



**JSS MAHAVIDYAPEETHA**  
**JSS ACADEMY OF TECHNICAL EDUCATION, NOIDA**  
**DEPARTMENT OF PHYSICS**

**REPORT ON LAUNCH OF FIRST PHYSICS DEPARTMENT  
NEWSLETTER**

**“PHYSIKA” ON THE DAY OF READING**

**Objective:** Objective of event was to Inaugurate the First newsletter of Physics department PHYSIKA 2023 on the "**Day of reading** "

Number of participants:60

With the divine blessings of His holiness Jagadguru Sri ShivarathriDeshikendraMahaswamiji, President, JSS Mahavidhyapeetha, Mysuru, the Department of PhysicsOrganized, OfflineLaunch of First Physics department newsletter '**Physika** ' **Volume 1, issue 1 on the Occasion of "Day of reading "**on **19<sup>th</sup> JUNE 2023 at 3:15 p.m. in Room no B- 02 in AB V** .This occasion was dedicated to the G-20 summit to be held in India this year.

The Inaugural function of the event started with introduction and welcome to all dignitaries by coordinator of the eventDr.NidhiYaduvanshi. She thanked Principal Dr Amarjeet Singh ,First year Coordinator, All Departmental HOD's , Faculty members and students for their presence.Guest of honour of the event were First year Coordinator- Dr.Z.K.Ansari, HOD Maths-Dr. Bhupendra Parashar, HOD English-Dr. Pranav Manjari,and HOD Chemistry-Dr.Roli Verma .Dr.RichaVerma, HOD Physics -Convener of the event stated the purpose of the event and thanked everyone for their presence.

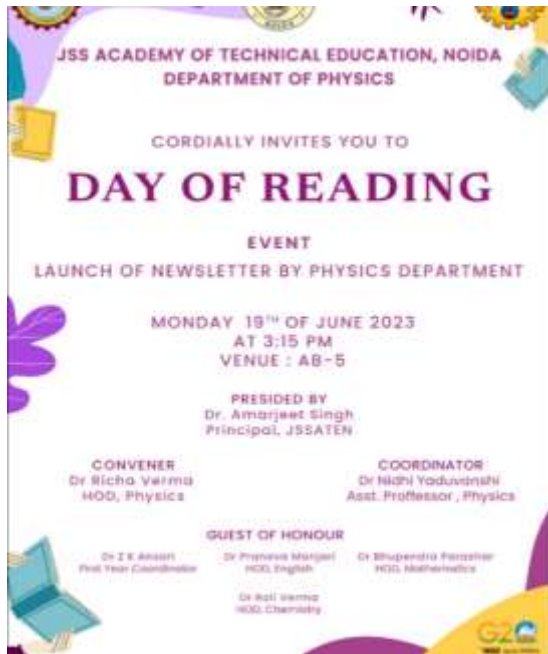
### **Objective of the Event**

Objective of event was to Inaugurate the First newsletter of Physics department PHYSIKA 2023. This newsletter showcases various Physics Department activities,Projects by First year students, Events and Achievements of Departmental societies SPADE and TENACIOUS, Exciting and Innovative articles by First year students and Campus placement of our students.This year's Physics Project work was dedicated to the G-20 summit in India.

Editorial team of newsletterconsists of Faculties of our dept and talented student volunteers, mostly from our student societies SPADE and TENACIOUS whose immense effort made this event fruitful.Wide Vision, continuousmotivation, and time to time feedback of HOD Physics made the final draft of the newsletter possible.The Newsletter was compiled by Newsletter Editor-Dr Nidhi Yaduvanshi .

## No of participants

There were around 60 participants in the event. Photographs of the event have been given below.



Event Invitation



Introduction by Dr Nidhi Yaduvanshi



Address by Principal Sir





Inauguration of Newsletter PHYSIKA by Principal Sir



Participation of around 60 students and Faculty in the event



Students participated in Day of Reading event



Participation by Faculties in the event





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**DEPARTMENT OF PHYSICS**

## **BAMBOO-The Sustainable Green Gold: Project presentation in B.Tech I Yr**

**Objective:** To encourage and promote active involvement of students and Faculty members and also encourage scientific thinking and sensitivity towards the environment.

