



Institution's Innovation Council, NIT Arunachal Pradesh Email:prakousol@nitap.ac.in

Annual Report 2020-21

A. About IIC Institute

Ministry of Education's Innovation Cell (MIC) launched the Institution's Innovation Council (IIC) program in collaboration with AICTE to systematically skills the culture of Innovation and start-up ecosystem in higher education institutions officially inaugurated on 21st November 2018 at AICTE headquarter.IIC of the National Institute of Technology, Arunachal Pradesh was established as per the guideline of the Ministry of Education (MoE)in 13thNovember 2018.

The Council with its team of President, Vice-President, Convenor and coordinators, faculty members, and Startup cell student volunteers of the institute is meant for nurturing the potential start-up ideas that will cater to the need of both tech and non-tech solutions to various social, economic and industrial problems of the nation.

Our focus is to create a vibrant innovation ecosystem facility in NIT-AP, where students of any branch can avail tools and types of equipment to have a hands-on experiment to realize their innovative ideas. Prepare institute for ARRIA and to establish function Ecosystem for scouting ideas and pre-incubation of ideas and develop better cognitive ability amongst technical students.

B. Brief mention of key functionaries at the IIC Institute

- **President:** Prof. Pinakeswar Mahanta, Director, National Institute of Technology, Arunachal Pradesh
- Vice President: Prof. Mihir Kr. Shome, Dept. of Management and Humanities
- Convenor: Dr. Tushar Dhabal Das, Assistant Professor, Dept. of BAS(Physics)
 Coordinators:

• Coordinators:					
Dr. Sahadev Roy	Asst. Prof, ECE	Startup Activity Coordinator,			
		Internship Activity			
		Coordinator			
Dr. Prases Kumar	Asst. Prof, ME	Member			
Mohanty					
Dr. Saikat Kumar Jana	Asst. Prof, BioTech	IPR Activity Coordinator			
Dr. Yaka Bulo	Asst. Prof., ECE	Social Media Coordinator			
Dr. Brajagopal Datta	Asst. Prof., EE	Member			
Dr. Achyuth Sarkar	Asst. Prof., CSE	Member			
Dr. Shubhajit Das	Asst. Prof., ME	ARIIA Coordinator, NIRF			
		Coordinator			
Dr. Moirangthem	Asst. Prof.,	Member			
Momocha Singh					

C. Portfolio/graphical/Tabular representation of Resource strength (Human Capital and Physical Capital) of the IIC institution:

- Total No. of IIC Members :11
- Total No. of IAs : Advanced Level-3, Foundation Level-3
- Total No. of faculty Mentors: From Portal 4
- Pre-Incubation Units : Yes
- Incubation Units :Yes
- IP Facilitation Unit : IPR Cell Established in January 2019
- D. Highlight Facilities, Infrastructure of Pre-Incubation & Incubation kind and Student bodies/clubs engaged in promotion of

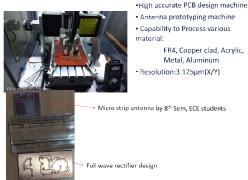
Innovation and Entrepreneurship in the campus.

List of Major Facilities:

