



Oriental Institute of Science & Technology, Thakral Nagar, Opp Patel Nagar, Raisen Road, Bhopal-462021 [ARI-C-36117][C-36117]

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	Yes

Contact:

Faculty Name:	M Hasnine Mirza
Designation:	Assistant Professor
Email ID:	hasninemirza@oriental.ac.in
Mobile No.	9200226488

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)	
IIC 2.0 (2019-20)	4.5
IIC 3.0 (2020-21)	4
IIC 4.0 (2021-22)	3.5

Contact:

IIC President of the Institute:	Dr. Manish Sawale
Designation:	Director-IQAC, OIST
Email ID:	manish.sawale@gmail.com
Mobile No.	9893095600

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. Mohd. Ahmed	Advance	4
2	Sreeja Nair	Advance	2
3	Hasnine Mirza	Advance	0
4	Dr. Manish Sawale	Advance	2
5	Dr. Raja Santhosh kumar	Basic	0
6	Dr. Farha Haneef	Advance	0
7	Mr. Gaurav Sahu	Basic	0
8	Dr Jitendra Pandey	Advance	3
9	Kuldeep Mishra	Basic	0
10	Dr Abhishek Sharma	Advance	0
11	Dr Lakhan Patidar	Basic	0
12	Ganesh Kumar Vishwakarma	Advance	0
13	Parshottam Sarathe	Basic	0
14	Anjali Kumari	Basic	0
15	Ankita Tiwari	Basic	0
16	Akansha Meshram	Basic	0

Sr. No.	Name of the Faculty IA	Level of Training	No of I&E Expert Talks/Sessions Conducted
17	Shilpa Tripathi	Basic	0
18	Parul Khatri	Basic	0
19	Priyanka Kamdar	Basic	0

1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-36117	Yes
HEI Participated in the Smart India Hackathon (2022)	C-36117	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	Course End Date	Total Duration of the Course (in Days)
No Data Found										



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
1	1 week course on writing Patents	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	OIST IPR Facilitation Cell	02-07-2022 00:00:00	08-2022 00:00:00
2	How to start your startup	2020-21	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Entrepreneurship Development Cell	12-07-2021 00:00:00	17-2022 00:00:00

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. Scheme
1	AICTE-IDEALab	OIST AICTE IDEA LAB	Mohammed Ahmed	7974524747	mohdahmed@oriental.ac.in	Mentoring Su Incubation Fa Support (Idea Prototype and Business Plan Development Facility Suppo (Innovative Bt Model to Star Market Linka Growth Stage

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Contact no	Email	Govt. Scheme
2	EDC	Entrepreneurship Development Cell	Mamta Sood	9770005707	mamta_sood@oriental.ac.in	Mentoring Su
3	Innovation Cell	OIST Innovation Cell	Hasnine Mirza	9200226488	hasninemirza@oriental.ac.in	Mentoring Su

3.2) Existence of Incubation Facility (\geq 1500 Sq. Ft. Floor Area)

Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
1	OIST-MSME Incubation Centre	Dr Manish Sawale	9893095600	manish.sawale@gmail.com	MSME

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	OIST IPR facilitation Cell	Dr Mohammed Ahmed	7974524747	mohdahmed@oriental.ac.in	Mentoring Support, Seed Grant 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	Con No
1	Kabaad Ka jugaad	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Rahul Saini	Student	
2	Self charging and Automatic Braking system	Academic Requirement/Study Project	2021-22	TRL 5 : Large scale prototype tested in intended environment	Ayush Thakur	Student	
3	Gesture Based PC Control Simulation	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Pushkar Pratyush	Student	
4	sentiment analysis using python	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	NIKHIL KUMAR	Student	

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	Con No
5	Use of mivan technology in struction	Academic Requirement/Study Project	2021-22	TRL 5 : Large scale prototype tested in intended environment	Ritika Saxena	Student	
6	Onion Price Prediction	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Aman Chaturvedi	Student	

