



Report

On

4th Technical Symposium

‘JISTech 2k18’



JIS College of Engineering

Wednesday, 21st February 2018

Biswa Bangla Convention Centre Kolkata



Tribute to *Jodh Ishwar Singh*

Our Inspiration Team JISTech

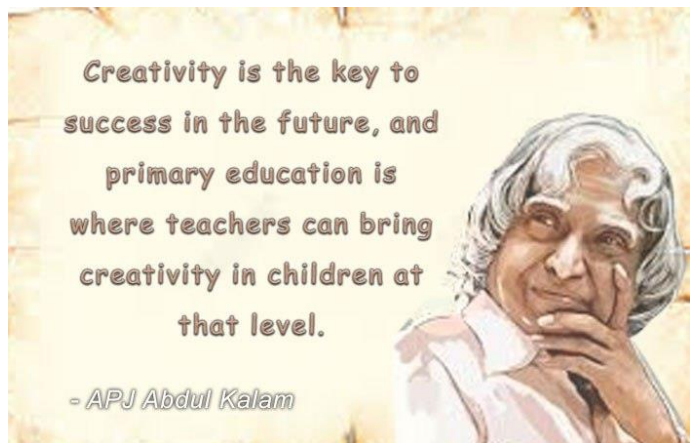


A teacher should have a creative mind.

- A. P. J. Abdul Kalam -

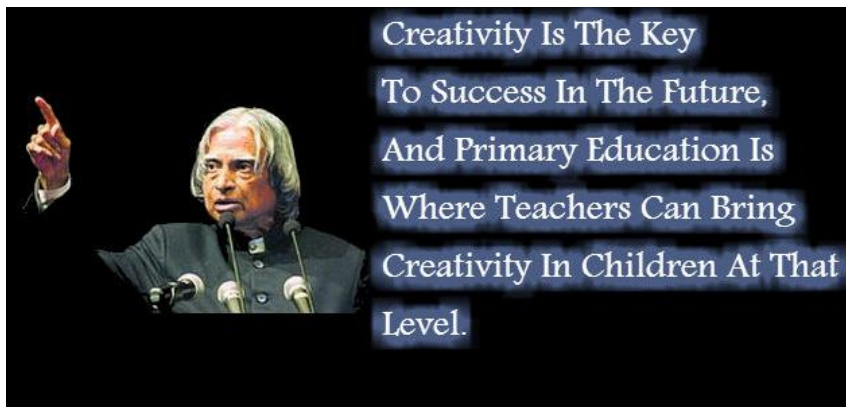
Innovation
Innovation

Tribute to *KALAM* Sir



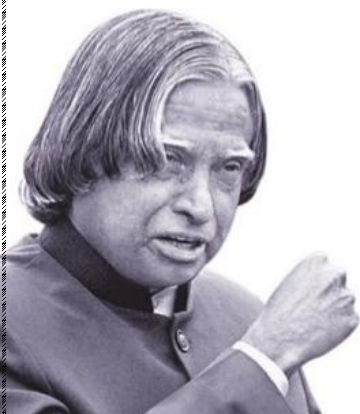
Creativity is the key to success in the future, and primary education is where teachers can bring creativity in children at that level.

- APJ Abdul Kalam



Creativity Is The Key To Success In The Future, And Primary Education Is Where Teachers Can Bring Creativity In Children At That Level.

Innovation
Innovation



“ Anyone who converts a challenge into an opportunity through innovation creates wealth. He or she indeed is a leader, are you?

Innovation

ACKNOWLEDGEMENT

On behalf of organizing committee, we would like to acknowledge our Principal Sir and all the HODs for their enormous guidance. We would also like to thanks all the Faculty, Technical Assistant and staff members' subcommittee members of our JIS college of Engineering, for their enormous support. We are also thankful to nominated departmental coordinators, event organizers, sponsors, all the Industry persons and Jury members. We are thankful for the School teachers come here. We would also like to thank the little boys and girls who came here to participate from several schools.

Thanking you all for your kind cooperation towards this successful events JISTech 2k18, the 4th technical symposium of JIS College of Engineering, Kalyani. We would like to express our deepest appreciation to all those who helped us to make this event successful. It is a privilege and a great joy for us to extend thanks to all who contributes for this JISTech 2k18.

Respected Mr. Taranjit Singh, Managing Director, JIS Group whose contribution in stimulating suggestions and encouragement helped us in coordinating the program in such fluency. Furthermore, we would also like to acknowledge with much appreciation the crucial role of our respected Sila Madam. Her enthusiastic inspirations motivate us to make this event success.

And last but not the least our students, Thank you very much for enormous participants. We definitely thank the exhibitors and volunteers for their enthusiastic effort on JISTech 2k18.

Thanking you in anticipation.

On Behalf of Organizing Committee:

Dr. Biswarup Neogi
Convener, JISTech 2K18

JISTech 2K15

First Step..



JISTech 2K16

Second Step..



JISTech 2K17

Third Step..



JISTech 2K18

Forth Step..



About JISTech 2K18

JIS College of Engineering, Kalyani is the first Autonomous self-financed college of West Bengal. Organizing various National and International seminars throughout the academic calendar, and having an exclusive Entrepreneurship cell, CII Center for Innovation and Center for Excellency of its own which conducts various entrepreneurship-awareness drives across various places, this college has carved a niche of its own. The objective is to nurture research and knowledge initiative, to empower students with education and employment opportunities, to establish worldwide network with industry and to entrust our enterprise as well as change our students with social responsibilities. This year JISTech 2k18 performed at BiswaBanga Convention house association with international level conference entitled “International Conference on Impact of Digital Co-Creation in Business Revolution”





The “JISTech 2k18” is a special type of program with different flavor. Mainly, students are integrated with this “JISTech 2k18” activity directly. Students are exhibited their innovative projects not in the manuscript format, but in the way of presentable first prototype design format. On the view of modification of our

traditional study processes this event has been designed towards the improvement of hands-on engineering experience of our students.

‘JISTech 2K18’ the Technical Symposium is organized to provide an excellent platform to showcase all kinds of different talents ranging from arts, educational and something beyond the curriculum. Firstly, it helps the institution to bring together the students from across the country. Secondly, these promote innovative



ideas and allow students to share their knowledge and ideas with other students. Thirdly, attending these festivals give information on the different fields of study. JISTech 2K16 will comprise of Inter Department Model Exhibition at Institute Level.



Proper guidance is provided on the field of stage presentation, model presentation.