- 1. OLED AND SOLAR CELL SIMULATION TOOL
- 2. 100 MHZ DIGITAL STORAGE OSCILLOSCOPE Model: SMO1002
- 3. 3D PRINTER ALONG WITH DESKTOP COMPUTER
 - MODEL: Olivetti S2
- 25MHz ARBITARY FUNCTION GENERATOR 4 Model: SMG5225
- 5. ARC WELDING MACHINE, 400 A Model: Tornado 401
- 6. DRONE WITH ALL SIDE OBSTACLE AVOIDANCE SYSTEM ALONG WITH 3D MAPPING SOFTWARE FOR POST PROCESSING OF VIDEOS / IMAGES CAPTURED
- Model: Phantom4 Pro 7. GENERAL PURPOSE PCB BOARDS AND MINI BREADBOARD
- 8. HEAT GUNS
 - Power Input 2000 W, Temperature range 500- 6300 C, Air flow rate 150/300/500 L/min, with LCD display, Temperature setting and 3 Step Air flow switch
- PCB PROTOTYPING MACHINE 9 Model: ETS-PCBMATE -300W 10. PORTABLE DRILL MACHINE
- Model No.: GSB 21-2 RE
- 11. REGULATED DC POWER SUPPLY Model: PSD3304, Make: Scientific Mes Technik Pvt Ltd
- 12. ROBOT SYSTEM LEARNING KIT Model: TI-RSLK Basic Kit,
- 13. TEMPERATURE CONTROLLED SOLDERING STATION
 - Model: LF-399D, make: Xytronics
- 14. TIG /MMA PULSE WELDING POWER SOURCE MODEL: TORNADO 200 HF
- **15. WOOD WORKING MACHINE** Model: J1013, Combimax (Delux)

Main Instruments Detail:

1.PCB Prototyping Machine: Manual







3. DRONE Practice Kit: **DRONE Practice Kit:**



•This is smart prosumer flying camera of shooting 4K video at 60fps & upto 100mbps , and capturing 20megapixel still photo •Obstacle avoidance allow

4.Robotics system learning kit:

- Robot chassis, motors, Line IR sensors
- Microcontroller development kit
- Motor drive and power distribution board Other mechanical and electronic
- components

5.Wood Working Machine:



Application on wood: Drilling, Grinding, Moulding, Surfacing, Rebating, Sawing, Grooving

E. Highlight Achievements (Narrative/Graphical/tabular representation)

- Number and Different types of I&E and IPR activities conducted:
- 1. "Session on identifying Intellectual Property Component at the early stage of Innovation" Introduction to Intellectual Property Right program was held on Saturday at 11 AM 30/1/2021 at National Institute of Technology, Arunachal Pradesh.Dr. Saikat Kumar Jana, Assistant Professor, co-ordinator of IPR cell in our institute, and IIC ambassador had given a brief lecture related to IPR.



FR4, Copper clad, Acrylic,

Eused Filament Fabrication (EFF)

Printing Area 200 x 200 x 200mm

Industrial level quality and reliability

Anodized aluminium body, 30 x 30mm

Direct printing from SD card possible without PC

Printing speed: up to 200mm/s Interchangeable nozzles (diameters

from 0.30mm to 0.80mm)

Integrated LCD control panel.

Variety of plastic materials worked

Panels in polycarbonate

Single extruder

Metal, Aluminum

Resolution:3.125um(X/Y)

radial

This kit available for Prototyping Practice for B.Tech Students





- Webinar on Intellectual property rights and IP management for start-ups was jointly organized by NIT, AP and SCC, Ziro on 5-6th March 2021.
- No. of student's &faculty ideas generated:

SI.	Title of Ideas	Name of Students	Mentor Name
No.			
1	Autonomous Drone flight Controller on Embedded	Vikas Kumar, CSE/17/08	Dr. P. K. Mohanty,
	Systems	Arpit Gupta, CSE/17/02	Dept. of ME
2	Ferrofluid Deformable Mirror for Atronomical	Sayan Pakira	Dr. T. D. Das
	Telescope	(CHE/17/11)	Dept. of BAS
3	Smart Vest	Sourav Sarkar	Dr. T. D. Das
		ECE/17/17	Dept. of BAS
4	Wifi and USB enabled 3D Holographic Propeller	Vikas Kumar (CSE/17/08),	Dr. T. D. Das,
		Ajay Chawla (ECE/17/16),	Dept. of BAS
		Arpit Gupta (CSE/17/02)	
5	Development of a sustainable, Cost effective UV-C	Hiranmoy Kotal,	Dr. Saikat Kumar
	based smart portable sterilizer to promote zero contact	PHD(BT)/2020/02	Jana
	tunnel counter transfer	Tiasha Roy,	Dept. of Bio-Tech
		PHD(BT)/2020/03	
6	Design and Development of Car Simulator Steering	Aditya Roy (VLSI/20/06) and	Dr. Sahadev Roy
	Wheel	Arnav Banerjee (VLSI/20/02)	Dept. of ECE

