	A DUAL-MODE EVAPORATIVE COOLER FOR COMPOSITE CLIMATE	12-10-2021	Published	2021	
2	202111057176	AN IMPROVED ELECTRO-KINETIC CONSTANT RATE- OF-STRAIN CONSOLIDOMETER	12-08-2021	Published	2021	
3	202111052391	AN ASYMMETRIC TRANSISTOR AND METHOD OF FABRICATION THEREOF	15-11-2021	Published	2021	
4	202111050848	A SUPER ABSORBENT BIOCOMPATIBLE SOY-BASED HYDROGEL SCAFFOLD AND METHOD OF PREPARATION THEREOF	11-05-2021	Published	2021	
5	202111046586	A PORTABLE COLORIMETRY SENSING DEVICE FOR POINT OF CARE DIAGNOSTICS	10-12-2021	Published	2021	
6	202111039649	A DC/DC CONVERTER WITH BOTH CURRENT AND VOLTAGE SOURCE PROPERTY FOR OPTIMAL BATTERY CHARGING SYSTEM	09-01-2021	Published	2021	
7	202111033576	SYSTEM AND METHOD FOR ENERGY MANAGEMENT AND VOLTAGE CONTROL THROUGH GRID-CONNECTED COMMUNITY ENERGY RESOURCES	26-07-2021	Published	2021	
8	202111031286	ADAPTIVE OPTIMAL POWER MANAGEMENT FOR RENEWABLE BASED MIX ENERGY SYSTEM	07-12-2021	Published	2021	
9	202111028517	A METHOD FOR DEVELOPMENT OF SYNERGISTIC NANO HYBRID STRUCTURE ON NANORODS	25-06-2021	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
10	202111020273	A FACILE HOLLOW MESOPOROUS CHIRAL POLYMERIC NANOCAPSULE AND A PROCESS FOR ITS PREPARATION	05-03-2021	Published	2021	
11	202111016470	A NATURAL TEMPLATE BASED ANTICHOLINESTRASE INHIBITORS AND ANTIOXIDANTS FOR TREATMENT OF ALZHEIMER DISEASE	04-07-2021	Published	2021	
12	202111013441	NOBLE METAL BASED ELECTROCATALYST FOR HYDROGEN EVOLUTION REACTION	26-03-2021	Published	2021	
13	202111011562	A METHOD AND A KIT FOR DETECTING CONCENTRATION OF ANTI-TUBERCULOSIS DRUG IN A BIOLOGICAL SAMPLE	18-03-2021	Published	2021	
14	202111011563	A GLASS MATRIX COMPOSITION FOR CONVERSION OF A BARREN LAND INTO A FERTILE LAND	18-03-2021	Published	2021	
15	202111009754	A DRUG LOADED THERMOSENSITIVE POROUS POLYMER FILM AND A METHOD OF PREPARATION THEREOF	03-09-2021	Published	2021	
16	202111007198	A CHIRAL HOLLOW POLYMERIC NANOCAPSULE WITH DEFINED OPENING AND A PROCESS FOR ITS PREPARATION	20-02-2021	Published	2021	
17	202111005760	A DEVICE FOR DEPOSITION OF FLUID FOR CHROMATOGRAPHY	02-11-2021	Published	2021	
18	202111002570	A NANOHERBICIDAL COMPOSITION AND A METHOD FOR ITS PREPARATION AND USES THEREOF	19-01-2021	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
19	202111001482	A MULTIFUNCTIONAL DIARYLUREA- HYDROXYAMIDINE BASED COMPOUND FOR TREATMENT OF ALZHEIMER DISEASE	01-12-2021	Published	2021	
20	202111000980	AN IMPROVED SOLAR STILL ASSEMBLY FOR PURIFICATION OF RAW WATER	01-08-2021	Published	2021	
21	202111000822	AN IMPROVED ORGANIC RANKINE CYCLE SYSTEM WITH COUPLED DIFFUSION ABSORPTION REFRIGERATION EFFECT	01-07-2021	Published	2021	
22	202011047641	MULTITARGET-DIRECTED TRIAZOLE BRIDGED CYCLOARYL ANALOGUES FOR TREATMENT OF ALZHEIMER'S DISEASE	31-10-2020	Published	2021	
23	202011045547	A METHOD OF DEMINERALIZATION OF SCALES, SHELLS AND BONES	19-10-2020	Published	2021	
24	202011045297	A THREE DIMENSIONALLY(3D) PRINTED PHANTOM FOR COMMISSIONING OF GYNAECOLOGICAL BRACHYTHERAPY APPLICATORS	17-10-2020	Published	2021	