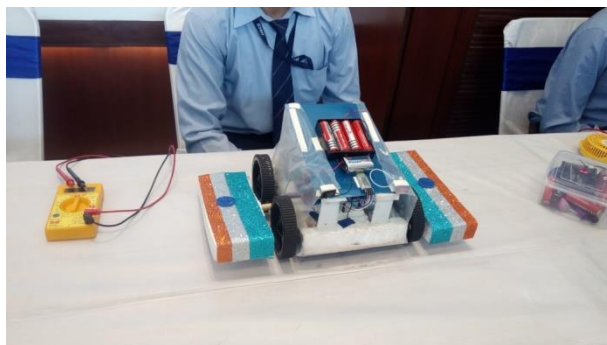
JISTech, 2K18 is the place where high profile delegates used to visit. Through their valuable advice the symposium turns out to be a big successful event. Students are allowed to discuss their plans with the

delegates. Students are encouraged towards the start-up processes from the industrialist personality.

Interdepartmental Exhibition is one of the most eye catching events. All departments of JISCE gather and present their capabilities and receive the prizes for the best. Students of different colleges come and participate in it along with our college students. Providing a platform for students to present their innovative ideas and models and implementing those ideas in real life scenario is the prime motto of JISTech, 2K18.



This year International Conference on Impact of Digital Co-Creation in Business Revolution associate



with JISTech 2k18 and expresses a wonderful experience with productive outcome. The main agenda of “Digital Co-Creation in Business Revolution” is to implement our technological prototype towards commercialization. In addition, this international conference created one expressive platform for students innovator to collaborate with industry person. In conclusion, the joint

program JISTech 2k18 & International Conference on Impact of Digital Co-Creation in Business Revolution enhance status of JIS College of Engineering followed by JIS Group in the territory of Innovative India.

Gallery of Snapshot JISTech 2K18.....





Essential Delegates Visited and Involved on JIS Tech 2k18 association with International Conference on Impact of Digital Co-Creation in Business Revolution

- Mr. Simarpreet Singh, Director
JIS Group
- Dr. Hari Krishna Maram
Digital Brand Ambassador Vision Digital India &
Vice-Chancellor Universal Digital University, USA
- Dr. Manpreet Singh Manna, Director, AICTE
- Dr. Harikishan Eppanapally,
Advisory Board Member, Rutgers University, USA
President, Bank of New York, USA
- Dr. Wayne Bottiger,
President, KEISIE International University and
President Universal Digital University, USA
- Ms. Renu Rajani,
Vice President, Infosys Limited
- Dr Malay R Dave,
Principal, JIS College of Engineering
- Mr. Rajendran Dandapani,
Director of Engineering & Evangelist,
Zoho Corporation, Digital Co-Creation
- Dr. Sarfaraz Sayed,
Founder, INTELYGEN ALABS,
Ex. G E Lead Engineer,
Basics of Crypto Currency & Block Chain Technology
- Mr. Feroz Khan,
Microsoft-Software Architect & Block Innovator,
Block Chain & its effect on human in the future
- Dr. Manpreet Singh Manna,
Director, AICTE
- Dr. Harsha Vardhan,
MD & CEO, Med Achievers Pvt. Ltd
- Ranganatha R,
Chief Technical Officer, Vision Digital India.
- Dr. N Sesha Reddy,
Chairman, Aditya Group Inst

DELEGATES

- Mr. Balkrishna Shetty,
Rt. Ambassador, Indian Foreign Services
- Mr. K P Fabian,
Rt. Ambassador, Indian Foreign Services
- Dr. Amanulla Khan,
Entrepreneur & Strategic Coach
- Ms .Sree Divya Vadlapudi
Prasanna, Chairperson FTAPCCI
- Dr. Baisakhi Banerjee,
Principal, Milli Al-Ameen College
- Dr. Shanti Sree
MD, CEO, Premier Pain Management, LLC. New York
- Ms. Song Hee Lee.
Vice President Universal Digital University USA
- Ms. Ekta Srivatsav,
Chief Editor, Techplus Media, IT,
VARnew & Edu Technology
- Dr. Sanjitga Malar,
Social Entrepreneur
- Dr. Bhavana Arora,
Author, Educationalist, Trainer
- Mr. Chetan Bhagat,
Leading Author, Columnist, Screen Writer,
- Dr. Sovan Chatterjee,
Mayor, Kolkata Municipal Corporation, MIC,
Dept of Housing, Fire, Environment &
Emergency Services, Govt. of West Bengal
- Mr. Taranjeeth Singh,
Managing Director, JIS Group
- Mr. Malay Ghatak,
Minister of Law and Labour, Govt. of West Bengal
- Dr. Wayne Bottiger,
President, KEISIE International University and
President Universal Digital University, USA
- Dr. Hari Krishna Maram
Digital Brand Ambassador Vision Digital India &
Vice-Chancellor Universal Digital University, USA
- Dr. Sila Singh Ghosh
Vice President, CR, JIS Group

DELTA SET

Significant Outcome of JISTech 2k18

JISTech 2K18, the 4th technical symposium of JIS College of engineering provides a big platform for students. JISTech 2K18 provided something beyond the curriculum. It helped students to come up with great innovative ideas and implementing it. Proper guidance in provided on the field of stage presentation, model presentation.

JISTech 2K18 is a big success. About 10 colleges, 10 departments and 5000 students from different departments showcased the spirit of knowledge through innovation on a single platform. Over 70 models were exhibited by students of schools and colleges. Competitions are held between these school and college exhibits. Every exhibit is provided with accolades and the bests are picked up for real life models.

On the view of the outcome, this event projects our JIS College of Engineering as a well-established and organized educational hub to the huge numbers of little school students come our premises. The program attempted to create affection on our JIS College of Engineering for the little students, as they remind us in future.

Jointly conference entitled “International Conference on Impact of Digital Co-Creation in Business Revolution” was going on in BiswaBanga Auditorium Near about 5000 numbers of participants from different institutions of West Bengal attained this program. After ending this program, everybody visited the JISTech 2k18 exhibition house. They are pleased with our student’s project models of several departments. In this way, our college projected our capability in engineering education.

There are many numbers of project models have created towards the exhibition show. Department will showcase all this project models in working condition. It will be beneficial for our upcoming visit to reflect our all the departments as a practical engineering job house.

Some probable project models will may processes of granting for various Govt. Funding agencies like UGC, AICTE, DST, DIT etc. It will carry the project for

further implementation and college will be benefitted with research project outcome.

JISTech showed the way to practicality. Students got a great opportunity to showcase their innovations. All were mesmerized by the environment. Students, who used to have a fear of presentation, presented their model very easily. JISTech provided that friendly behavior. Teachers from different colleges visited the symposium and they posted a great positive feedback about the college. JISTech showcased the college campus as well as the facilities provided by the colleges and how JIS College of Engineering helps the student in presenting their likelihood through their beautiful and skillful projects.