• No. of student's & faculty Innovation/prototypes developed:

SI. No.	Title of Ideas	Name of Students	Mentor Name
1	Autonomous Drone flight Controller on Embedded Systems	Vikas Kumar, CSE/17/08 Arpit Gupta, CSE/17/02	Dr. P. K. Mohanty, Dept. of ME
2	Development of a sustainable, Cost effective UV-C based smart portable sterilizer to promote zero contact tunnel counter transfer	Hiranmoy Kotal, PHD(BT)/2020/02 Tiasha Roy, PHD(BT)/2020/03	Dr. Saikat Kumar Jana Dept. of Bio-Tech

• No. of IPs generated, published and granted:

Sr. No.	Title of IPR	Patent/Design/Copy Right number with year of grant/file	Inventor/ Inventors
1	" Method for Monitoring Person for Detection of Possibility of Corona Infection"	Indian Patent application Number: 202031016741 Date of Publication- 18.04.2020 PUBLICATION DATE :15/05/2020	Dr.Achyuth Sarkar ,Prof. (Dr.) Bhagirathi Nayak , Mr. UditMamodiya ,Dr. Dinesh Goyal ,Dr. V. Dhinakaran , Mrs. Priyanka Sharma ,Dr. Ajay B Gadicha ,Dr. Savita S G , Amit Yadav
2	" Method for Diagnose Medical Problem through Medical Image Processing Using Big Data and Machine Learning"	Indian Patent application Number : 202031019607 Date of Publication- 08.05.2020 PUBLICATION DATE :12/06/2020	Dr.Achyuth Sarkar ,Dr. E Laxmi Lydia ,Dr. Raju Dindigala ,V.Sridhar ,Dr.I.Sivakumar ,Dr. Krishna Prasad K ,UditMamodiya ,Dr. A. Jayanthiladevi ,Dr. T.P Latchoumi
3	"ELECTROCHEMICAL SENSOR BASED SYSTEM ADAPTED FOR IMMUNO RESPONSE"	Indian Patent application No. 202031005545 dated 07.02.2020	Dr.Saikat Kumar Jana & Thangapnadi K
4	A COST EFFECTIVE SYSTEM FOR DRIVER DROWSINESS DETECTION	Indian Patent application No. 202041005075,PUBLICATION DATE : 21/02/2020	Dr. Argha SARKAR, , Dr. Debjit DUTTA
5	A CUTTING TOOL BASED MACHINING SYSTEM FOR AUTOMATED SUBMERGED PRESSURIZED COOLANT	Indian Patent Application No.201821025194, PUBLICATION DATE	Abhisek SARKAR, Dr. Debjit DUTTA, Abhimanyu

	MACHINING	:20/07/2018	
7	A PROCESS FOR ISOLATION OF FLAVONOID COMPOUND / "RUTIN" FROM PLANT SPILANTHES PANICULATA	Indian Patent Application No.201731033794, PUBLICATION DATE :10/11/2017	Dr. Hui Tag, Dr. PallabiKalita Hui. Dr. Debjit Dutta. Mr. VajravijayanSenthil Vadivel, Dr.Gunasekaran Krishnaswamy
8	DEVELOPMENT OF A SOLAR POWERED ECONOMIC AND ENVIRONMENTAL FRIENDLY E-BANNER: AN EXCLUSIVE SUSTAINABLE GREEN APPROACH	Indian Application ref. no. 202041043065 Patent filed on 03.10.2020,	Dr. Debjit DUTTA et. al.
9	A PROCESS FOR ISOLATION AND YIELD INCREASE OF FLAVONOID COMPOUND/QUERCETIN FROM PLANT HOUTTUYNIA CORDATA THUNB BY UV-B EXPOSURE	Australian Patent number: 2021103279, Granted on 14 July 2021,	Dr. Pallabi Kalita Hui , Dr. Hui Tag, Dr. Debjit Dutta, , Sanjib Kumar Das