25	202011020948	TEMPERATURE SENSITIVE POROUS POLYMER FILM FOR BIOMEDICAL APPLICATIONS AND A METHOD OF ITS SYNTHESIS	18-05-2020	Published	2021	
26	202011018560	SOY-BASED ELECTROSPUN NANOFIBROUS SHEET AND METHOD OF ELECTROSPINNING THEREOF	30-04-2020	Published	2021	
27	202011018557	A METHOD OF SYNTHESIZING CARBON DOTS AND A PRODUCT THEREOF	30-04-2020	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
28	202011018312	ELECTROCHEMICAL DEVICE FOR HYDROGEN PRODUCTION	29-04-2020	Published	2021	
29	202011017968	A NANOMATERIAL BASED ANTIMICROBIAL COMPOSITION AND A METHOD OF PREPARATION THEREOF	27-04-2020	Published	2021	
30	202011017647	A METHOD OF PREPARING MULTIWALLED CARBON NANOTUBES	24-04-2020	Published	2021	
31	202011017635	A METHOD OF FABRICATING DENSITY GRADIENT MULTI-LAYERED SPINEL REFRACTORY AND A PRODUCT THEREOF	24-04-2020	Published	2021	
32	202011017291	AN ANTI-MICROBIAL MULTI-LAYER FACE MASK AND A METHOD OF PREPARATION THEREOF	22-04-2020	Published	2021	
33	202011015621	THREE ELECTRODE SYSTEM FOR INACTIVATION OF BACTERIAL CELLS	04-09-2020	Published	2021	
34	202011015428	AN ECO-FRIENDLY METHOD OF FABRICATING MULLITE FOAM AND A PRODUCT THEREOF	04-08-2020	Published	2021	
35	202011015355	A COMPOSITION OF AUSTENITIC STAINLESS STEEL FOR MEDICAL IMPLANTS	04-07-2020	Published	2021	
36	202011006354	A METHOD FOR PREPARING THREE DIMENSIONAL NANOFIBROUS COMPOSITE SCAFFOLD AND A PRODUCT THEREOF	13-02-2020	Published	2021	
37	202011005745	METHOD FOR FABRICATING A GAS SENSOR BY DEVELOPING THIN SOLID POLYMERIC FILM	02-10-2020	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
38	202011003640	AN ARSENIC RESISTANT BACTERIUM STRAIN	27-01-2020	Published	2021	
39	202011003336	SOLAR AIR HEATER WITH TROMBE WALL	24-01-2020	Published	2021	
40	202011001700	A NOVEL POROUS SCAFFOLD FOR ORTHOPEDIC APPLICATION AND A METHOD OF PREPARATION THEREOF	14-01-2020	Published	2021	
41	201611033229	"A SOLUTION PHASE SYNTHESIS FOR DOPED/UNDOPED CERIUM (IV) PYROPHOSPHATE COMPOUNDS OF DIFFERENT MORPHOLOGIES"	29-09-2016	Granted	2021	
42	3078-DEL-2015	"APPARATUS FOR ALCOHOL PRODUCTION BY FERMENTATION WITH INTEGRATED REACTION CUM SEPARATION UNIT"	28-09-2015	Granted	2021	
43	201811024410	A Micro Fluidic Plateform For Low Density Cultures of Cells and a Method For Controlling the Same	29-06-2018	Published	2020	
44	201811025421	Porous Silica Shapes and Manufactiring Process Thereof	07-06-2018	Published	2020	
45	201811044916	An Alkaline Earth Metal Doped Zinc Oxide Nanosheets and Method of Preparation Thereof	22-11-2018	Published	2020	
46	201811040152	A Bioactive Glass Drug Formulation for Bone Repair and Regenrarion and a Method of Preparation Thereof	24-10-2018	Published	2020	
47	201811027390	A Method to Reduce Suspended Particulate Matter in Air	21-07-2018	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
48	201811045481	A Novel Hydrogel with High Mechanical Stability and a Method of Making the Same	12-01-2018	Published	2020	
49	201811045795	Solar Air Heater	12-04-2018	Published	2020	