In line of Start-up India, Industry Institute partnership was established with an unfathomable podium furnishing the opportunity to the respective Departments of the Institute to share wits and notions with corporate houses. The Industry Institute collaborative endeavour not only propagated in the Technical Symposium but it took rapid strides towards attainment of excellence through academic association. Ten Industrial organizations allied themselves with the Institute for academic enhancement.

JISTech 2K18 provided links and tie-ups between various international colleges, organizations and companies by which the technical symposium of JIS College of Engineering goes into another level and this is the reason for which JISTech is different from all.



Departmental Report on JISTech 2K18

N.B Copyright and other responsibility on departmental part of this report is carried by concern departmental coordinators.

Department of Biomedical Engineering

About Biomedical Engineering Departmental Pavilion in JISTech 2k18

The Biomedical Engineering Department at JIS College of Engineering, Kalyani is among the largest of its kind in West Bengal and is home to award-winning faculty, exceptional students and numerous research activities and laboratories engaged in an array of interdisciplinary biomedical activities. The mission of the Biomedical Engineering Department is to create a fusion of engineering and the life sciences that promote scientific discovery and the invention of new technologies and therapies through research and education.

In the above context, Biomedical Engineering Department of JIS College of Engineering exhibited highly innovative health care system related engineering models at its stall in JISTech2K18. In Biomedical engineering stall, four superb engineering models namely, “STRESS-TESTER”, “ELECTRO-OCULO ARM”, “APPLICATION OF IoT IN BIOMEDICAL” and “TRANSCUTANEOUS ELECTROTHERAPEUTIC UNIT” were exhibited.

All the faculty members, technical staff and 25 Project Model Exhibitors (Biomedical Engineering students including B. Tech 3rd year to 4th year) actively participated and brought a great vivacity and success in JISTech 2K18 on behalf of The Department of Biomedical Engineering, JIS College of Engineering, Kalyani

Nominated Departmental Coordinators Name and Designation:

Name	Designation
Swati Sikdar	Assistant Professor, BME Dept.
Sayanti Guha	Assistant Professor, BME Dept.

Head of the Department Name: DR. KARABI GANGULY

Picture Gallery of Biomedical Engineering Departmental Pavilion:





Achievement in JISTech2k18:

- Awarded “Best Department” in JISTech2K18 (HATRICK in JISTech consecutively in 2016, 2017 AND 2018)
- The Model entitled “ELECTRO-OCULO ARM” was awarded as the Departmental Best Project from Dept. of Biomedical Engineering in JISTech2k18

About Best Project Model of Biomedical Engineering Departmental Pavilion:

The best project model entitled “**ELECTRO-OCULO ARM**” supervised by **DR. KARABI GANGULY** from Dept. of Biomedical Engineering in JISTech2K18 has greatly attracted and stirred the minds of academicians and dignitaries from other engineering colleges including JISCE and Medical Health-care Industries, respectively. Students of different schools were also impressed by this model. The judges have also encouraged biomedical engineering students to develop this type of models in future.



The eye acts as an electrical dipole between the positive potential of cornea and negative potential of retina. This is the basis of EOG Signal. The Electro-Oculography (EOG) based Human Interactive Device (HID) is a very useful system for providing information about the human eye activity as it acts by detecting changes in eye position.

The system developed is a low –cost, reliable, simple yet having high performance. For generating an eye movement along any axis, there are three opposing pairs of muscles attached to the globe of the eye which work to move eye horizontally, vertically as well as for the rotational movement of the eyeball.



Electro-Oculo Arm is a device that is operated by applying the EOG Signal. The project presents a novel method to control robotic hand with the help of eye movements.

Studies on groups of persons with severe disabilities have shown that many of them retain the ability to control their eye movements which could be used to develop a new robotic hand control. This device relies on the eye movements of the user so it can be used even by patients who are paralyzed from shoulder downwards. This system enables a person to control the hand movements like left, right, pick and place etc. The persons with disabilities can use this system for environmental control or as a source of information/communication etc

All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/ Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/ Co-convener)	Student Names
BM E 01	STRESS TESTER	SWATI SIKDAR	NO	YES		Arindam Bhattacharya
						Ashmita Bera
						Doyeli Chakraborty
						Sweta Parui
						Supriya Debnath Shrestha Bardhan

SL. No.	Title of the Project	Faculty Mentor/ Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/ Co-convener)	Student Names
BME 02	ELECTRO-OCULARM	DR. KARABINGANGULY	YES	YES		Mitul Chakraborty
						Manisha Majumdar
						Ashish Singh
						Chandan Mukherjee
						Sourojit Sen Sharma
Soumili Sarkar						
BME 03	APPLICATION OF IoT IN BIOMEDICAL	SAYANTI GUHA	NO	YES		Shaikh Inzamamul Hoque
						Pranjal Bandyopadhyay
						Rajat Subhra Basu
						Supriya Jana
						Akash Prasad Gupta
Koumudi Bhattacharjee						
BME 04	TRANSCUTANEOUS ELECTROTHERAPEUTIC UNIT	DR. SANDIP BAG	NO	YES		Arnab Mitra
						Shreya Biswas
						Arpita Bose
						Mohor De
						Udita Shukla
						Shikha Bhati
Reshav Prasad Saha						

Any others Information: Being the Departmental Coordinator, we would like to convey our thanks to HOD, all faculty members, technical staff, students of Dept. of Biomedical Engineering and Organizing Committee Members of JISTech2K18 for their continuous and unified supports which have greatly helped us to achieve the glory of **“Best Department” in JISTech2K18 for Three Successive Years (2016,2017,2018).**

Department of Computer Science and Engineering

About CSE Departmental Pavilion in JISTech 2k18

Nominated Departmental Coordinators Name and Designation:

Apurba Paul, Assistant Professor

Head of the Department Name: Mr. Amrut Ranjan Jena

Picture Gallery of CSE Departmental Pavilion:





Achievement in JISTech 2k18(if any Best Department or others):NA

On behalf of Department of CSE we have exhibited seven different projects at BiswaBangla Convention center on 21st February 2018 in the yearly event, JISTECH2018. All the faculty members of CSE department were actively participated in that event. The following list of projects were displayed on that occasion:

Project Id No:	Title of the Project	Student Names	Faculty Mentor/Guide Name
1	Heart Beat Monitoring over Internet using Arduino and ThingSpeak	Nuzhat Shamim	Prof. Sumanta Chatterjee
2	GIS based Monitoring System	Suvam Basak	Prof. Sudipta Sahana
3	Android Development and Bluetooth Controlled Notice Board using Arduino	Aman Adarsh	Prof. Amrut Ranjan Jena
		Ali Shiraz Akhter	
		Ankita Roy	
		Gaurav Keshri	
		Anima Tripathy	
	Khwaja Mahiuddin Ansari		
4	App based lock system for advanced Home Security	Sourav Kundu	Prof. Sudipta Sahana
		Swannava Dutta	
		Soumyojyoti Barman	
		Siddharth Das	