No. of Student & Faculty Start-ups/Ventures established: Two

٠	Amount spent on promotion and awareness generation on Innovation Entrepreneurship in the
	campus: Total: ₹12,11,110/-

SI.	Name of Event	Date	Expenditures(₹)
<u>No.</u>	Washahan Danast "Half dan washahan an	13 th Nov., 2018 from	42,000/-
1	Workshop Report "Half day workshop on Cognitive Skills, Design Thinking and Critical	13 th Nov., 2018 from 10AM-1PM	42,000/-
	thinking" at Seminar Hall, NIT Arunachal	IUAM-IPM	
	Pradesh		
2	Workshop on Intellectual Property Right (IPR)	10 th January, 2019, 10:30	40,000/-
-	for Students and Faculty members at Seminar	AM to 03:30 PM	10,000
	Hall, NIT Arunachal Pradesh		
3	Lecture Event "Creative Entrepreneurship	25 th April, 2019, 2PM-	30,000/-
	Lecture"	4PM	,
4	My Story - Entrepreneur's Life & Crossroad -	30 th September, 2019 from	10,000/-
	Motivational Speak - To be Share by	1:00PM to 2:00PM	
	Entrepreneurs at Auditorium, NIT-AP by our		
	Alumni		
5	"Idea Competition" eventat Auditorium, NIT	30 th September 2019 from	26,000/-
	Arunachal Pradesh	9 AM-5 PM.	
6	Workshop Report	30 th September 2019 from	1,00,000/-
	"Idea Generation and Creative Thinking",	9 AM-5 PM	
	"Awareness Programme on Intellectual		
	Property Rights (IPR)" at Auditorium, NIT		
	Arunachal Pradesh	a ath To 1	1.50.000/
7	Arunachal Hackathon2020	14 th February ,2020	1,50,000/-
8	Halfday Lecture /Interaction Session on "How to	6 th March,2020, 10AM-	30,000/-
	plan for Start-up and legal and Ethical Steps"	1PM.	
	Organized at Auditorium, NIT Arunachal Pradesh		
9	TechTOY 2020 1st Online National Hackathon	15-16 th September 2020	1,69,104/-
	on Technological Innovation for Toys	via Google Meet	
10	"Exposure and field visit problem identification"	30 th October 2020	7,000/-
	Bamboo Processing Centre at Poma village		
11	"Session for Problem-solving and Identification	13/11/2020 and	47,000/-
	workshop at Poma Village"	16/11/2020	
12	21 Day online Induction program for 1 st year	2 nd December to 24 th	1,99,570/-
	B.Tech 2020-21 Batch	December 2020	
13	5 Day online workshop on Entrepreneurship	18-22 January 2021	49,930/-
	and Startup as a Career Opportunity	through Cisco Webex	
14	Entrepreneurship Development Training	3 rd to 7 th February 2021	1,55,000/-
	Programme on Vermicomposting	41-	
15	Popular Lecture Series on Start-up &	30 th March, 2021, 11AM	Nil
	Innovation on Toys	onwards	
16	Five Days Online Workshop on	22 nd -26 th February 2021	36,000/-