50	201811048780	A Strontium Based rare Earth Free High Energy Permanent Magnet for DC Motor Application and a Method of Synthesis Thereof	22-12-2018	Published	2020	
51	201811049831	Норрег	29-12-2018	Published	2020	
52	201811049448	A Novel Nano-Binder in Castable Refractory and a Method of Preparation Thereof	27-12-2018	Published	2020	
53	201911000437	Magnesium Zinc Ferrite Polyurithrane Nano Composite	01-04-2019	Published	2020	
54	201911000354	An Improved Sagregator	01-03-2019	Published	2020	
55	201911000362	A Multifunctional Hybrid 3-(4-Hydroxy-3-Methoxy-Phenyl) Prop-2-Enoic Acid and Substituted Amine/Piprezine Derivatives for the treatment of Alzimers Diesese	01-03-2019	Published	2020	
56	201911008546	A Method of Preparing Titanium Dioxide Based Transparent and Thin Films and a Product Thereof	03-05-2019	Published	2020	
57	201911002765	A Metal Ceramic Joint Adhesive	23-01-2019	Published	2020	
58	201911010216	Aluminium Foam with High Porosity and Open- Celled Microstructure using Power Metallurgy Route and a Process Thereof	15-03-2019	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
59	201911008950	A Method of Preparing Mineral from Aluminium Dross Using Organic Solvent Precipitation	03-07-2019	Published	2020	
60	201911008550	A Method for Preparation of Graphene-Oxide Nanocomposites Based Sprayable Paint Coating	03-05-2019	Published	2020	
61	201911009585	Hopper with Repulsion Tubes	03-12-2019	Published	2020	
62	201911008955	A Biometric Based Method and System for Identifying an Infant	03-07-2019	Published	2020	
63	201911013103	Material for Faster Bone Healing	04-02-2019	Published	2020	
64	201911013972	A Bio-Piezoelectric Device and a Method of Preparation Thereof	04-07-2019	Published	2020	
65	201911012094	A Novel Anti-Coagulant Formulation and a Method of Preparation Thereof	27-03-2019	Published	2020	
66	201911015958	A Novel Polymeric Hydrogel For Treating Melanoma Cancer and a Method Thereof	22-04-2019	Published	2020	
67	201911013104	Friction Reducing Coating on Orthodintic Wires	04-02-2019	Published	2020	
68	201911016335	A Waste Derived Nano Sol Binder for Castable Refractory and a Method of Preparation Thereof	24-04-2019	Published	2020	
69	201911020250	A Novel Material for Treating Wastewater and a Method of Preparation Thereof	22-05-2019	Published	2020	
70	201911017225	An Upconverting Plateform for Arsenite Detection in Water Samples and a Method of Preparation Thereof	30-04-2019	Published	2020	

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71	201911019579	A Direct Broadcast System using CDMA Technology	17-05-2019	Published	2020	
72	201911020251	Janus Shaped Silver-Magnetite Nanoparticles and a Method of Preparation Thereof	22-05-2019	Published	2020	
73	201911022735	A Method of Preparing Synthetic Beads to Remove Heavy Metals from Waste Water	06-07-2019	Published	2020	
74	202011003639	A Biometric Based System and a Method for Management of Pet Animals	27-01-2020	Published	2020	
75	202011023201	Development of Multifunctional Porous Polymeric Membrane Using Accelerator for Seperation of F- Block Elements	06-02-2020	Published	2020	