Number of participants: 540

Green GOLD IDEATHON is an initiative of Physics department JSSATE Noida under the guidance of NEHHDC Govt. of India. Using Bamboo which is one of the fastest growing renewable natural resource, students submit designs for Tools /Gadgets. The Tools should be for every day usage and were to be designed using Bamboo as a primary material. Use of plastic should be kept at a minimum for these eco friendly and useful gadgets. This year's Green GOLD IDEATHON was dedicated to the **G-20 summit in India**. India is hosting the G-20 Presidency for the first time with the theme, '**One Earth, One Family, One Future**', between 5<sup>th</sup> January 2023 to 11<sup>th</sup> January 2023 , in Physics Lab , AB 5, JSSATEN, Noida , 3:30pm onwards.

As this Project work was for all the students of B.Tech 1st year and we received whole hearted participation from B.Tech. Iyear A group students. Activity was planned to be in be in two rounds, in the first round the students projects ideas were submitted in the form of presentations by students on the theme, “BAMBOO: The Sustainable Green Gold”. They were required to submit detailed design ideas about uses of Bamboo in the form of a presentation. This was a great opportunity for students to showcase their skills and share their ideas for the effective use of Bamboo, and they displayed several noteworthy and innovative ideas at first year level.

The selected presentations will be showcased in an offline Ideathon. Merit certificates will be provided to all these students. The first three student groups will be given prizes. Selected students will also be given an opportunity to visit NEHHDC head quarters ASSAM and interact with the Artisans there and help them to make a real device from their design.

We are grateful to NEHHDC (North Eastern Handicrafts and Handlooms Development Corporation Ltd) under whose guidance the activity has been conducted.

A few Highlights of the event are attached below:



**JSS MAHAVIDYAPEETHA**  
JSS Academy of Technical  
Education C-20/A, Sector-02,  
NOIDA (U.P.)



**North Eastern Handicrafts and Handloom  
Development Corporation (NEHHDC)**  
Ministry of Development of North Eastern  
Region (DoNER),  
Government of India

**Green GOLD IDEATHON**  
for B.Tech. First Year Students Organized by  
Department of Physics, JSSATE, Noida  
and  
NEHHDC Limited (A Govt. of India Enterprise)  
Product developed are displayed under the banner of  
"BAMBOO: The Sustainable Green Gold"  
For B.Tech. Students

**Final presentation from 5<sup>th</sup> January 2023- 11<sup>th</sup> January 2023**

• Merit Certificates by Organizers to all participants selected in  
preliminary round  
• Prizes for first three participants



**Dr. P. K. Sharma**  
Organizer



**Dr. P. K. Sharma**  
Organizer

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**NORTH EASTERN HANDICRAFTS AND  
HANDLOOM DEVELOPMENT  
CORPORATION (NEHHDC)**

North Eastern Handicrafts and Handloom Development Corporation (NEHHDC), as the name suggests is an organization that attempts to develop and promote the indigenous crafts of the region by connecting craftsmen to prospective markets and consumers and generating economic, cultural and social opportunities for craftsmen while adding cultural value to consumers. The corporation is under the administrative control of the Ministry of Development of North Eastern Region (DoNER), Government of India.

**JSS ACADEMY OF TECHNICAL  
EDUCATION, NOIDA**

JSS Academy of Technical Education Noida (JSSATE) is one of the leading Technical Institutions in the National Capital Region in the State of Uttar Pradesh. Established in the year 1999 by JSS Mahavidyapeetha, Meerut, the Institution has set benchmarks every year and grown into an Institution of Excellence in Technical Education. Located in the central part of NOIDA, JSSATE has become a household name for its excellence in Discipline, Teaching, Training and Placement. The Institution has MPUs with Extra laboratories, Shops, Model Laboratories, a Varsity Embedded & Robotics Lab, PLMCC, Schneider Electric, Substation Automation Lab, Emission Interference Center and Centre for Innovation & Design. It has additional facilities for the students in reference to its shops. Today, JSSATE has total students strength of over 4000, who are mentored by more than 350 faculty members. The Campus has finest accommodation for girls and boys.

