### ACTIVITIES OF DEPARTMENT OF PHYSICS, WOMEN'S COLLEGE UNDER STAR COLLEGE SCHEME

# Period: 31<sup>st</sup> December 2021 to 31<sup>st</sup> March 2022

#### **INDUSTRIAL VISITS BY STUDENTS DURING 2021-22:**

Faculties of Physics department has conducted one industrial visit to ONGC Tripura Power Company (OTPC), Palatana, Udaipur, Gomati District, Tripura A visit to ONGCOTPC, Palatana, Udaipur, Gomati District, Tripura for 3<sup>rd</sup> and 5<sup>th</sup> Semester Physics (Major) students on 29<sup>th</sup> March, 2022.

In that industrial visit, Undergraduate students of Physics Honours got some idea about the OTPC which is not only the biggest gas based power plant in the North Eastern region but it is also regarded as a role model for other plants. Physics Honours students are excited very much to visualize this wonderful thermal power plant and learnt a lot regarding the process implemented for the production of electricity.

# VISITS TO NEARBY LABAORATORY OF REPUTED INSTITUTION/RESEARCH INSTITUTE:

Department of Physics also organized a good number of Laboratory visits under DBT Star College Scheme in which 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> Semester Physics (Major) students had visited laboratories of nearby reputed academic institutions to get exposure about various equipments/instruments and their operational techniques.

A. Date of visit: 10<sup>th</sup> March, 2022

Place of visit: Tripura Institute of Technology, Agartala

**Outcomes:** In this visit, 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> semester Physics (Major) students are allowed to visit the electrical, electronics, mechanical and civil labs of Tripura Institute of Technology, Agartala. They got some idea about the functions of various sophisticated instruments/equipments in various labs of TIT and tried to understand the basic physics involved behind the operation of those instruments.

#### B. Date of visit: 12<sup>th</sup> March, 2022

#### Place of visit: ICFAI University, Tripura

**Outcomes:** During this visit, students of 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> sem Physics (Major) were immensely benefitted as they got some excellent hands on demonstration from faculties/staff of Physics Department of ICFAI university about the operation of various instruments/experiments. This visit was helpful for UG students from our college as they have glimpses of various experiments/laboratory works available in M.Sc. physics.

#### EXHIBITION/SEMINAR/TRAINING COURSES/WORKSHOP CONDUCTED:

During 2021-2022, department of physics organized the following workshops and popular talks for the benefits of the students.

- O3 (three) days workshop on "*Development of Computer Skills (Office Package)*" from 7<sup>th</sup>
  9<sup>th</sup> February, 2022 for 1<sup>st</sup> semester Physics (Major) students. Faculties involved are
  - (i) Dr. Subrata Deb, Assistant Professor, Department of Physics,
  - (ii) Dr. Sudip Debnath, Assistant Professor, Department of Physics &
  - (iii) Pusparwng Hrangkhawl, Assistant Professor, Department of IT.
- O1 (One) day Hands on Training session on "Measurement Techniques" was conducted on 30<sup>th</sup> March, 2022 for 1<sup>st</sup> semester Physics (Major) students by Smt. Jaya Bhaumik, Department of Physics.
- National Science Day (NSD-2022) has been celebrated jointly by the departments of Physics and Chemistry on 30<sup>th</sup> March, 2022 in presence of students from Physics & Chemistry (Honours). In this programme, Mr. Sagnik Saha acted as a resource person and delivered a talk on "Formation of Universe and it's expansion with Modern Physics explanation".

## **POPULAR LECTURE/TALKS ORGANIZED:**

Department of Physics also organized a total of 09 (nine) popular lecture to upgrade/aware the UG students during this tenure under this scheme.