Project Id No:	Title of the Project	Student Names	Faculty Mentor/Guide Name
		Tiyasha Giri	
5	E-Jan Suraksha (24x7 On Duty)	Suraj Kumar Shaw	Prof. Apurba Paul
		Rup Saha	
		Sonu Kumar Singh	
		Sumit Verma	
		Subham Kumar Mahanty	
6	Radar Technology with Missile Defence System Arduino	Sayan Dey Biswas	Prof. Madhusmita Mishra
		Soumadeep Nayek	
7	9 Queen game with Android Application	Shaswata Mitra	Prof. Apurba Paul
		Sayan Dey Biswas	
		Aditi Ghosh	

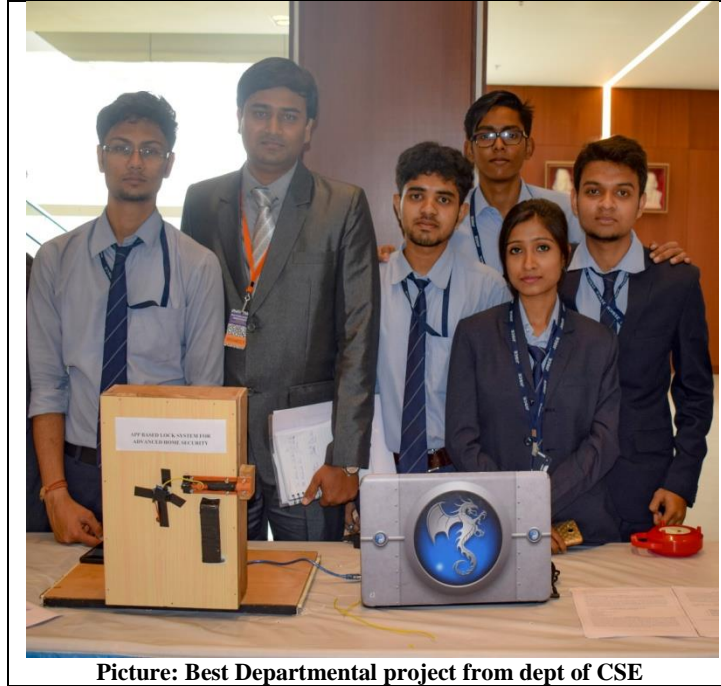
About Best Project Model of CSE Departmental Pavilion (attach picture with brief details of innovation):

The best Project Model of CSE Departmental Pavilion is

App Based Lock System for advanced home automation

Students Name	Year	Mail id
Siddharth Das	2nd Year	isiddharthdas97@gmail.com
Soumyojyoti Barman	2nd Year	soumyojyoti.barman13@gmail.com
Swarnava Dutta	2nd Year	swarnava.dutta97@gmail.com
Sourav Kundu	2nd Year	kundu20015sourav@gmail.com
Tiyasha Giri	2nd Year	moutiyasha.giri99@gmail.com

The proposed work aims to satisfy the need of general people who want to keep their home and surroundings safe and free of any unwanted disturbances like theft and robbery and want to control remotely from a distance the locking, unlocking and keeping a note of intruders who tried to enter their house without their notice. As it is hard to find the most flexible and easy solution within budget and according to their convenience, in the market, the app to do the same in a more advanced manner can be highly beneficial. When a person presses the calling bell, owner can see and thus monitor what's going on outside the house. This system just needs a fast active internet connection which is likely to be present in every houses these days, to secure the house from any intruder. The person to purchase this system will need an account created and once the database has the information the simple app provided will do all the monitoring help to him or her. The app has additional features to take image of the person trying to unlock the door and mail the image to the owner if owner presses that button. The concept is based on server and client interaction.



All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
1	Heart Beat Monitoring over Internet using Arduino and ThingSpeak	Prof. Sumanta Chatterjee	Yes	Yes		Nuzhat Shamim
2	GIS based Monitoring System	Prof. Sudipta Sahana	Yes	Yes		Suvam Basak
3	Android Development and Bluetooth	Prof. Amrut Ranjan Jena		Yes		Aman Adarsh Ali Shiraz Akhter Ankita Roy Gaurav Keshri

Sl. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
	Controlled Notice Board using Arduino					Anima Tripathy Khwaja Mahiuddin Ansari
4	App based lock system for advanced Home Security	Prof. Sudipta Sahana	Yes	Yes		Sourav Kundu Swannava Dutta Soumyojyoti Barman Siddharth Das Tiyasha Giri
5	E-Jan Suraksha (24x7 On Duty)	Prof. Apurba Paul		Yes		Suraj Kumar Shaw Rup Saha Sonu Kumar Singh Sumit Verma Subham Kumar Mahanty
6	Radar Technology with Missile Defence System Arduino	Prof. Madhusmita Mishra		Yes		Sayan Dey Biswas Soumadeep Nayek
7	9 Queen game with Android Application	Prof Apurba Paul		Yes		Shaswata Mitra Sayan Dey Biswas Aditi Ghosh

Any others Information: No

Department of Electronics and Communication Engineering

About Electronics and Communication Engineering Departmental Pavilion in JISTech 2k18

Nominated Departmental Coordinators Name and Designation:

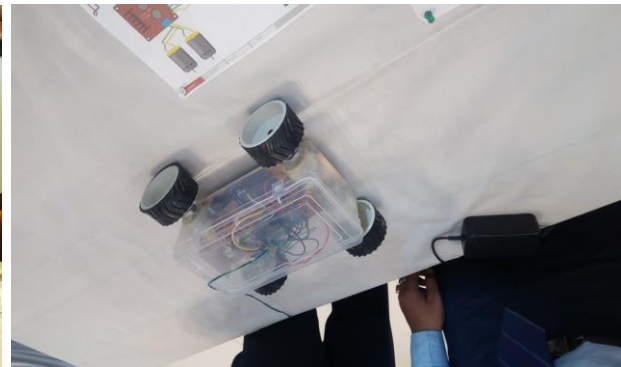
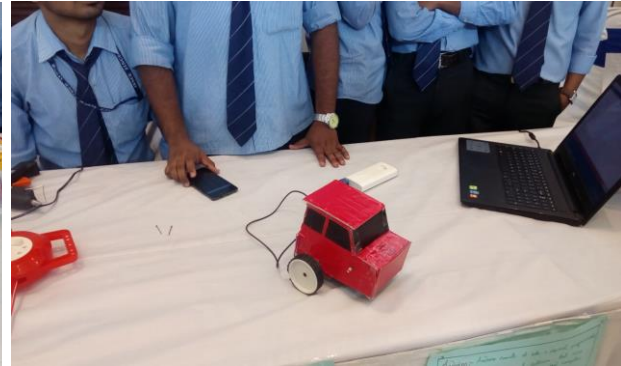
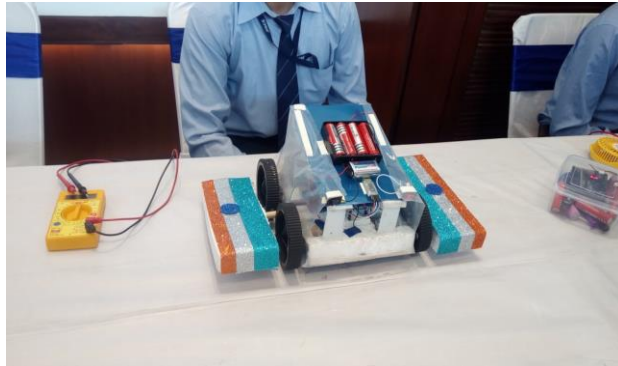
Mr. Bikash Dey, Assistant Professor

Head of the Department Name: Dr.Swapan Bhattacharya

There was 5 selected projects at the departmental stall. Most of the projects are offrom core electronics area. Project categories were of security application and robotics and display control type. There was a huge enthusiasm among students for this JISTech2k18 like other years and the students exhibited very well at the JISTech2k18.

Picture Gallery of Electronics and Communication Engineering Departmental Pavilion:





Achievement in JISTech 2k18:(if any Best Department or others):NA

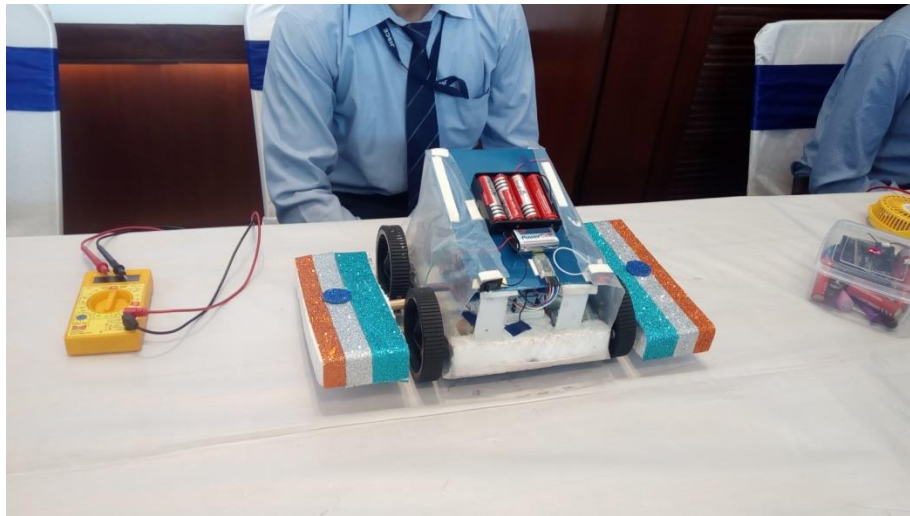
About Best Project Model of Electronics and Communication Departmental Pavilion (attach picture with brief details of innovation):

Title of Project: Bluetooth and Voice Controlled Amphibious Robot

Students: Achintya Kumar Saha,Aniket Roy, MonojitSadhukhan,Pratik Raha

Mentor: Mr. Anirban Ghosal

Brief Details: This Bluetooth and voice controlled car can travel both in land as well as in water. This Bluetooth and voice controlled car can be used to save people during natural disaster like flood, earthquake etc. as it is capable of to drive in ground and in water. Commercial aspect is that implementation of the car completely we can start a startup using the technology we used in this car. Social aspect is that the car can be used to serve people in natural disaster.



Picture of Model

All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/ Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
1.	Sand Rover Using Arduino Uno	Dr. Indranath Sarkar	NO	YES		Somdeep Ghoh
						Rahul Das
						Rahul Kumar
						Avijit Roy
						Rajesh Nandi
2.	LED Propeller Display	Mrs. Moumita Pal	NO	YES		Rohan Patra
						Treshtha Sarkar
						Soumadip Sarkar
						Ritwik Acharya

3.	Bluetooth and Voice controlled amphibious robot	Mr. Anirban Ghosal	YES	YES		Achintya Kumar Saha Aniket Roy Monojit Sadhukhan Pratik Raha
4.	Remote Controlled Car with Speedometer Display	Mr. Arindam Banerjee	YES	YES		Sabyasachi Joardar Ranish Mitra Santunu Kumar Bose Santanu Maurh ,Sourav Ghosh Saikat Bhowmik Prasenjit Maity Animesh Pal
5.	Password Based door lock using arduino	Mr. Arindam Banerjee	NO	YES		Arghya Ghanteswari Aniket Banerjee Avijit Saha Kehav Kr, Agarwal

Any others Information: NA

Department of Electrical Engineering

About Electrical Engineering Departmental Pavilion in JISTech 2k18

Main objectives of the event:

- To provide a platform for our students to give information in relation to latest developments and development activities in Industry incorporating various Engineering Sectors.
- To bridge the gap between industry and campus.
- To provide its related and enabling technologies regarding research innovation.
- To provide an arena for students to test their engineering skills.
- To connect the students with ground breaking ideas with the experts.

Nominated Departmental Coordinators Name and Designation:

Mr. Sudip Das, Asst. Professor

Head of the Department Name: Dr. Papun Biswas, Associate Professor

Picture Gallery of Departmental Pavilion:



About Best Project Model of Electrical Engineering Departmental Pavilion (attach picture with brief details of innovation):

Title of the Project: Eco friendly smart room

Brief Details: Eco friendly smart room means convenience, efficient, comfort and security. Automation systems help easily control and reduce the power consumption of electrical appliances. The main aim of the project is to provide few facilities to the user automatically & reduce power consumptions. In this project the entrance of the room will be controlled by password security system. After entering the room, the light will be on or off based on the day mode or night mode condition. In the day mode, the light will be automatically off. Similarly, in the night mode or day mode in rainy season, the light will be automatically on. Similarly, fan will be on or off automatically based on the ambient temperature. If the room temperature is large then the fan will be automatically on. Similarly, if the room temperature is low, then the fan will be automatically off. In rainy season, fan speed may be changed automatically based on temperature. We also use here solar panel for getting electrical energy.