**PHYSICS DEPARTMENT**

Department of Physics, JSSATE is a dynamic department with an active research program in various branches of Physics. The department consists of six faculty members all being PhD holders from renowned Universities. Physics is the crown jewel of all sciences, and broadly speaking engineering is mostly applied physics. We offer courses on theory and practical subjects as per the syllabus of AICTE/UGBSP. We have found student learning and dwelling in the subject, comes about through carefully planned and structured lecture and a sound experimental background. The department has a well equipped laboratory for B.Tech. students. All the experiments are designed to cultivate experimental skills related to various branches of engineering and technology.

**AIM AND SCOPE**

Green GOLD IDEATHON is an initiative of Physics department JSSATE Noida with the guidance of NEHHDC Govt. of India. Using Bamboo which is one of the fastest growing renewable natural resources, students will submit designs for Tools/ Gadgets. The Tools should be for every day usage and should be designed using Bamboo as a primary material. Use of plastic should be kept at a minimum for the use friendly and useful gadget.

This Project work is for all the students of B.Tech 1st year. Whole batch participation of students is expected. Activity will be in two rounds, in the first round the students will submit PPT in their respective Physics teachers. The selected presentations will be showcased in an online/offline showcase. Merit certificates will be provided to all those students. The best three student groups will be given prizes. Selected students will also be given an opportunity to visit NEHHDC handi shops/AVSAL and interact with the Artisans there and help them to make a real device from their design.

**REGISTRATION**

• Registration form  
• <https://forms.gle/3hmsOC0wrd8t6sk7>  
• Registration is free  
• Registration for all the participants is mandatory.  
• A certificate will be provided to the registered participants after successful completion.

**ORGANIZING COMMITTEE**

- Dr. Neelvi Vachani, Assistant Professor, Department of Physics
- Dr. Manisha Chaudhary, Assistant Professor, Department of Physics
- Dr. Pratima, Assistant Professor, Department of Physics
- Dr. Deepa Chidambal, Assistant Professor, Department of Physics
- Dr. P. K. Sharma, Assistant Professor, Department of Physics

