



# Little Flower Degree College

(Affiliated to Osmania University)

Uppal, Hyderabad

Managed by Brothers of St. Gabriel Educational Society

**LEAD TO ILLUMINATE**



**PHYSICS**



# Little Flower Degree College

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## ACADEMIC YEAR 2020 -2021

### MEMBERS OF THE DEPARTMENT

Faculty Name	Designation
Ms. Sreelekha	HOD
Ms. Sreevidya	Faculty

## INDEX

SNO	Date	Name of the Event	Venue	Participants
1	18-08-2020 to 21-08-2020	Webinar on Advanced functional Materials	Online webinar, Nizam College	1
2	20-08-2020	Webinar on Renewable energy	Online, zoom Meeting	1
3	26-09-2020	International webinar on wormholes and black holes.	Online	75
4	19-09-2020	International Webinar on Introduction to Nanoscale Materials	Online zoom (St. Anns college)	1
5	27-01-2021 to 01-02-2021	National Level FDP on RESEARCH TRENDS IN PHYSICS AND ELECTRONICS	Online	150
6	16-03-2021	Rally on World Water Day	Uppal Ring Road	37
7	06-07-2021	Intra collegiate competitions- Poster presentation	online	17



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## WEBINAR ON ADVANCED FUNCTIONAL MATERIALS

A Faculty development programme was organised by department of chemistry and physics, Nizam college, Osmania University, Hyderabad on the topic "Advanced functional materials" from 18<sup>th</sup>- 21<sup>st</sup> August 2020,

The workshop aims to provide participants with valuable insights, skills, and connections to contribute to the ongoing research and development efforts in the exciting and rapidly evolving field of advanced functional materials.

The Workshop Enhanced understanding of the design principles, synthesis methods, and characterization techniques relevant to the development of functional materials.



Mrs. Sreevidya received Certificate of Participation





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## Nizam College

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### International Webinar on Advanced Functional Materials (18<sup>th</sup>-21<sup>st</sup> August 2020)

**Organized by**  
Department of Chemistry & Physics  
Nizam College, Osmania University, Hyderabad-500001



**Chief Patron**  
Shri Aravind Kumar, IAS  
I/c Vice Chancellor, OU



**Patron**  
Prof. Ch. Gopal Reddy  
Registrar, OU



**President**  
Prof. L.B. Laxmikanth Rathod  
Principal, Nizam College, OU

#### Conveners



**Dr. B. Vijaya Kumar**  
Asst. Prof. of Chemistry  
Nizam College, OU



**Dr. G. Upender**  
Asst. Prof. of Physics  
Nizam College, OU



click here  
Registration



9542981771

Visit: <http://nizamcollege.ac.in>

A/C: 0000062268075356  
IFSC Code: SBIN0020082  
Branch: Lalaguda, Secunderabad

Registration Fee  
**₹ 200/-**



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## WEBINAR ON A NEW PROSPECT ON RENEWABLE ENERGY FOR SUSTAINABLE FUTURE