All the Overall Project Model Details:

SL . No.	Title of the Project	Faculty Mentor/ Guide Name	Recommen ded for IPR submi ssion (Yes/ No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
01	Drip Irrigation System	Sudip Das	Yes	Yes		Pritam Saha Nilashis Karmakar Piyasa Das Paramita Sarkar

SL No.	Title of the Project	Faculty Mentor/ Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
						Md. Afridi Rajdeep Ray Arnab Charit Modak
02	Soft start of Induction Motor by Electronic Kit	Basudeb Dey	Yes	Yes		Tapojit Patra Monish Sanyasi Subhan Mondal Rahul Panday Swapnadeep Biswas Suman Paul Pritam Chakraborty Subhomoy Das
03	Accident avoiding smart vehicles	Biswamoy Pal	Yes	Yes		Sourav Roy Soumyarup Roy Sourav Kumar Sweta Barman Soumava Kundu
04	Wireless controlled automatic obstacle detection system (Accident avoiding smart vehicles)	Milan Sasmal	Yes	Yes		Subhradeep Gupta Souvik Mukharjee Sudipa Banik Subrata Paul Anupam Chakraborty
05	Innovative green controlling dustbin	Suparna Pal	Yes	Yes		Islam Khan Kajal Priyamvada Anamika Paul Kiranmoy Kharnra Faiz Akram
06	Eco friendly smart room	Sudip Das	Yes	Yes		Sourav Das Pritam Saha Rajdeep Ray Chitradip Dey
07	Smart Dustbin	Biswamoy Pal	Yes	Yes		Pritam Saha Nilashis Karmakar Piyasa Das Paramita Sarkar Md. Afridi Rajdeep Ray

Department of Information Technology

About IT Departmental, Pavilion in JISTech 2k18

In the line of thought of the JIS Group “Igniting minds empowering lives”. The department has been working with a dual goal of Research & Development and Industry Institute Initiative upon a strong foundation of learning centric environment. JISTech2K18 is an instance of R&D with fresh innovative idea where our students highlight their igniting mind to serve the nation.

Nominated Departmental Coordinators Name and Designation: Mr. Sumit Das, Assistant Professor.

Head of the Department Name: Mr. Soumyabrata Saha

Picture Gallery of Information Technology Departmental Pavilion:



Information Technology Family



Project ID: IT3 Gesture Controlled Robot Car



Project ID: IT5 Accident alert system



Project ID: IT4 Modified Electronic Voting Machine



Project ID: IT2 Automated house



Project ID: IT1 Ultrasonic obstacle detector



Project ID: IT6 Mobile Vacuum cleaner



Project ID: IT7 Automatic Plant Watering system (Best Project)

Achievement in JISTech 2k18: (if any Best Department or others)

Awarded as First Runner's up among all the departments.

About Best Project Model of IT Departmental Pavilion, (attach picture with brief details of innovation): IT7

Automatic Plant Watering System is an arduino-based project and idea of this project was established by observing various difficulties faced by farmers and ground curators during controlling of the moisture in their respective working fields. This system will automatically detect the presence or absence of moisture in the ground and water the plants if required.



The implementation of this Watering System will result in a **reduction of human intervention** in agriculture, which will **cut down the cost of farming**. This will also **increase productivity** by ensuring optimum water depth. Thus it will not only produce yield with **better quality** and higher **quantity** but also add to **the profit of the farmers**, which is an issue of concern these days is keeping in view the suicides committed by the farmers because of poverty.

All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgment on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
IT1	Ultrasonic obstacle detector	Sumit Das				Preeti Kumari
						MD Arbaaz Khan
						Mohit Kumar
						Sumit kumar Poddar
						Amir Suohani
IT2	Automated house	Rupashri Barik				Tapash Sarkar
						Suvam Chawdhary
						Niladitya Ghosh
IT3	Gesture Controlled Robot Car	Tanusree Saha				Soumodeep Khan,
						Shovandev Chatterjee,
						Rupsa Chakraborty,
IT4	Modified Electronic Voting Machine	Suparna Dasgupta				Trina Karmakar
						Tanusree Maji,
IT5	Arduino based accident alert system using GPS	Annwasha Banerjee				Arghya Das
						Saptarshi Barat.
						Tanbir Ahmed Sheikh
						Gaurave Chatterjee
IT6	Mobile Vacuum cleaner	Sumit Das				Sayak Ash
						Priyanka Pandey
						Chanchal Mahapatra
						Ujjwal Verma
						Anjali Kumari Sharma
						Dibendu Kundu
IT7	Automatic Plant Watering system	Sumit Das				Trina Saha,
						Purnabrata Mukherjee
						Supriyo Chatterjee
						Sourav Kumar
						Upadhayay
	Abhisek Singh					
	Nayan Banerjee					

Any others Information:

Department of Mechanical Engineering

About Mechanical Engineering Departmental Pavilion in JISTech 2k18

JISTech2K18, a Technical Fest was organized by the JIS College of Engineering on 21st February, 2018 at Biswa Bangla Convention Centre in Kolkata. The objective to conduct this contest was bridging knowledge of theory with practical aspects by using phenomenon of science and principles of Engineering. Students of Mechanical Engineering Department also took active participation in the above mentioned Tech Fest. They carried out their investigation on several industrial equipments and presented few models along with their innovative ideas. Seven groups registered for the model making competition. These Models included both working & Demo models. During their work, they were found to be quite sincere and energetic. After the completion of their project, they gained theoretical as well as practical knowledge and enjoyed momentous achievements.

The judges for the event carefully understood all the models and made a wise judgment and gave the students some valuable suggestions.

Nominated Departmental Coordinators Name and Designation:

Mr. Shishir Kumar Biswas, Assistant Professor

Head of the Department Name: Dr. Prasanta Kumar Bardhan

Picture Gallery of Mechanical Engineering Departmental Pavilion:





Achievement in JISTech2k18: (if any Best Department or others)

Best Innovative Project (2nd runner up), Best Social Project

About Best Project Model of Mechanical Engineering Departmental Pavilion (attach picture with brief details of innovation):

Helping Wheel Chair

Helping Wheel Chair is mechanically controlled device designed to have self mobility with the help of the user command. This reduces the user's human effort and forces to drive the wheels for wheelchair, which can also be used to climb up or down staircases. Furthermore it also provides an opportunity for visually or physically impaired persons to move from one place to another. The wheelchair is also provided with obstacle detection system which reduces the chance of collision while on the journey.