Figure 1: Event Brochure



Figure 2: Participants

Timestamp	Email Address	Name	Admission	Hand	SECTION	TITLE OF YOUR PROJECT	OBJECTIVE (Write let Any other relevant info Submit presentation of your idea her)
1-4-2023 20:07:15	arya22c@gmail.com	Diya Verma	Z2EC162	A1		Bamboo fabric	Bamboo clothing is made from bamboo fibers <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-4-2023 22:29:21	yadavshay@gmail.com	Ashjay yadav	Z2EC039	A1		Hande Single Push Seeder	THE MAIN REASON OF WHY WE HAVE TH <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-5-2023 10:02:44	guptaharsh104@gmail.com	Harsh Gupta	Z2EC163	A1		Bamboo fabric	"Bamboo clothing is made from bamboo fiber <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-5-2023 17:24:41	dandasharma73@gmail.com	Darshita	Z2EC160	A1		Bamboo telescope	Telescope body of Bar Telescope body of bar <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-7-2023 2:07:38	prajwalenkh444@gmail.com	Pratik Anand	Z2EC194	A1		Bamboo Quadrotor(Drone)	We will be making drone from from the bambo <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-7-2023 10:23:54	baghelpandey02@gmail.com	Dagsh Pandey	Z2EC014	A1		Bamboo air cooling with fiber	As we all know in top ten cities in the world <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-8-2023 8:57:18	alanmaurya@gmail.com	Alan Maurya	Z2EC006	A1		bamboo cooling system	The main objective of it is <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-8-2023 11:30:07	pratham5543@gmail.com	Pratham Bahle(509)	Pratham,Z2EC009	Z2EC0A1		Bamboo cooling system	The main objective of our project was to redif <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-9-2023 13:11:13	guptaharsh104@gmail.com	Harsh Gupta	Z2EC163	A1		Bamboo Fabric	"Bamboo clothing is made from bamboo fiber <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-12-2023 19:44:57	anushka73@gmail.com	Anushka Dhillon	Z2EC155	A1		BAMBOO FIBRE	Using bamboo fibres for the production of fiber <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-13-2023 19:42:43	shil18303@gmail.com	Sanjana	Z2EC047	A1		The Gas Application Lamp	The main objective of our project is to give a <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-18-2023 22:28:37	anarkurupriya@gmail.com	Ankur Sharma	Z2EC152	A1		Fabric from bamboo	The main objective of our project is to use bambo <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-28-2023 12:27:16	Phoonragpa13@gmail.com	Pooni Baghai	Z2EC018	A1		Bamboo Drone	Replacing the plastic or metal frame of drone to bamboo will be highly eco friendly <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-7-2023 10:32:26	prince2742004@gmail.com	Prince Kumar	Z2EC068	A2		A bamboo microscope	To provide the economy it will cost approximately <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-8-2023 19:21:55	anushka9821@gmail.com	Jatin Kumar	Z2EC080	A2		Portable Bamboo Refrigerator	The main objective to make the bamboo refrig <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-24-2023 22:08:40	nishaygupta129@gmail.com	Nishay Kumar Gupta and gnu	Z2EC086	A2		PICO HYDRO ELECTRIC POWER PL	Our project deals with Our main aim is to pro <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-8-2023 3:02:36	shubhikumar7240@gmail.com	Shubhi Kumar	Z2EC133	A3		Bamboo The sustainable green gold	Bamboo The sustainable 3 project <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-11-2023 23:15:48	ateesh.chaudhary@gmail.com	Vansha Chaudhary	Z2EC126	A3		BAMBOO HELMET	The objective of the pr Bambo Helmets have <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-13-2023 23:28:50	narayanat710@gmail.com	Lati Narayan Yalve	Z2EC129	A3		Bamboo Based Circle Robot Vacuum	Introduction of any get Budget 4k-6k <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-26-2023 3:47:32	dashratan057@gmail.com	Tanish Shrivastava	Z2EC181	A3		Bamboo Waste cup sleeves and Barnd	By using bamboo we are making best o <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-26-2023 18:20:43	tyagayee51@gmail.com	Aryan Tyag	Z2E156	A4		BAMBOO PHONE CASE	The project is the edu Phone case production <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-16-2023 18:27:30	capat1211@gmail.com	Devesh Rajput	Z2E177	A5		Bamboo duct	replace metal and plastic while construction <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>
1-11-2023 18:41:36	yashshukla2003@gmail.com	Yash Shukla	Z2E185	A5		BAMBOO A HEALTHY CHOICE FOR	Our main objective is to create a sustainable <a href="https://drive.google.com/open?id=1u...">https://drive.google.com/open?id=1u...</a>

Figure 3: List of Projects

## Bamboo Vacuum Cleaner

BY  
Yuvraj Singh  
Abhinav Kumar Jha  
Yashika  
Srishti Gupta  
Akshat Jaiswal  
Anuj Yadav  
Vidisha Kesarwani

**Introduction**

The initiative will include simple cleaning techniques for families. This initiative aims to reduce families' workload while completing the cleaning tasks. The project is called "Bamboo Vacuum Cleaner" and in reality, using a vacuum system to clean something is easier than using a cleaning system like a broom and a shovel.

**Problem Statement**

- \* I - Some homeowners who work on multiple projects at once.
- \* II - A shovel cannot be used to remove all trash.
- \* III - Poor cleaning performance.

**Material Required**

**Bamboo:**  
Bamboo has an extremely robust fibre that makes it a great building material. Bamboo has a tensile strength that is comparable to steel and a compressive strength that is two times greater than concrete. Since stress in bamboo fibre is higher than in wood, unlike wood, bamboo has a wider spread.