**Event: Webinar**

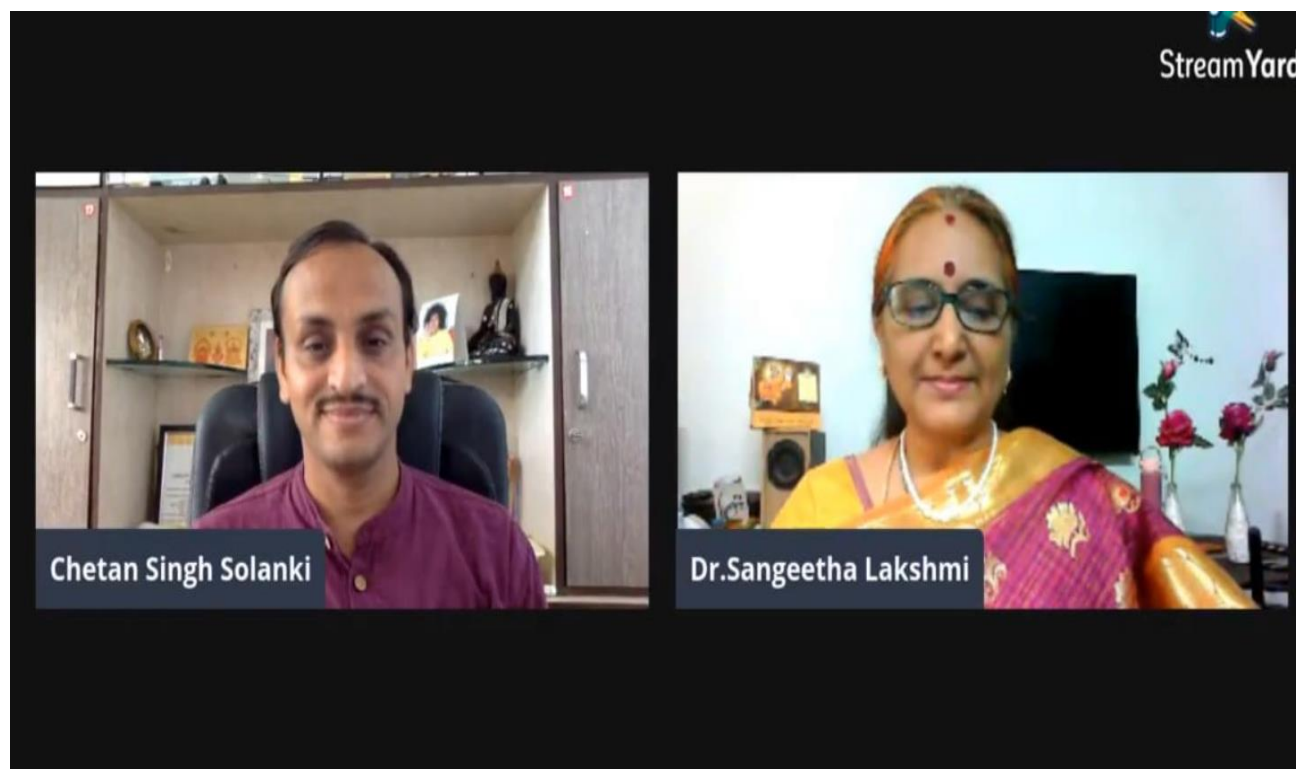
**Date: 20-08-2020**

**Venue: Online, Zoom**

**Participants: Faculty (1)**

A National Webinar was organised by the Department of Physics, St. Pious X Degree & PG College on “A New Prospect on Renewable Energy for Sustainable Future” on account of National “Akshay Urja Diwas”. Webinar was organised on 20<sup>th</sup> August, 2020 on Zoom platform. Guest speaker of the day was Prof. Chetan Singh Solanki (SOLAR MAN OF INDIA) Professor, Dept. Of Energy Science & Engineering, IIT-Bombay Founder, Energy Swaraj Foundation. Professor explained the benefits of attaining energy swaraj, his approach to energy swaraj, and the role of nature in the approach to attain energy swaraj. He also discussed the declining natural resources, how alarming the rise in CO<sub>2</sub> levels affects temperature.

The session was really interesting and the participants realised and understood the importance of energy conservation.



Mrs Sangeetha Lakshmi Introducing Guest Speaker.



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## Current Status

- CO<sub>2</sub> emission in 2018 **increased by 1.7% as compared to 2017**
- Installation of Renewable Energy in 2018 was same as 2017
- Levels of heat-trapping CO<sub>2</sub> in the atmosphere **rose to 415 parts per million in May 2019, higher than those observed in nature in at least 800,000 years.**

Chetan Singh Solanki

18

on "A new Prospect of Renewable Energy for Sustainable Future", Organised by Departme

Guest Speaker speaking about Conservation of Energy.





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## INTERNATIONAL WEBINAR ON WORMHOLES AND BLACK HOLES

**Event: International webinar**

**Date: 26-09-2020**

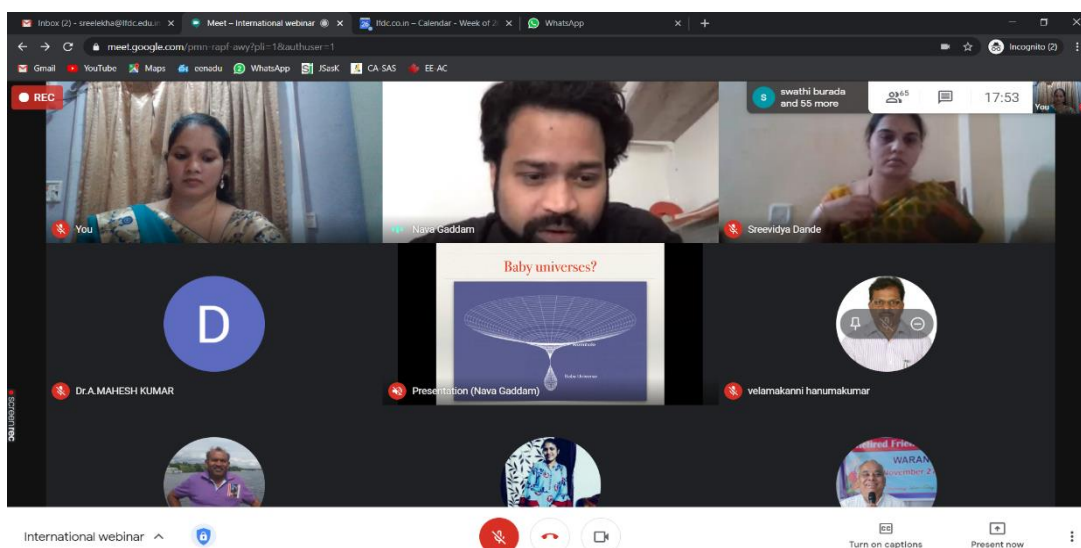
**Venue: Online, Zoom**

**Participants: Students (75)**

Wormholes and black holes are two of the most fascinating and enigmatic concepts in theoretical physics, captivating the imagination of scientists and laypeople alike. These cosmic phenomena represent extreme distortions of space-time, where the laws of physics as we know, them are pushed to their limits, offering profound insights into the nature of the universe.