<b>S.</b>	Name of the Resource	Title of the talk	Date	<b>Target Group</b>
No.	person with designation			at and the
1	Dr. Subrata Deb	Applications of Physics in	03/02/2022	$1^{st}$ , $3^{rd}$ & $5^{th}$
	Assistant Professor	Crime Investigation		Sem Physics
	Department of Physics,			(Major)
	Women's College, Agartala			Students
2	Dr. Sudip Debnath	Preparation of Ultrathin	04/02/2022	$1^{\text{st}}, 3^{\text{rd}} \& 5^{\text{th}}$
	Assistant Professor,	Films & Its		Sem Physics
	Department of Physics,	Characterizations		(Major)
	Women's College, Agartala			Students
3	Dr. Mahuya Acharjee,	Molecular Spectra and	11/03/2022	$1^{\text{st}}, 3^{\text{rd}} \& 5^{\text{th}}$
	Assistant Professor,	Algebraic Modelling		Sem Physics
	Department of Physics, MBB			(Major)
	College, Agartala			Students
4	Dr. Sharmistha Banik,	"Development of Scientific	25/03/2022	$1^{\text{st}}, 3^{\text{rd}} \& 5^{\text{th}}$
	Assistant Professor,	Temper"		Sem Physics
	Department of Physics, IASE,			(Major)
	Agartala			Students
5	Mr. Sagnik Saha,	Evolution of Astrophysics	14/03/2022	$1^{\text{st}}, 3^{\text{rd}} \& 5^{\text{th}}$
	Project Fellow, Indian			Sem Physics
	Institute of Astrophysics,			(Major)
	Bangalore			Students
6	Mrs. Soma Chakraborty,	"Life: A Hybrid of Wrong &	28/03/2022	$1^{\text{st}}, 3^{\text{rd}} \& 5^{\text{th}}$
	Lecturer in Life Science,	Right"		Sem Physics
	District Institute of Education	_		(Major)
	and Training, Kunjaban,			Students
	Agartala			~~~~~~~
7	Dr. Rahul Bhattacharjee,	Comet: The Cosmic Snow	17/03/2022	$1^{\text{st}}, 3^{\text{rd}} \& 5^{\text{th}}$
	Associate Professor,	Ball		Sem Physics
	Department of Physics, ICV			(Major)
	College, Agartala			Students
8	Dr. Arunabha Saha, Assistant	Basic Concepts of	17/03/2022	$1^{\text{st}}, 3^{\text{rd}} \& 5^{\text{th}}$
-	Professor, Department of	Experimental Study of		Sem Physics
	Physics, ICFAI University	Nuclear Structure		(Major)
	j , J			Students
9	Mr. Sagnik Saha, Project	"Formation of Universe	31/03/2022	1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup>
-	Fellow, Indian Institute of	and it's expansion with		Sem Physics
	Astrophysics, Bangalore	Modern Physics		(Major)
	,,,,,,, _	explanation "		Students
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S. No.	Name of the Resource person	Designation & Address	Date
1	Dr. Mahuya Acharjee	Assistant Professor Department of Physics MBB College, Agartala	11/03/2022
2	Dr. Sharmistha Banik	Assistant Professor Department of Physics IASE, Agartala	25/03/2022
3	Mr. Sagnik Saha	Project Fellow Indian Institute of Astrophysics, Bangalore, India	14/03/2022 & 31/03/2022
4	Mrs. Soma Chakraborty	Lecturer in Life Science, District Institute of Education and Training (DIET), Kunjaban, Agartala	28/03/2022
5	Dr. Rahul Bhattacharjee	Associate Professor Department of Physics, ICV College, Agartala	17/03/2022
6	Dr. Arunabha Saha	Assistant Professor, Department of Physics, ICFAI University, Tripura	17/03/2022

