

	Dr D Y Patil Pratishthan's D D.Y. Patil Institute of Engineering, Management and Research, Akurdi, Pune	
Academic Year: 2022-23		
Term – I	Dhruva Astronomy Club	Date of Preparation: 04/08/2022

About Dhruva Astronomy Club

The universe is simmering and seething with magnificence and this team of Dhruva Astronomy Club of DYPIEMR is striving to unfold the truth behind this miracle. Looking above at the enormous sky, stars, suns, and lunars, who must have not wondered what these cosmos hold? This platform enables students to explore and gain knowledge of space science. Dhruva lets the students express their keen interest in astronomy and put forth their ideas and passion in front of the world. It gives them an ambitious team to share their ardour with. Over the years the club has been able to gratify students' yearning for astronomy. We provide them with an area and scope to initiate their projects related to space. We aim to indulge our readers by spreading awareness of astronomy through our blogs and social media pages. The broadening doesn't stop there, we sight to increase the number of members by involving every hidden aspiring astronomer from our college.

Our DHRUVA Astronomy Club is established on 28th Feb 2018 on “National Science Day”. The key objective of this club is to motivate the students and to understand the basic concepts related to astronomy and astrophysics. We have engaged with different types of students from teens to adults, increased their knowledge about astronomy, and mentored many to become an astronomer. The role of an engineer has become multifaceted to enable technology for the next millennia. Astrophysics is one such domain that only demands a strong scientific background.

	Dr D Y Patil Pratishthan's Dr D.Y. Patil Institute of Engineering, Management and Research, Akurdi, Pune	
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but also requires engineer expertise. DHRUVA ASTRONOMY CLUB at DYPIEMR is a unique platform that aims to inculcate scientific temper, constructive ideas and information exchange among aspiring engineers on campus in Astrophysics.

Extracurricular Activities under DHRUVA:

- 1.Seminar
2. Telescope handling & building sessions
- 3.. Star gazing
4. Podcasts
5. Conduction of Astronomy quizzes and outreach programs
6. Organizing trips to local planetarium, and science centres
7. Feedback/ Grievance
8. Calendar.

Mr.Shubham Chitale
Student President

Dr. Mrs V.B Patil
Faculty Co-ordinator

Dr. A.V. Patil
Principal



**Dr D Y Patil Pratishthan's
D D.Y. Patil Institute of Engineering, Management
and Research, Akurdi, Pune**

DI No.:
ACAD/DI/56 A

Academic Year:
2022-23

Activity Calendar

**Revision: 00
Dated:20/11/2019**

Term – I

Dhruva Astronomy Club

**Date of
Preparation:
04/08/2022**

SR.NO	EVENT	DATE OF ACTIVITY PLANNED	ACTUAL DATE	PO Addressed	STATUS
Quarter 1					
1	IUCCA visit	July		PO12	Completed
2	Podcast	July		PO12	Completed
3	Astro quiz	Aug	16/08/2022	PO12	Planned
4	Fact share meet	Aug	26/08/2022	PO12	Planned
5	Seminar	Sept		PO7	In process
6	GMRT visit	Sept		PO12	In process
7	Fact share meet	Sept	30/09/2022	PO10	Planned
Quarter 2					
8	Star gazing	Oct		PO7	In process
9	Fact share meet	Oct	28/10/2022	PO9	Planned
10	Seminar	Nov		PO10	In process
11	Telescope making workshop	Nov		PO5	In process
12	Fact share meet	Nov	25/11/2022	PO9	Planned
13	Fun event	Dec		PO10	
14	Fact share meet	Dec	30/12/2022	PO9	Planned
Quarter 3					
15	Republic day quizzes	Jan		PO12	Planned
16	Seminar	Jan		PO7,10	In process
17	Fact share meet	Jan	27/01/2023	PO9	Planned
18	Stargazing	Feb		PO7	
19	IUCCA visit	Feb		PO5	In process
20	Fact share meet	Feb	24/02/2023	PO9	Planned
21	Club bonding	March		PO9	Planned
22	Fact share meet	March	31/03/2023	PO9	Planned

Quarter 4					
23	Seminar	Apr		PO10	In process
24	Astro quiz	Apr		PO9	Planned
25	Fact share meet	Apr	28/04/2023	PO9	Planned
26		May			
27	Fact share meet	May	26/05/2023	PO9	Planned
28		Jun			
29	Fact share meet	Jun	30/06/2023	PO9	Planned