76	202011020671	An Improvised Hybrid Solar Chimney Based Power Generation System	15-05-2020	Published	2020	
77	202011026380	A Method of Preparing a Catalyst for Catalytic Converter and a Product Thereof	22-06-2020	Published	2020	
78	202011029080	Compostion and Method for Synthesis for Strontium Hexaferrite based Non-Rare-Earth- Magnets	07-08-2020	Published	2020	
79	202011029248	Biocompatible Nano-Triblock-Copolymers and a Process for Their Preparation	07-09-2020	Published	2020	
80	202011031802	A Mesoporous Anti Microbial Nano-Composite and a Method of Preparation Thereof	24-07-2020	Published	2020	
81	202011033120	An Improved High Flow Solar Chimney Power Plant	08-01-2020	Published	2020	

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82	202011030025	An Improved Digital Strethoscope	15-07-2020	Published	2020	
83	202011041316	A Method for Waste Bacterial Culture Media Based Flourescent Security Ink	23-09-2020	Published	2020	
84	202011038430	System for Electro-Osmotic Soil Consolidation and a Method Thereof	09-05-2020	Published	2020	
85	201911018781	A NOVEL COMPOSITION FOR SURFACE MODIFICATION OF ANODEFOR ELECTROCHEMICAL APPLICATION	10-05-2019	Published	2021	Applicant
86	201911025592	A FOAMING AGENT FOR POROUS CERAMICS AND A METHOD OFPREPARATION THEREOF	27-06-2019	Published	2021	Applicant
87	201911025593	HIGH POWER MICROWAVE SECTORAL WAVEGUIDE MODECONVERTER	27-06-2019	Published	2021	Applicant
88	201911030344	REORGANIZATION OF MOLECULES IN DISPOSED ABSORBENTMATERIALS INTO ENERGY PRODUCTS USING NANOCATALYST	26-07-2019	Published	2021	Applicant
89	201911030419	A NOVEL SUSPENSION FOR THREE-DIMENSIONAL BIOPRINTINGAND A METHOD OF PREPARATION THEREOF	27-07-2019	Published	2021	Applicant
90	201911030657	MACROPOROUS CERAMIC FOAM WITH HIGH POROSITY AND APROCESS THEREOF	30-07-2019	Published	2021	Applicant
91	201911031635	A NOVEL POLYMER BLEND UTILIZING WASTE PLASTICS ANDPROCESS OF PREPARATION THEREOF	05-08-2019	Published	2021	Applicant

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92	201911031783	AN INTEGRATED CONTINUOUSLY OPERATED WASTEWATERTREATMENT SYSTEM WITH MICROALGAL BIOMASS PRODUCTION	06-08-2019	Published	2021	Applicant
93	201911032481	NOVEL QUINOLINYL PIPERAZINE DERIVATIVES FOR THE TREATMENTOF ALZHEIMER'S DISEASE	10-08-2019	Published	2021	Applicant
94	201911033524	AN N-TYPE METAL OXIDE INTERFACE BASED THIN FILMTRANSISTOR AND A METHOD OF PREPARATION THEROF	20-08-2019	Published	2021	Applicant
95	201911034164	SYNTHESIS OF N-BENZYLPIPERIDINE AND 5-(2,4- DICHLOROPHENYL)-1,3,4-OXADIAZOLE HYBRID WITHMULTIFUNCTIONAL ACTIVITIES AGAINST ALZHEIMER'S DISEASE	24-08-2019	Published	2021	Applicant
96	201911034300	A NOVEL COMPOUND FOR TREATING ALZHEIMER'S DISEASE AND AMETHOD OF PREPARATION THEREOF	26-08-2019	Published	2021	Applicant
97	201911034931	SYNTHESIS OF 2-(4-BROMOPHENYL)-5-(4-(PYRIDIN-2-YL) PIPERAZIN-1-YL)-1,3,4-OXADIAZOLE FOR TREATING ALZHEIMER'S DISEASE ANDMETHOD OF PREPARATION THEREOF	29-08-2019	Published	2021	Applicant