## **EXTERNAL RESOURCE PERSONS INVITED:**

# **PHOTO GALLERY:**





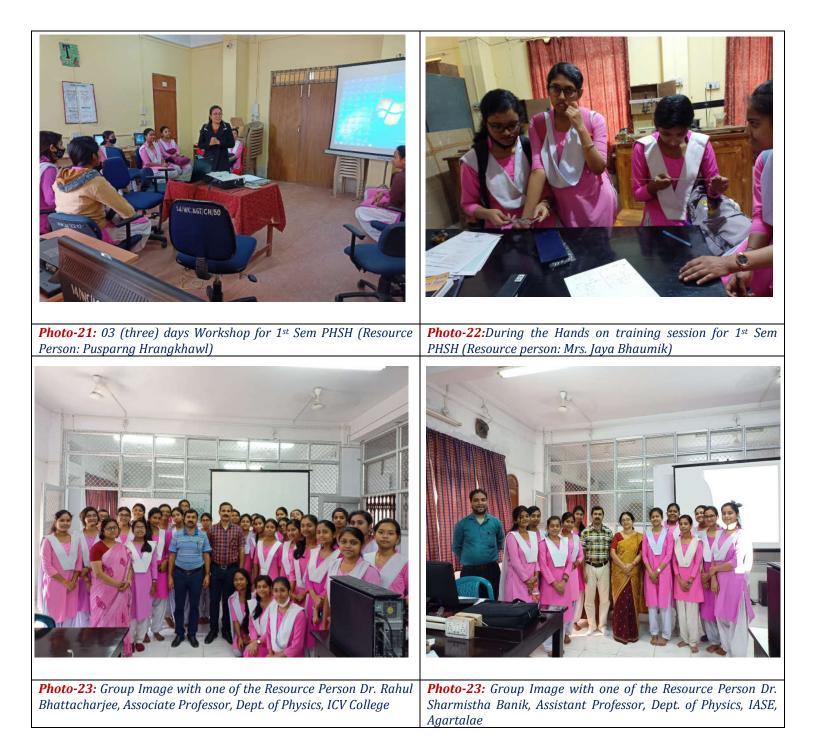


**Photo-11:**Visit to ICFAI University (Laboratory Visit)

Photo-12: Visit to ICFAI University (Laboratory Visit)







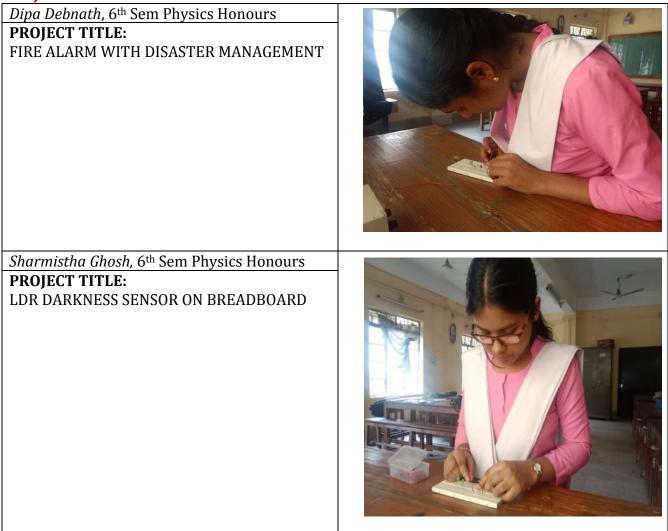
## Year: 2022-2023

## TRAINING PROGRAM/ PROJECT WORK FOR 6<sup>TH</sup> SEMESTER HONS STUDENTS:

## A. TRAINING PROGRAM ORGANISED FOR STUDENTS (UPTO 30<sup>TH</sup> JUNE, 2022): NIL

## **B. PROJECT WORK FOR 6<sup>TH</sup> SEMESTER PHYSICS HONOURS STUDENTS:**

#### **PROJECT BASED ON ELECTRONICS:**



Nikita Debnath, 6 <sup>th</sup> Sem Physics Honours	
PROJECT TITLE: CONSTRUCTION OF HALF ADDER & FULL ADDER	
Anamika Das, 6 <sup>th</sup> Sem Physics Honours <b>PROJECT TITLE:</b> LASER SECURITY ALARM SYSTEM	
Prity Debbarma, 6 <sup>th</sup> Sem Physics Honours PROJECT TITLE: SOLAR STREET LIGHT	

**N. B.:-** Other students of 6<sup>th</sup> semester Physics Honours are also working for their project to fulfill the criterion of B.Sc. end Semester examinations -2022. Project works carried out by the remaining students' alongwith other activities of the department will be reflected soon.