All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
1	Foucault Pendulum	Mr. Dipak Shaw				Tushar Kr. Dey
						Debojit Roy
						Ghulam Waquar Ashraf
						Dipayan Paul
						Pritam Das
						Shayen Lasker
						.Rajesh Mukhopadhyay
						Amit Kr. Gain
						Soumit Kundu
						Syed Babar Ali
Shivasish Dey						
2	Gravitational Paradox	Mr. Dipak Shaw				Tushar Kr. Dey
						Debojit Roy
						Ghulam Waquar Ashraf
						Dipayan Paul
						Pritam Das
						Shayen Lasker
						Rajesh Mukhopadhyay
						Amit Kr. Gain
						Soumit Kundu
						Syed Babar Ali
Shivasish Dey						
3	Eco air cooler	Mr. Shishir Kumar Biswas				Anubhav Nandi
						Gopal das
						Avishek sanyal
						Ayan banerjee
						Sahil sarkar
Drbadrita Bhattacharjee						
4	Rocker bogie stair climbing robot	Mr. Shishir Kumar Biswas				Anubhav Nandi
						Ankit Kumar Roy Choudhury

SL. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
						Auropriyo Barman Ayan Saha Bisant Das Satyam Kumar Chowdhury
5	Automatic Cloth Drier	Mr. Shishir Kumar Biswas				Anubhav Nandi Ankit Kumar Roy Choudhury Auropriyo Barman Ayan Saha Bisant Das Pritam Das Pushpendu Ghosh Rakesh Banik Somnath Moulik
6	Model auto-expo	Mr. Shishir Kumar Biswas				Kaushal Kumar Poddar Satyakant Tripathi Kunwar Adwitiya Adil Alam FaizanAlam
7	Helping Wheel Chair	Mr. Shishir Kumar Biswas				Kaushal Kumar Poddar Satyakant Tripathi Kunwar Adwitiya Adil Alam Faizan Alam Neyaz Ahmed Dipak Biswas Ajoy Kumar Sharma

Any others Information:

Department of Chemistry

About Chemistry Departmental Pavilion in JISTech 2k18

Nominated Departmental Coordinators Name and Designation:
Tanmoy Dutta, Assistant Professor, Chemistry Department.

Head of the Department Name: Trina Dutta

Picture Gallery of Chemistry Departmental Pavilion:

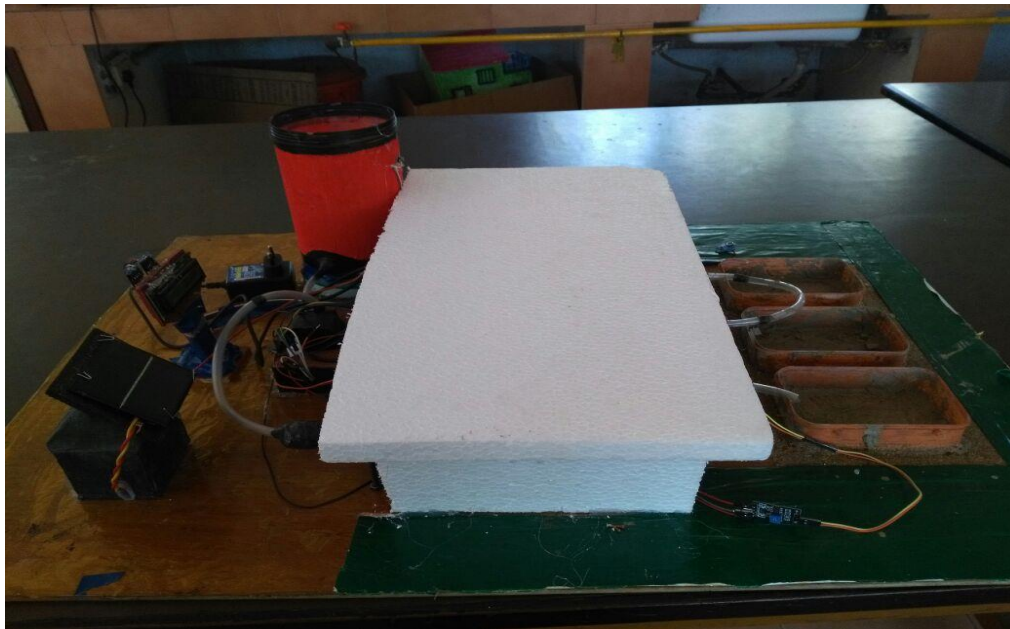


Achievement in JISTech 2k18(if any Best Department or others):NA

**About Best Project Model of Chemistry Departmental Pavilion
(attach picture with brief details of innovation):**

The main purpose of this project is to monitor (by using a sensor) the moisture level of the soil used for agriculture. If the level of moisture is below the preset

value, the 12 V DC pump will be triggered for the specified time duration. The source of this energy will come from a solar cell, used in this project.



All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/ Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
1	Rain detecting system	Trina Dutta	No	No		Tanmoy Ghatak Sourodeep Sengupta Gourab Basu Taaur Ayan Saha Tanmoy Ghatak
2	Computerized Numerical Control machine for 2D printing	Trina Dutta	Yes	Yes		Sanjay Bhattacharjee Debraj Chakraborty Sayan Debnath Tirthankar Dey Arnab Sarkar Abhishek Banerjee Sourav Doom

SL. No.	Title of the Project	Faculty Mentor/ Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
3	Laser Security System	Trina Dutta	No	No		Nilanjan Bhattacharjee
						SubhamMahato
						Nikita Mulchandani
						Aman Kumar Thakur
						Puja Jaydhar
						Apurba Bhattacharya
4	Automatic Drip irrigation system by using solar energy	Ananya Barman	Yes	Yes		Pushpan Bhaumik
						Shubham kumar
						Anjali sharma
						Sandipanganguly
						Moulikarmakar
						Pinkonhalder
5	Smart Dustbin	Jit Chakraborty	No	No		Suprapratim Biswas
						Bijoy kumar Paul
						Avijit Maitra
						Akash Chatterjee
						Kamalesh Mistri
						Krishnendu Jana
6	Hydraulic Powered Robotic Arm	Jit Chakraborty	No	No		Nilesh Kumar Biswas
						Aniket Maiti
						Pradipta Dutta
						Tiyasha Patra
						Shreoshree Sengupta
						Soham Tah
	Rahul Singha					
	Sadrita Basu					

Any others Information: NA

Department of Mathematics

About Departmental Pavilion in JISTech 2k18

Nominated Departmental Coordinators Name and Designation:

Arpita Ghosh, Assistant professor

Head/TIC of the Department Name: Mr. Rupak Bhattacharjee

Three project models had been exhibited in JISTech 2k18 from Department of Mathematics. Students from first and second year had taken part in the exhibition. The innovation details have already mentioned in the innovation catalogue. The departmental pavilion in JISTech 2k18 has become a good platform for the students to present their innovative ideas in front of the judges and the viewers. The faculty members from the department has worked hard to make the event successful and well organized.