Mr. Shubham Chilhate
Student Coordinator

Dr Vandana Patil
Faculty Coordinator

Dr. Mrs. A V Patil
Principal

Academic Year: 2021-22		Revision: 00 Date :20/12/2019
Term –I	Dhruva Astronomy Club	Date of Preparation: 05/12/2022

ACADEMIC Year : 2019-20 to till date

Name of Club: DHRUVA (Astronomy) Club

Celebration Activity : National Science Day

Date of Event:28/02/2021

Seminar on Sustainability of Dr. Satish Chandra Ogale, Director of IISER, National Science Day is celebrated to with aim to observe and commemorate the contributions of Dr. C.V. Raman, the first Indian Nobel laureate in the field of Physics.

Energy, Environment, Health, Food and Water are the sectors of critical significance and concern to the world, especially to the rapidly developing countries like India. These fields are intertwined in many complex ways and our excessive dependence on polluting fuels has had extremely serious and progressively deleterious influence on all these aspects. Since energy drives the engines of growth, our increasing demand for energy is unavoidable in the face of development, but in the light of the issues mentioned above we must necessarily seek clean forms of energy. Lesser dependence on fossil fuels and enhanced use of alternative renewable forms of energy is also a must for energy security of the country. Amongst the various forms of renewable energy solar energy is the most abundant and clean source, and it can be harnessed in various interesting and effective ways. For a long time it was considered to be uneconomic but with improvements in technologies, new inventions during the past decades and novel possibilities generated by the emergence of nano-science and nano-technology, the solar economics are gyrating towards favourable domains of utilization.



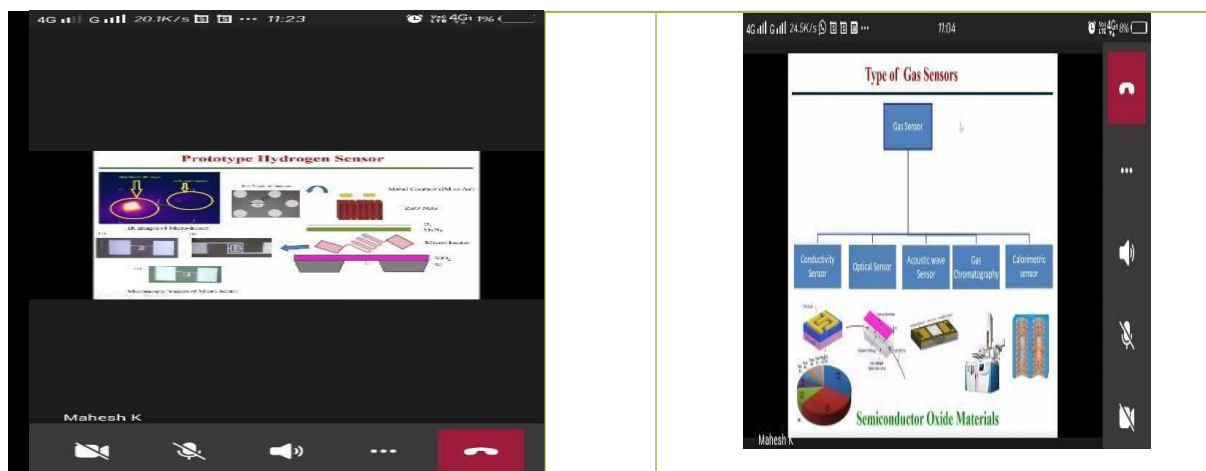
Snapshot1: Dr Satish Chandra Ogale is explaining the need of Renewable energy and Sustainability

Celebration Activity : National Science Day

Date of Event:28/02/2021

Seminar on Innovations in Sciences of Dr. Mahesh Kumar ,Associate Professor, IIT Jodhpur

Dr. Mahesh Kumar has brief about the development of gas sensors that are based on metal/metal-oxide nanoclusters has attracted intensive research interest in the last years. Nanoclusters are suitable candidates for gas sensor applications because of their large surface-to-volume ratio that can be utilized for selective and rapid detection of various gaseous species with low-power consuming electronics. Herein, nanoclusters are used as building blocks for the construction of gas sensor where the electrical conductivity of the nanoclusters changes dramatically upon exposure to the target gas