	"Entrepreneurship & Regional		
	Development"		
17	Five Days Online Workshop on Technological	8 th -12 th March, 2020	1,14,257/-
	Innovation of Toys (Tech Toy 2021)		
18	Toycathon2021(Nodal Centre)	22 nd -24 th June 2021	249/-
19	World Entrepreneurs Day celebrated by	21 st August 2021 at 3.30	Nil
	Institute Innovation Cell NIT Arunachal Pradesh	PM onwards	
	with the presence of Dr. Rohit Swarup recipients		
	of National award Shiksha Bharti Puruskar &		
	Indian leadership award for educational		
	excellence on his topic Design driven innovation		
	for faculties of NIT Arunachal Pradesh		
20	Lecture on "An Idea to Creating a Product"	23 rd August 2021, 4PM-5	5,000/-
		PM	
21	Session by Startup Entrepreneur	25 th August 2021, 2:30 to	Nil
		4:00PM	
		Total:	₹12,11,110/-

• Amount grant or fund supported to student &Faculty lead Innovations, start-ups and IPR: ₹6,37,068/-

▶ Financially supported Students start-up project for the session 2018-19 under TEQIP-III

Sl.	Title of Project		Name of Students	Mentor Name	Total
No.					Budget(₹)
1	Smart Sensing Pilot- for students	s,	Samartha Kar and	Dr. K. R. Singh,	₹58,000/-
	faculty and administration		Kaushik Dutta	BAS (Math.)	(closed)
2	Smart Parking Management		Samartha Kar et. al.	Dr. Brajagopal	₹40,000/-
	System(SPMS)			Datta,EE	(closed)
3	E-waste online startup		Jyoti Ranajan Nayak et.	Dr. M. Momocha	₹45,000/-
	_		al.	Singh, MH	(closed)
4	Smart Printer using Bluetooth		Amrit Raj et. al.	Dr. Swarnendu	34,068/-
	Compatibility			kr. Chakraborty,	(closed)
				CSE	
			-	Fotal Cost	₹1,77,068/-
\triangleright	Financially supported Studen	its sta	rt-up project for the sessi	on 2019-2020 unde:	r TEQIP-III:
Sl.	Title of Project	Nam	e of Students	Mentor Name	Total
No					Budget(₹)
1	Multi-task Photographer	Katit	: Modi,	Dr. P. K.	₹80,000/-
	Camera robot(M-T PCR)	ME/	17/02	Mohanty,	(continue)
				Dept. of ME	
2	Regional India	Suc	lhanshu Kr. Tiwary et. al.	Mr. Sumit Nandi	₹50,000/-
				Trainee Teacher,	(Closed)
				Dept. of CSE	
3	Autonomous Drone flight		s Kumar, CSE/17/08	Dr. P. K.	₹90,000/-
	Controller on Embedded	Arpit Gupta, CSE/17/02		Mohanty,	(Complete
	Systems			Dept. of ME	d)
4	Ferrofluid Deformable Mirror	Sayan Pakira		Dr. T. D. Das	₹30,000/-
	for Atronomical Telescope		E/17/11)	Dept. of BAS	(Closed)
5	Smart Vest	Sour	av Sarkar	Dr. T. D. Das	₹30,000/-
		ECE	/17/17	Dept. of BAS	(Closed)

• Financially supported Students start-up project for the session 2020-2021 under TEQIP-III:

Total Cost

₹2,80,000/-

Sl. No	Title of Project	Name of Students	Mentor Name	Total Budget(₹)
. 1	Wifi and USB enabled 3D Holographic Propeller	Vikas Kumar (CSE/17/08), Ajay Chawla (ECE/17/16), Arpit Gupta (CSE/17/02)	Dr. T. D. Das, Dept. of BAS	60,000/- (Closed)
2	Development of a sustainable, Cost effective UV-C based smart portable sterilizer to promote zero	Hiranmoy Kotal, PHD(BT)/2020/02 Tiasha Roy,	Dr. Saikat Kumar Jana Dept. of Bio-	60,000/- (Completed)

	contact tunnel counter transfer	PHD(BT)/2020/03	Tech	
3	Design and Development of Car	Aditya Roy (VLSI/20/06)	Dr. Sahadev	60,000/-
	Simulator Steering Wheel	and Arnav Banerjee	Roy	(Closed)
		(VLSI/20/02)	Dept. of ECE	
	Total Cost ₹1,80,000/-			

