

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 30th September 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. Pankaj Mishra
Designation:	Associate Dean (I&I)
Email ID:	ciie@iitism.ac.in
Mobile No.	9470194401

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)	5
IIC 3.0 (2020-21)	4
IIC 4.0 (2021-22)	0 (On Progress)

Contact:

IIC President of the Institute:	Prof. Pankaj Mishra
---------------------------------	---------------------

Designation:	Dean(International Relations & Alumni Affairs)
Email ID:	diie@iitism.ac.in
Mobile No.	9470194401

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	Prof. Mohd. Irfan	Advance	0
2	Prof. P. K. Sharma	Advance	0
3	Prof. Himanshu Bhusan Mishra	Advance	0
4	Prof. Arijit Baral	Advance	0
5	Prof. Pankaj Kumar Jain	Basic	0
6	Prof. Tarachand Amgoth	Basic	0
7	Dr. Arun Dayal Udai	Basic	0
8	Prof. Ejaz Ahmad	Basic	0

1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	U-0205	Yes
HEI Participated in the Smart India Hackathon (2022)	U-0205	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 Course (in Months)
No Data Found										
<div> <div></div> <div></div> </div>										

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
No Data Found							
<div> <div></div> <div></div> </div>							

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	Innovation Cell	Innovation Cell	Prof. Pankaj Mishra	9470194401	adi@iitism.ac.in	
2	Startup Cell	Startup Cell	Prof. Niladri Das	9430136495	adie@iitism.ac.in	
3	Tinkering Lab	Tinkering Lab	Prof. Pankaj Mishra	9470194401	adi@iitism.ac.in	

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

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	Centre for Innovation Incubation & Entrepreneurship (CIIE)	Prof. Niladri Das	9430136495	adie@iitism.ac.in	Alm/NITI Ayog,MSME,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	Patent Office	Prof. R. Anand	7631704704	anandr@iitism.ac.in	Mentoring Support,Seed Grant Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)

Section 4: Generation and Support of Ideas / 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 30th September 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	Contact No	Email
No Data Found								

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 30th September 2022)

Sr. No.	Startup/Venture Name	Startup/Venture Registered as	GST Registration/ LLP Registration/CIN No	FY of Establishment	Startup/Venture Recognized by DPIIT/Startup India	FY of Start Rece Supp from Incul unit . Insti
No Data Found						
<div> <div></div> <div></div> </div>						

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	Coal India Limited	Govt. Agency (Central)	(05)	Active	13-07-2021	
2	Steel Authority of India	Govt. Agency (Central)	(05)	Active	05-07-2022	
3	RZ Urban Enviro Partners	Non Govt. Agency	(01)	Active	30-05-2022	
4	MSME Technology Centre, Jamshedpur (Indo-Danish Tool Room)	Govt. Agency (Central)	(03)	Active	06-12-2021	

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on	View
5	University of the West of Scotland (School of Computing, Engineering and Physical Sciences	International Agency	(02)	Active	05-03-2021	
6	The AGH University of Science and Technology, Krakow, Poland	International Agency	(05)	Active	01-02-2021	
7	National united University Miaoli, Taiwan	International Agency	(05)	Active	02-07-2020	
8	Dr. Anil & Mamta Kumar (AMK), IIT (ISM)-Dhanbad and ISMAANA (ISM Alumni Association of North America)	International Agency	Life	Active	12-04-2021	
9	Ishwar Singh (IS), IIT (ISM)-Dhanbad and ISMAANA (ISM Alumni Association of North America)	International Agency	Life	Active	29-09-2021	
10	Piyush K. Dutta (PKD), IIT (ISM) Dhanbad and ISMAANA (ISM Alumni Association of North America)	International Agency	Life	Active	14-10-2021	
11	Madhuchhanda Das (MD), IIT (ISM) Dhanbad and ISMAANA (ISM Alumni Association of North America)	International Agency	Life	Active	29-09-2021	

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on	View
12	Kazimierz Pulaski university of Technology and Humanities in Radom, Poland	International Agency	(05)	Active	14-12-2020	
13	Ecole Centrale De Nantes (France)	International Agency	(05)	Active	23-11-2020	
14	Boise State University, USA	International Agency	(05)	Active	19-11-2020	
15	P.S. Davar & Company	Knowledge/Mentoring Agency	(01)	Active	29-09-2021	

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	QCA ARCHITECTURE OF A MULTILAYER CONTENT ADDRESSABLE MEMORY CELL FOR SUPERIOR PROCESSING SPEED	Copy Right	L-107385/2021	09-09-2021	No

7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
---------	----------------------	------------------------	-------------------------

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
1	LOW-COST 10 KVA INTELLIENT-POWER-MODULE BASED INVERTER FOR AC MACHINES	202131000212	04-01-2021
2	A MAGNET DRIVEN SERVO MECHANISM FOR MACRO/MICRO ELECTRICAL DISCHARGE MACHINING (EDM)	202031054445	15-12-2020
3	DEVELOPMENT OF ALOE VERA QUANTUM DOSTS AS LOW DOSAGE HYDRATE INHIBITOR FOR PETROLEUM INDUSTRIES	202031051570	26-11-2020
4	APPARATUS FOR RAPID TREATMENT OF SOLID ORGANIC WASTE	202031046099	22-10-2020
5	A DEVICE WITH AN IMPROVED DESIGN OF SHARPENING BLADE WITH APPLICATION IN PENCIL SHARPENER	202031045441	19-10-2020
6	AN ADDITIVE FOR DEPRESSING THE POUR POINT OF WAXY CRUDE OILS	202031039791	14-09-2020
7	COMPOSITE MATERIAL FOR BRAKE PADS	202031005648	10-02-2020
8	METHOD FOR REAL TIME MONITORING OF LIQUID LEVEL FOR WIRELESS TRANSMISSION SYSTEM	201931054793	02-07-2021
9	A MACHINE STRUCTURE TO REDUCE VIBRATION OF MICRO-MILLING MACHINE	201931049978	24-07-2020
10	A PROCESS FOR PREPARATION OF CYCLE/ACYCLIC ALKENES	201831036761	03-07-2020
11	PROCESS FOR THE PREPARATION OF NOVEL SUNFLOWER OIL-DERIVED GEMINI SURFACTANTS OF NON-IONIC NATURE AND COMPOSITIONS THEREOF FOR ENHANCED OIL RECOVERY APPLICATION	201831026697	24-01-2020
12	A HYBRID PARTICULATE MATTER (PM) EMISSION CONTROL DEVICE HAVING ELECTROSTATIC PRECIPITATOR AND HIGH FREQUENCY INDUCTION HEATING COIL FOR DIESEL ENGINE AND METHOD FOR THE SAME	201731025438	31-07-2020

7.3) Patent Published / Granted Data

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	Nam Lice
1	Apparatus for rapid treatment of solid organic waste	IP/Patented Technology	Sunil Kumar Gupta	Other organisation/Agency	RZ U Envi Parti

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 **Prof. Rajiv Shekhar** (Head of Institute) and **Dr. Bibhas Chandra** (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



Prof. Rajiv Shekhar,
Head of the Institution,
Indian Institute of Technology (Indian School of
Mines) Dhanbad,
Dhanbad, Jharkhand

Nodal officer



Dr. Bibhas Chandra,
Nodal Officer,
Indian Institute of Technology (Indian School of
Mines) Dhanbad,
Dhanbad, Jharkhand