**Motors:**  
Every vacuum has a motor, which functions as the device's "heart" and keeps it going. The location of the vacuum cleaner's motor is in the bulky portion of your vacuum that is connected to a fan, over which air is pushed to remove dirt. The power of your vacuum's motor determines the suction strength and cleaning speed. You should be aware of the power to air speeds. The cleaning skills. The quantity of electrical current required to operate a vacuum is determined by its voltage and amp ratings. The cleanest floors on the street is probably yours if you find a high wattage, high amp vacuum.

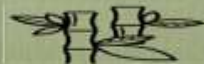
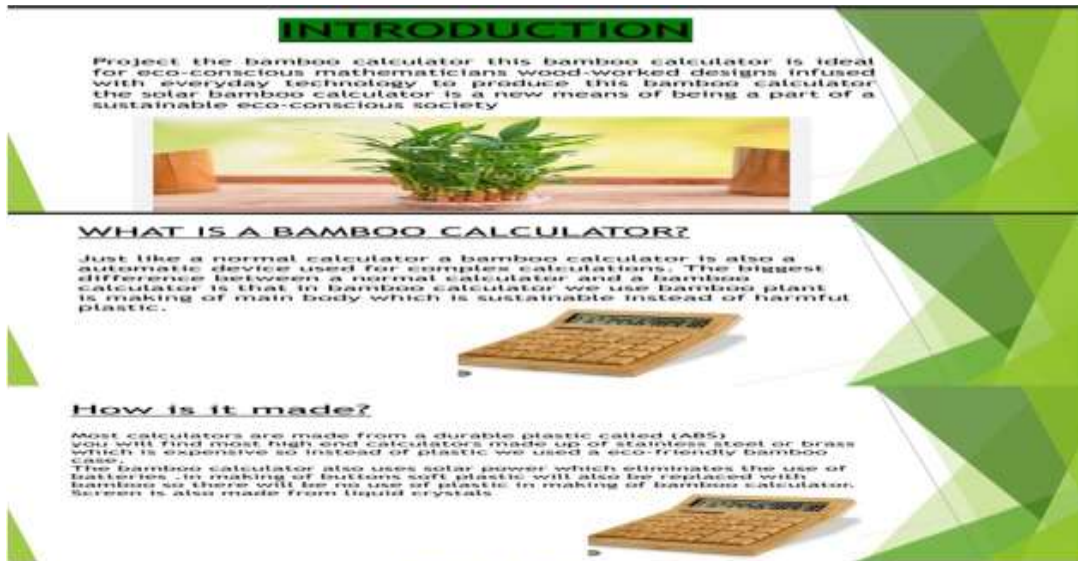



Figure 4: A Few Ideas



The selected Student groups are as follows

### I Position

<b>Bamboo Microscope</b>		
	Name	Admission Number
1	Aasthik Kumar	22CSDS043
2	Indrajeet Patel	22CSDS044
3	Vishal Yadav	22CSDS045
4	Harshit Jaiswal	22CSDS046
5	Swapnil Singh	22CSDS049
6	Tejasw Mishra	22CSDS050
7	Sachin Singh	22CSDS051

### II Position

<b>(a) Bamboo Carts</b>
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	Name	Admission Number
1	Rishabh Pawar	22IT056
2	Yash Rajput	22IT057
3	Archita Singh	22IT058
4	Vivek Singh	22IT059
5	Balraj Srivastava	22IT060
6	Akriti Yadav	22IT066
7	Vivek Yadav	22IT075

<b>(b)Hands Single Push Seeder</b>		
	Name	Admission Number
1	Abhijay Yadav	22EC039
2	Rishabh Mishra	22EC040
3	Harsh Gupta	22EC163
4	Ashish singh	22EC041
5	MD Noman Khan	22EC038
6	Shivam Kumar	22EC050

### III Position

<b>Balancing Toy made of Bamboo</b>		
	Name	Admission Number
1	Anshika Goel	22IT016
2	Vanshika Chauhan	22IT015

3	Kanak Goel	22IT005
4	Abhishek Yadav	22IT006
5	Sacchidanand	22IT009