98	201911034931	A PROCESS FOR EFFICIENT BIOREMEDIATION OF CHEESEWASTEWATER	12-09-2019	Published	2021	Applicant
99	201911036988	CONSTRUCTION BRICKS USING INDUSTRIAL WASTE WITH SIMPLECOMPOSITION AND PROCESS OPTIMIZATION	13-09-2019	Published	2021	Applicant

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100	201911037645	SYSTEM FOR SPATIO-TEMPORAL TRAFFIC DATA REPORTING FORSMART CITY SERVICES	18-09-2019	Published	2021	Applicant
101	201911038240	A HIGHLY POROUS LIGHT WEIGHT CERAMIC FOAM AND A PROCESSOF PREPARATION THEREOF	23-09-2019	Published	2021	Applicant
102	201911038774	A NOVEL PROCESS FOR SYNTHESIS OF METAL NANOPARTICLES ANDA PRODUCT THEREOF	25-09-2019	Published	2021	Applicant
103	201911039568	REBAMIPIDE LOADED TRANSDERMAL PATCH FORNEURODEGENERATIVE DISEASE	30-09-2019	Published	2021	Applicant
104	201911041364	AN IMPROVED NOZZLE ASSEMBLY FOR UNIFORM FLUID DELIVERY	12-10-2019	Published	2021	Applicant
105	201911042913	LATENT FINGERPRINT IMAGING USING RARE EARTH DOPED METALOXIDE BASED NANOPHOSPHORS	22-10-2019	Published	2021	Applicant
106	201911043042	FMG SENSOR FOR HAND PROSTHESIS APPLICATION	23-10-2019	Published	2021	Applicant
107	201911044199	NOVEL SULFONAMIDE DERIVATIVES OF PARA AMINO BENZOIC ACIDFOR THE TREATMENT OF ALZHEIMER'S DISEASE	31-10-2019	Published	2021	Applicant
108	201911044200	A THREE-DIMENSIONAL SCAFFOLD FOR CARTILAGE TISSUEREGENERATION AND METHOD OF PREPARATION THEREOF	31-10-2019	Published	2021	Applicant
109	201911044724	AN IMPROVED HDR BRACHYTHERAPY APPLICATOR APPARATUS	04-11-2019	Published	2021	Applicant

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110	201911045141	A NOVEL BIOACTIVE COMPOSITE SCAFFOLD AND A METHOD OFPREPARATION THEREOF	06-11-2019	Published	2021	Applicant
111	201911049752	A COLLOIDAL QUANTUM DOTS (QDS) BASED ION SENSITIVE FIELDEFFECT TRANSISTOR	03-12-2019	Published	2021	Applicant
112	201911050006	A THERMALLY EFFICIENT OVER-EXPANSION STROKE BASED ENGINE	04-12-2019	Published	2021	Applicant
113	202011005531	A METHOD OF PREPARING BENZALDEHYDE THROUGH CATALYTICOXIDATION	07-02-2020	Published	2021	Applicant
114	202011014307	EXTENDED LARGER AREA HETEROJUNCTION BASED BIO-SENSINGDEVICE	31-03-2020	Published	2021	Applicant
115	202011017140	A TWO DIMENSIONAL PHOTOSENSITIVE METAL OXIDESEMICONDUCTOR (MOS) CAPACITOR	21-04-2020	Published	2021	Applicant
116	202011029248	BIOCOMPATIBLE NANO-TRIBLOCK-CO-POLYMERS AND A PROCESSFOR THEIR PREPARATION	09-07-2020	Published	2020	Applicant
117	202011031802	A MESOPOROUS ANTI-MICROBIAL NANOCOMPOSITE AND AMETHOD OF PREPARATION THEREOF	24-07-2020	Published	2020	Applicant
118	202011041316	A METHOD FOR PREPARATION OF WASTE BACTERIAL CULTUREMEDIA BASED FLUORESCENT SECURITY INK	23-09-2020	Published	2020	Applicant

7.5) IP Commercialized and Transferred to Industry/Startup

Patent/Licence Holder Date of Sr. Name of Technology Technology name (Institute Co-Technology Name of Transferred Licenced/Transferred/Commercialized No. Туре ownership is Must) Transferred to Licensee Technology

No Data Found