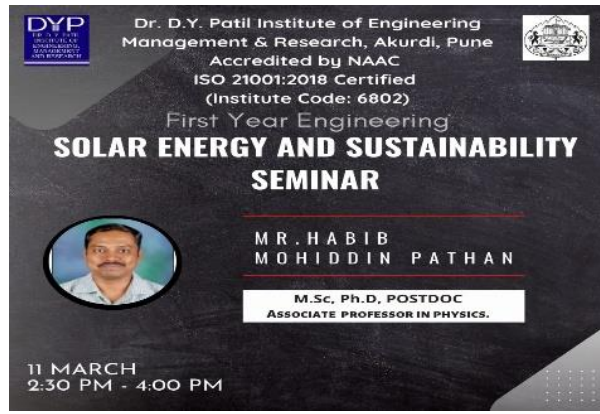


Snapshot1: Dr Mahesh Kumar is Explaining the innovations in materials and their Applications.

Seminar on Solar Energy and Sustainability

Dhruva astronomy club of DYPIEMR organized an seminar on Solar Energy and Sustainability in which Mr. Habib Mohiddin Pathan sir "Associate Professor of Physics " share knowledge on Sustainability . This seminar is conducted on 11 march 2022 in seminar hall DYPIEMR .

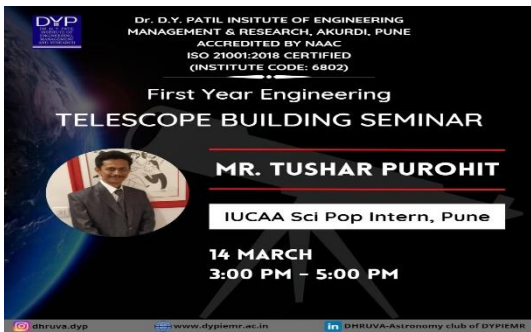




Caption 1: Speaker Dr H M Pathan explaining the solar cell working mechanism and design

Seminar on Telescope Building –

The club as arrange an Seminar on telescope building in which our speaker Mr. Tushar Purohit Sir tells the history of telescope who it work who we can build an telescope at home and many more . This seminar is conducted on 14 march 2022



Caption1: Speaker Mr Tushar Purohit was explained the different types telescopes.

IUCAA Visit –

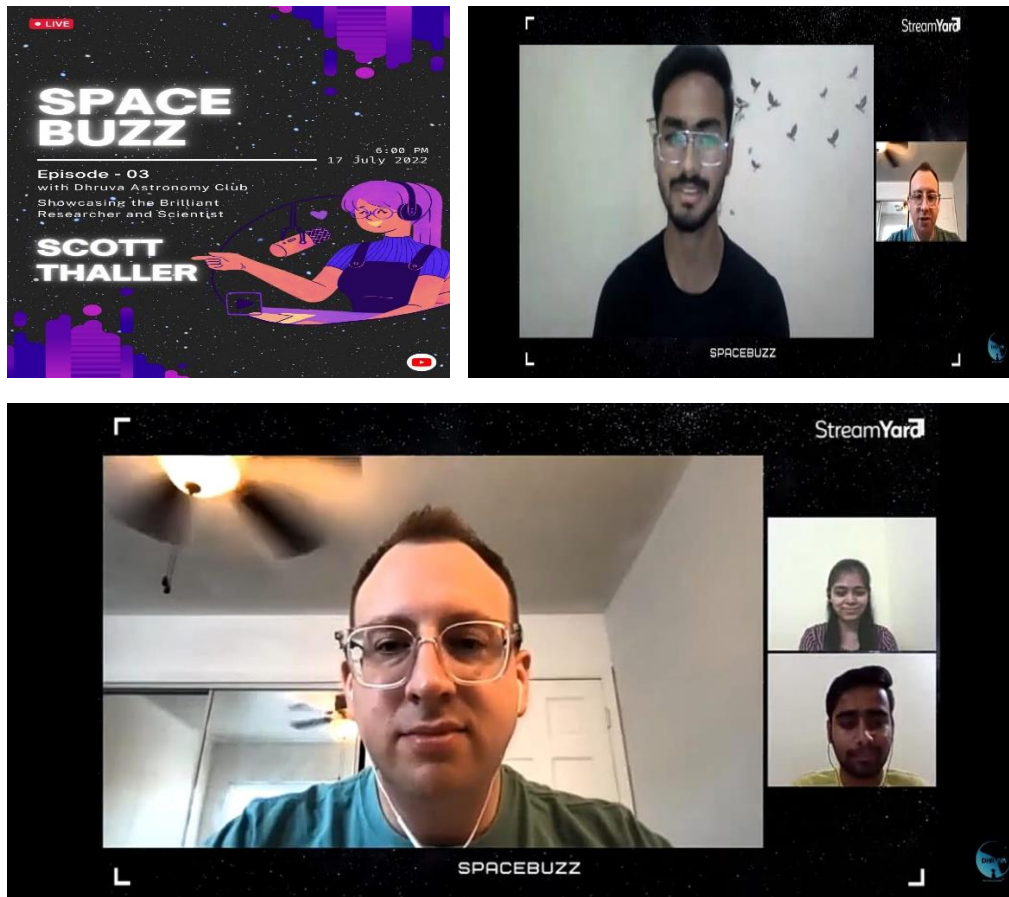
The members of Dhruva astronomy club of DYPIEMR visit Inter- University Centre for Astronomy and Astrophysics , Pune on 2 June 2022 , Visit at IUCAA helped students get in touch with the latest Technology and have the expertise views and knowledge to smoothly integrate new technology solutions with their existing knowledge. Students were introduced with different aspects of Astronomy and Astrophysics. Students were shown different projects involving LIGO, MODEL of IUCAA, TARAMANDAL etc. During the visit, students were keen towards understanding about astronomical happenings and inspired by meeting with Sir Isaac Newton, Galileo Galilei, Albert Einstein (Statues) whose mere presence as a statue made the IUCAA holistic place for scientists and Engineers.