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	GST No	FY of Establishment	Startup/Venture Recognized by DPIIT/Startup India	FY Sta Re Suj fro Inc uni Ins
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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	SPLEN TECHNOLOGIES AND EDUCATION PVT LTD	Corporate/Industry Association	5	Active	28-09-2021	View (/Up
2	Global Skills Park	Govt. Agency (State)	3	Active	22-09-2021	View (/Up
3	CRESCIVE EDUTECH PVT LTD	Corporate/Industry Association	5	Active	28-09-2021	View (/Up
4	McLayers Mercantile Pvt Ltd	Corporate/Industry Association	5	Active	30-09-2021	View (/Up
5	Robotronix Engineering Tech Pvt Ltd	Knowledge/Mentoring Agency	5	Active	28-09-2021	View (/Up
6	Sofcon India Pvt Ltd	Knowledge/Mentoring Agency	5	Active	29-09-2021	View (/Up
7	India Blockchain Alliance, IBA, TPCRA World	Corporate/Industry Association	5	Active	28-09-2021	View (/Up
8	IndEyes Infotech Pvt Ltd	Knowledge/Mentoring Agency	5	Active	27-09-2021	View (/Up
9	EduSkills Foundation	Knowledge/Mentoring Agency	3	Active	01-05-2022	View (/Up
10	Shubhalaya Infrastructures	Corporate/Industry Association	5	Active	28-09-2021	View (/Up

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
11	Netlink Software Pvt Ltd	Corporate/Industry Association	5	Active	22-02-2022	View (/Up
12	National Law Institute University, Bhopal	Educational Institute	5	Active	11-08-2021	View (/Up

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	Electronic Glove for Women Safety	Design	352738-001	08-11-2021	No
2	DRAINAGE PIPES CLEANING ROBOT	Design	353698-001	26-11-2021	No
3	Artificial Intelligence based delivery robotic device	Design	358281-001	09-02-2022	No
4	Confidance tracking device of the employee	Design	358783-001	18-02-2022	No

7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
1	Automated Hydroponics System Using IOT Devices	202221009360	22-09-2022
2	Cloud and IoT based implementation of Intelligent E-mirror system using python language	202141049776	26-11-2021
3	Machine Learning Algorithm-Based Automatic Sign Language Recognition System For Digital Hardware Implementation	202141047829	29-10-2021
4	Centralized Health monitoring system using convolution neural network	202121034968	03-08-2021
5	A system and method to enhance the output characteristics of FINFET	202211049767	31-08-2022
6	AN image processing based technique to help HR predict the pulse of working environment	202241008813	20-02-2022
7	Designing wireless sensor networks by implementing optimization techniques	202211009477	23-02-2022
8	Gesture and Posture Independent Face Recognition Using Machine Learning Model	202121041195	29-10-2021
9	Artificial Intelligence (AI) Propelled Object Recognition Camera	202221038180	02-07-2022
10	System for detecting anomaly	202221009242	11-03-2022
11	A machine learning model for intelligent bid price selection for profit accumulation	202221041910	21-07-2022
12	Autonomous vehicle driving and traffic sign identification based on deep learning models	202121034020	28-07-2021
13	SMS Driven automatic Wireless Notice Board	202221031829	17-06-2022
14	A machine learning method for detecting human touch for controlling and minimize corona virus	202121054072	24-11-2021
15	Easy Clean Tank	202121048175	22-10-2021