Picture Gallery of Departmental Pavilion:

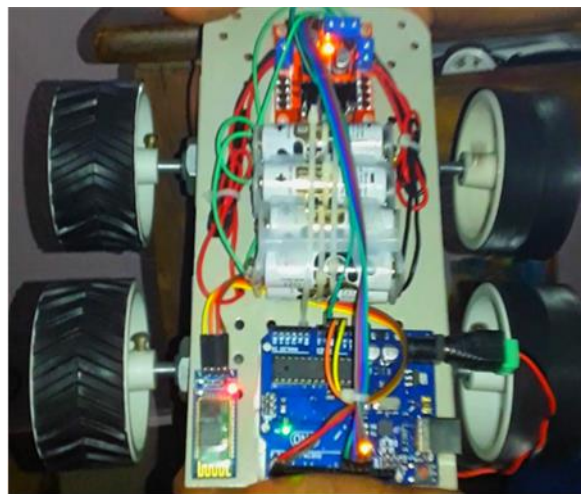


Achievement in JISTech 2k18: There are total 3 project models had been exhibited in JISTech 2k18. Out of the three one project has been selected as the best departmental project.

About Best Project Model of Departmental Pavilion (attach picture with brief details of innovation):



Details of innovation: A robot is usually an electro-mechanical machine that is guided by computer and electronic programming. Many robots have been built for manufacturing purpose and can be found in factories around the world. Designing of the latest inverted ROBOT which can be controlling using an APP for android mobile. And in which we use Bluetooth communication to interface Arduino UNO and android. Arduino can be interfaced to the Bluetooth module though UART protocol. According to commands received from android the robot motion can be controlled. The consistent output of a robotic system along with quality and repeatability are unmatched. This robot can be reprogrammable and can be interchanged to provide multiple applications. With this Rover we can build a robot mounted with camera. It will help us in military applications.



All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgement on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
1)	A prototype of Ligo detector and the observation of gravitational wave.	Arpita Ghosh	No.	Yes.		KumariAnubala.
						Achintya Kumar Saha.
						Pratik Raha.
2)	Hydraulic Bridge.	Arpita Ghosh	No.	Yes.		Akash Roy.
						AnkanBiswas.
						Pritam Bid.
3)	Arduino Based Bluetooth controlled Rover.	Arpita Ghosh	No.	Yes.		RatulSarkar.
						ShayantanChowdhury.
						SarbajyotiMallik.

Department of Business Administration

About CMS Departmental Pavilion in JISTech 2k18:

Nominated Departmental Coordinator: Dr. Avik Sanyal, Assistant Professor

Head of the Department Name: Mr. Uttiya Kar

Picture Gallery of CMS Departmental Pavilion:



Achievement in JISTech 2k18: (if any Best Department or others)

About Best Project Model of “Plastic to Petrol” of CMS Departmental Pavilion (attach picture with brief details of innovation):

The title of the project was “Plastic to petroleum”. The project was all about converting the plastic into fuel or other useful products, using the advanced form of pyrolysis, i.e.; depolymerisation.



All the Overall Project Model Details:

SL. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgment on day of the JISTECH (to be filled in by Convener/Co-convener)	Student Names
1.	Students team to provide technical support on specific domain	Uttiya Kar	No	Yes		Sourav Biswas
						Sumit Kar
						Rony Pramanick
2.	Plastic to Petroleum	Uttiya Kar	No	Yes		Ankita Prajapati
						Surbhi Gour
						Ankan Saha
3.	Online Agri Consultant	Subhajit Basu Chowdhury	No	Yes		Alapan Ganguly
						Bishal Srivastava
						Shream

SL. No.	Title of the Project	Faculty Mentor/Guide Name	Recommended for IPR submission (Yes/No)	Suitable for project display outside the Institute (like Tech-Fest of other colleges, project exhibition by Govt. or non-Govt. organizations) (Yes/No)	Marks obtained during Judgment on day of the JISTECH (to be filled in by Convener /Co-convener)	Student Names
						Bandyopadhyay Shrabasti Roy
4.	Biodegradable and non Biodegradable Segregation for utility purpose	Avik Sanyal	No	Yes		Manashi Chakraborty Diganta Biswas .Rohit Shaw Aadarsh Gupta
5.	Recycling waste water generated from air-conditioners for gardening and washrooms	Swati Pal	No	Yes		Priyanka Chakraborty Alekhya Mandal Biswajit Samanta Shovan Saha

Any others Information:

Plastic to Petrol, the departmental best project is again ready to represent JIS as well as CMS department at The Kritanj, at NIT , Agarpara.

Department of Physics

About Physics Departmental Stall in JISTech2k18:

Students across various engineering departments from different years were mentored by faculty members of the department of Physics and the stall was an exhibition from the department of Physics. In JISTech 2k18, there were total seven projects.

Nominated Departmental Coordinators Name and Designation:

Rinki Bhowmick; Asst. Prof. JISCE, Kalyani.

Swagata Bhattacharjee; Asst. Prof. JISCE, Kalyani.

Head of the Department Name: Sabyasachi Sen, Associate Professor

Picture Gallery of Physics Departmental Stall:



Achievement in JISTech 2k18: (if any like Best Department or others)

The stall was the perfect stage to give an idea about the innovative and independent ideas of students through their project work.

Picture of the best project (Application of Solar heating technique for reuse of rain water):



About Best Project Model of Physics Departmental Stall:

Best Project Name: Application of Solar heating technique for reuse of rain water.

Guide Name: Dr. Subhamoy singha Roy, Physics Dept.

All the Overall Project Model Details:

Project Id No:	Title of the Project	Faculty Mentor/Guide Name	Student Names
1.	Wireless power Transmission Using Mini Tesla Coil	Dr. Swagata Bhattacharjee	i)Sagar Pau ii)Sagar Datta
2.	Magneto electric Generator	Dr. Subhamoy singha Roy	i)Arghya Bhowmick ii)Barun kumar Sen
3.	Homemade Digital Clock	Dr. Swagata Bhattacharjee	i)Mushahit Ali ii)Alok Bhowmick
4.	Application of Solar heating technique for reuse of rain water	Dr. Subhamoy singha Roy	i)Swarup Sonar ii)Moumita Bera
5.	Vacuum Cleaner	Ms. Rinki Bhowmick	i)Subra Bhattacharya ii)Alok Bhowmick
6.	Evaporative Air cooler	Dr. Sabyasachi Sen	i) Kumar Jyoti Narayan ii) Bobita Bera
7.	Electricity generating dance floor	Dr. Sabyasachi Sen	i)Surbhi Singh ii)Paromita Mitra

Any others Information: NA

Thank
you