Space Buzz Podcast –

Dhruva Astronomy club of DYPIEMR arranged an online podcast on our YouTube channel with American Scientist Dr. Scott Thaller on 17 July 2022 .

In this Podcast he deuces about various aspect of Astrophysics and outer space.



Caption 1: speaker is explain the brief about Big Bang Theory and Mysteries of Universe.

Astro Quiz –

Dhruva Astronomy club of DYPIEMR organized an online Quiz competition on our website to test the knowledge of Students in the filed of astronomy and current affair related to astronomy and outer space. This competition organized on 28 August 2022, on Dhruva official Website.



Fact Share Meet –

To increase the knowledge of members Dhruva Astronomy club Arrange an Fact Share meet on 26th August 2022 in the seminar hall of DYPIEMR , in which member share their fact and knowledge about astronomy .



Video Making Competition –

On the occasion of Ganesh Chaturthi Dhruva Astronomy club organised an video making competition on Ganpati Decoration on 4th and 5th September 2022



Treasure Hunt Event –

To increase the club bonding and coordination in members of the club Dhruva astronomy club organized and fun event Treasure hunt on 15th September 2022 in the DYP campus.



DHRUVASATE Cube Satellite Program –

To use the engineering knowledge in the real world Dhruva Astronomy club started a 3u cubesat developing program on 15 October 2022 .

Problem statement – To detect and collect the data of Space pollution (debris) in low earth orbit

The primary phase of the 3u cubesat is ended in which we build a working prototype of our satellite under the guides of Dr. Saligram SPPU head ISRO cell and our faculty coordinator Dr. Vandana Patil.

Telescope workshop –

Dhruva Astronomy club of DYPIEMR organized a workshop on telescope building on 14th November 2022 in Santai auditorium in which our speaker Mr. Tushar Purohit Sir tells the history of telescope how it works and how we can build a telescope at home and many more

Stargazing Event –

Dhruva astronomy club of DYPIEMR had organized the Star Gazing event on 26th November 2022 at BHANDARDARA LAKE CAMPAIGN. From all departments and years, we took about 48 students. We were led by two highly knowledgeable telescope experts, **Mr. S. H. Renapurkar and Mrs. Chaya Renapurkar**, who provided us with detailed explanations of the stars, the Orion constellation, and meteor showers through engaging anecdotes. They took our first session at around 12pm which was very informative. We got a chance to navigate the constellations and observe incredibly distant objects through large telescopes



Caption1: Students are Analysing the Structure of Constellation, planets , stars through Telescope.