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	View
1	202121054072	A MACHINE LEARNING METHOD FOR DETECTING HUMAN TOUCH FOR CONTROLLING AND MINIMIZE CORONA VIRUS	24-11-2021	Published	2021		
2	202141049776	CLOUD AND IOT BASED IMPLEMENTATION OF INTELLIGENT E-MIRROR SYSTEM USING PYTHON LANGUAGE.	29-10-2021	Published	2021		
3	202121048175	EASYS CLEAN TANK	22-10-2021	Published	2021		
4	202121041195	GESTURE AND POSTURE INDEPENDENT FACE RECOGNITION USING MACHINE LEARNING MODEL	14-09-2021	Published	2021		
5	202111036926	THE SYSTEM AND METHOD OF VISUALLY IMPAIRED PEOPLE FOR VOICE CONVERSION SPEECH TO TEXT COMMUNICATION."	15-08-2021	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	View
6	202121034968	CENTRALIZED HEALTH MONITORING SYSTEM USING CONVOLUTION NEURAL NETWORK	08-03-2021	Published	2021		
7	202121034020	AUTONOMOUS VEHICLE DRIVING AND TRAFFIC SIGN IDENTIFICATION BASED ON DEEP LEARNING MODELS	28-07-2021	Published	2021		
8	202121033897	THE SYSTEM AND METHOD OF MOTORCYCLE SWINGARM ATTACHMENT.	28-07-2021	Published	2021		
9	202121030563	THE SYSTEM AND METHOD OF ARTIFICIAL INTELLIGENCE AND IMAGE PROCESSING APPROACHES IN DAMAGE ASSESSMENT AND MATERIAL EVALUATION."	07-07-2021	Published	2021		
10	202121027191	A ROLE OF CAPITAL MARKET IN ECONOMIC DEVELOPMENT."	18-06-2021	Published	2021		
11	202121023372	THE SMART MINI PORTABLE ROOM HEATER.	25-05-2021	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	View
12	202121021172	A SENSOR FUSION PRECISION TECHNOLOGY IN AGRICULTURAL AND ITS METHOD AND CONTROLLING PARAMETERS."	05-10-2021	Published	2021		
13	202141020582	THE AUTOMATIC SALT SEGMENTATION WITH IN USING DEEP LEARNING TECHNIQUE."	05-06-2021	Published	2021		
14	202121016243	AN DYNAMICALLY DEVICE FOR BALANCING FOOD CARRYING.	04-07-2021	Published	2021		
15	202141013178	A SYSTEM FOR PREPARING OPTIMUM DIESEL BLENDS USING WASTE PLASTIC OIL."	25-03-2021	Published	2021		
16	202121011669	A MEDICAL WASTE MANAGEMENT SYSTEM USING IOT METHOD.	19-03-2021	Published	2021		
17	202021038856	ARTIFICIAL INTELLIGENCE BASED PRODUCTION MONITORING AND TOOL LIFESPAN OPTIMIZATION SYSTEM	09-09-2020	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	View
18	202021033500	IOT BASED SMART ENERGY MANAGEMENT SYSTEM WITH SURVEILLANCE FOR AUTOMATION DEVICES	08-05-2020	Published	2020		
19	202011009938	METHOD OF OBSTACLES DETECTION AND CONTROL OF ROBOTIC WHEELCHAIR	03-07-2020	Published	2020		
20	352738-001	Electronic Glove for Women Safety	08-11-2021	Granted	2021	Co-Applicant	Vi
21	353698-001	Drainage Pipes Cleaning Robot	26-11-2021	Granted	2021	Co-Applicant	Vi
22	358281-001	Artificial Intelligence based delivery robotic device	09-02-2022	Granted	2022	Co-Applicant	Vi
23	358783-001	Confidance tracking device of the employee	18-02-2022	Granted	2022	Co-Applicant	Vi
24	202221009360	Automated Hydroponics System Using IOT Devices	22-09-2022	Published	2022	Co-Applicant	Vi
25	202141047829	Machine Learning Algorithm-Based Automatic Sign Language Recognition System For Digital Hardware Implementation	29-10-2021	Published	2021	Other(Individual)	Vi

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	View
26	202241008813	AN image processing based technique to help HR predict the pulse of working environment	20-02-2022	Published	2022	Co-Applicant	Vi
27	202211009477	Designing wireless sensor networks by implementing optimization techniques	23-02-2022	Published	2022	Co-Applicant	Vi
28	202221038180	Artificial Intelligence (AI) Propelled Object Recognition Camera	02-07-2022	Published	2022	Co-Applicant	Vi
29	202221009242	System for detecting anomaly	11-03-2022	Published	2022	Co-Applicant	Vi
30	202221041910	A machine learning model for intelligent bid price selection for profit accumulation	21-07-2022	Published	2022	Co-Applicant	Vi
31	202121034020	Autonomous vehicle driving and traffic sign identification based on deep learning models	28-07-2021	Published	2021	Co-Applicant	Vi
32	202221031829	SMS Driven automatic Wireless Notice Board	17-06-2022	Published	2022	Co-Applicant	Vi

7.4) IP Commercialized and Transferred to Industry/Startup

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	Date Tran: Tech
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No Data Found



Declaration

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

Joint Declaration by the Head of the Institute and Nodal Officer

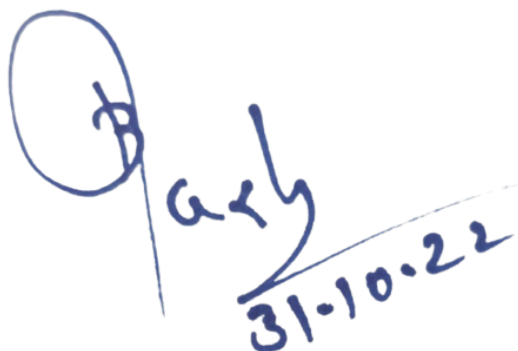
Dear Sir,

Herewith, myself **Dr. Rajesh Ku Shukla** (Head of Institute) and **Dr. Mohd Ahmed** (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

Nodal officer



Handwritten signature of Dr. Rajesh Ku Shukla, dated 31-10-22.



Handwritten signature of Dr. Mohd Ahmed, dated 31/10/22.

Dr. Rajesh Ku Shukla,
Head of the Institution,
Oriental Institute of Science & Technology, Thakral
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