- No. of Technology Transfer and Commercialisation happened: One
 - "Motion Based Charger for a Portable Computing Device" A. Majumder, A. Kumar, N. Mishra, A. Anand, Indian Patent filed on 3rd February 2017 Application No. 201731003981, Granted and Product will be available shortly.
- F. Highlight few best IIC Faculty/Student members and their achievements/ Rewarded for the innovations at different forum:
 - [Profile of few faculty members with 2-3 lines of their achievements]
 - 1. Dr. S.K. Jana, was a mentor and Jury member of Yuva Innovator Challange2021 organized by Yuva IncubatED power by KITES Education.
 - 2. Dr. Alak Majumder is a young and energetic faculty member of ECE. He has granted one Indian patent and applied seven patents including one USA patent.
 - 3. Dr. Pallabi Kalita Hui, She has polished two patents one Indian and other Australian.
- G. Highlight selected best Innovations & images with mention of inventor/innovation name:
 - 1. "Tata SUMO ticketing booking Application" by Amit Kumar Choudhari and Brijesh Kumar Patel
 - 2. "LPG Sensor to sense fuel quantity and automatically inform the linked distributor for refill cylinders" by Sayan Pakira and Saksham Goyal
 - 3. "Multi detector Sensor" by Katit Modi
 - 4. "Warning System for Driver" by Vikas Kumar
 - 5. "Autonomous Drone flight controller on Embedded Systems" by Vikash kumar and Arpit Gupta
 - 6. "Color path flowing robot using ros and gazebo" by Vikash kumar
 - 7. "Integrated text scanner and auxiliaries" by Arpit Gupta
 - 8. "Smart Vest" by Sourav Sarkar
 - 9. "Multi-task Photographer Camera robot(M-T PCR)" by Katit Modi
- H. Highlight selected start-ups established by students/faculties with mention of founder/cofounder name:
 - 1. Trip To Anywhere, TATA Sumo Booking App, Mr. Amit Chowdhury
- I. List if any breakthrough innovations / Technology developed at the institute (2-3 technology with 2-3 lines about technology and innovation:
 - 1. "Motion Based Charger for a Portable Computing Device" by A. Majumder, A. Kumar, N. Mishra, A. Anand.
 - 2. "Autonomous Drone flight controller on Embedded Systems" by Vikas Kumar and P.K. Mohanty
 - 3. "Multi detector Sensor" by Katit Modi
 - 4. "LPG Sensor to sense fuel quantity and automatically inform the linked distributor for refill cylinders" by Sayan Pakira and Saksham Goyal
- J. Participation of IIC-institute in various programs of Central and State Govt. Highlighting especially for the schemes or programs
 - ARIIA participation and Rank: Band A(Rang 11th -25th)
 - NISP Adoption status: –Implemented
 - Trained Faculty: Seven Faculty Members
 - Policy Formulation: NIT Arunachal Pradesh has already NISP policy formulated and reviewed by our faculty members and external experts, and finalizes the policy which is recommended by the review committee. The draft of innovation and startup policy was placed in the 33rd senate meeting held on 18/062021 and the senate discussed academic aspects of the innovation and startup policy and in principle recommended for consideration. Finally, It was approved in the 36th BoG dated 24th June 2021 and submitted to MoE for approval.
 - Policy Implementation: Applied for Ministry approval
 - Smart India Hackathon etc.
 - Four Teams with six students in each participated in the Smart India Hackathon 2020(3 teams from Software category and 1 teams from Hardware category):

Sl.	Idea Title	Team Name and Team	Category	Remarks
No.		Leader		
1	Cloud Enabled IoT LPG Monitoring	The Invictus, Mr. Sayan	Hardware	Selected For
		Pakira		Final Round
2	Computer vision and machine learning	The Tesla, Mr. Arpit Gupta	Software	
3	Computer vision and machine learning	Einstein, Mr. Vikas Kumar	Software	
4	Developing Carrier counselling Software	Alexander, Mr. Nitish Kumar	Software	

K. Detail of Social Media &Connections of IIC institute: Facebook page: www.facebook.com/prakousol

L.

Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation Cell		
Sl	IIC Members	Short Introduction
No.		
1	Prof. Pinakeswar Mahanta, President Mob:9435734561	Prof. Pinakeswar Mahanta is a senior professor of ME and director of NIT Arunachal Pradesh since 2018. He has more than 18 years of teaching experience in the field of Conjugate radiation, Renewable Energy, Circulating Fluidized Bed Technology, EnergyConservation, Combustion and gasification of solid fuel, Refrigeration, and Air conditioning besides and 14 years of industry experience. He is also JSPS Fellow awarded by Gifu University, Japan in December 2016. He has received Honorary Research Professor by South AsiaConsortium for Interdisciplinary Water Resources Studies (SaciWATERs), Secundrabad, India. He is a Chief Coordinator of TOCIC IIT Guwahati initiated by DSIR, GoI.
2	Prof. M. K. Shome Vice President Mob:9436290384	Prof. M. K. Shome is an only professor of MH and NIT Arunachal Pradesh. Dr. Shome has more than 22 years teaching, Research and industry experience. He is a member of several National and International Societies.
3	Convenor Mob:9402617737	Dr. T. D. Das, assistant professor of Physics with more than six years of teaching experience, and his research has focused on experimental and theoretical aspects of semiconductor electronics. He working as a IIC convener and Start-up coordinator ever since when NIT-AP established IIC under MoE's Innovation Cell in 2018. He has completed IAs advanced level training. He was a SPOC person for SIH2019 and 2020 respectively. He was a coach of IAs training for School teachers.
4	Dr. Sahadev Roy Coordinator Mob:9436272805	Dr. Sahadev Roy is working as an Assistant Professor of the ECE. He is also in charge of the Start-up Cell, Innovation Cell, and Coordinator of the Post Graduate and PhD. His area of research is Embedded Systems, IoT, Robotics & amp; Industrial Automation. He was nodal center head for Toycathon 2021 by MIC.
5	Dr. Saikat Kumar Jana, Coordinator Mob:9485230608	Dr. S. K. Jana, assistant Professor of BioTech and IPR coordinator. He has completed IAs advanced level. He is selected for jury member for the Yuva Innovation Challenge 2021, KITES Education.
6	Dr. Shubhajit Das, Member Mob:9435547092	Dr. Shubhajit Das, Assistant Professor in the Department of ME, NIT-AP, has a teaching experience of eight years and is actively working in the field of manufacturing, material science and design. He is member of IIC, NIT Arunachal Pradesh and is coordinating ARIIA and NIRF ranking of the institute. He has also undergone Innovation Ambassador training (Foundation Level) conducted by MIC.
7	Dr. Brajagopal Datta, Member Mob:9402768977	Dr. Brajagopal Datta is a young faculty member of EE. He has eight years teaching experience on High Voltage Engineering, Hybrid Transmission Systems, Renewable Energy, Power Systems, Control System Engineering. He has completed IAs training for foundation level.
8	Dr. Prases Kumar Mohanty, Member Mob:9485236260	Dr. P. K. Mohanty is an assistant Professor of ME. He is an expert on the Design and Development of Robots, Motion Planning of Autonomous Agents, Soft-computing Approaches, Structural Health Monitoring. He has more than six years of teaching experience. He has submitted one MSME project for consideration.
9	Dr. Yaka Bulo, Member	Dr. Yaka Bulo is an assistant professor at NIT Arunachal Pradesh in the department of ECE. She has over 8 years of teaching experience. Her areas of interest are wireless communication, wireless sensor network, error control techniques, and 5G technology. She is working as a member IIC3.0.

• We have collaborated with external IIC *i.e.* IIC of IIEST, Shibpur, West Bengal.