Navaneeth Krishna explained the conceptual basis in Einstein's theory of general relativity. He explained how the mathematics of curved space-time allows for the existence of wormholes as bridges connecting distant regions of the universe. Despite their theoretical plausibility,

Dr Navaneeth Krishna concluded his lecture by discussing the astrophysical significance of black holes and their role in shaping the cosmos. She underscored their influence on galactic dynamics, star formation processes, and the generation of energetic phenomena such as quasars and gamma-ray bursts. Dr Navaneeth Krishna's lecture provided a captivating journey through the realms of wormholes and black holes, blending theoretical insights with observational discoveries and speculative considerations. He expertise and enthusiasm illuminated these cosmic enigmas, inspiring attendees to ponder the profound questions they pose about the universe and humanity's place within it.



Participants Listening to the topic Black Holes



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Dr Navaneeth Krishnan Explaining about Formation Of Wormholes





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## INTERNATIONAL WEBINAR ON INTRODUCTION TO NANOSCALE MATERIALS

**Event: International webinar**

**Date: 19-09-2020**

**Venue: Online, Zoom (St. Anns college)**

**Participants: Faculty (1)**

An International Webinar was organised by the department of Physics & Electronics, St. Ann's College for Women, Mehdiapatnam on "Introduction to Nano Scale Materials: Future of The World". Webinar was organised on 19<sup>th</sup> September, 2020 on Zoom platform. The guest speaker of the webinar was Prof. Dr Ibrahim Hussein, King Khalid University, KSA & Ain Shams University, Egypt. Initially, Professor introduced his team mates who coordinate with him in his research work. He also gave an insight into the available research facilities at his end, professor introduced various nanoscale materials, their synthesis procedure, applications in Electronic and Opto Electronic Devices. By the end of the session the Professor also discussed various programs for students and opportunities for research scholars available in the University. All the participants actively participated and gained knowledge on Nano Scale Materials and its scope in research.



Mrs Jaya from St Anns College Introducing Guest Speaker



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REC

### Classification of Nanomaterials

Ibrahim Yahia's screen

Prof. Dr Ibrahim Hussein explaining about Nanoscale Materials



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## **FDP ON RESEARCH TRENDS IN PHYSICS AND ELECTRONICS**

**Event: Faculty development program**

**Date: 27.01.2021 to 01.02.2021**

**Venue: Online (G-meet)**

A Faculty Development Programme was organised by Department of Physics and Electronics, Little flower degree college, Uppal, Hyderabad in collaboration with Auxilium college, Vellore, on the topic “Research trends in Physics and Electronics” from 27<sup>th</sup> January – 1<sup>st</sup> February, 2021.

Speakers for the session were:

1. Dr Manoj Balachandran, Associate professor, Christ University, Bengaluru.
2. Dr P Chandrasekhar, Professor, Osmania university, Hyd.
3. Dr R. Satyavathi, Associate professor, K.L university, Hyd.
4. Dr Amit Chaturvedi, Scientist F, DRDL, Hyd.
5. Dr C. Manikumar, Assistant professor, Gitam university, Hyd.
6. Dr Chandrashekar, Technical Manager, BDL, Hyderabad.

Topics like carbon-based nano materials with different nanostructures, embedded systems, difference between microprocessor and microcontrollers, IOT, introducing missiles, how it is different from Rockets, Research, key components and ethical norms in research, and about different areas of experimental and theoretical research, Raman spectroscopy were covered.

All the participants actively participated in the sessions and clarified their doubts.





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Sir explaining about Missiles

Sir Explaining about IOT



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## Rally on World Water Day

**Event: Rally**

**Date: 16-03-2021**

**Venue: Uppal ring road**

**Participants: 37**

Department of Physics in coordination with NSS organised a rally on 16-3-2021. All BSc I year(physics) students took part in the rally that passed through Uppal bus stop and culminated at the Ring road, the rally aimed at creating an awareness on water conservation, Students generated awareness about the water wastage and conservation with the help of placards and raising slogan “Save Water Save life”, among others for a distance of half Km.



Group Photo of Rally at Little Flower Degree College





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I BSc MPCs Student Participating in the World Water Day Rally





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## INTERCOLLEGIATE COMPETITIONS- POSTER PRESENTATION ON PHYSICISTS AND THEIR CONTRIBUTIONS

**Event: Poster Presentation**

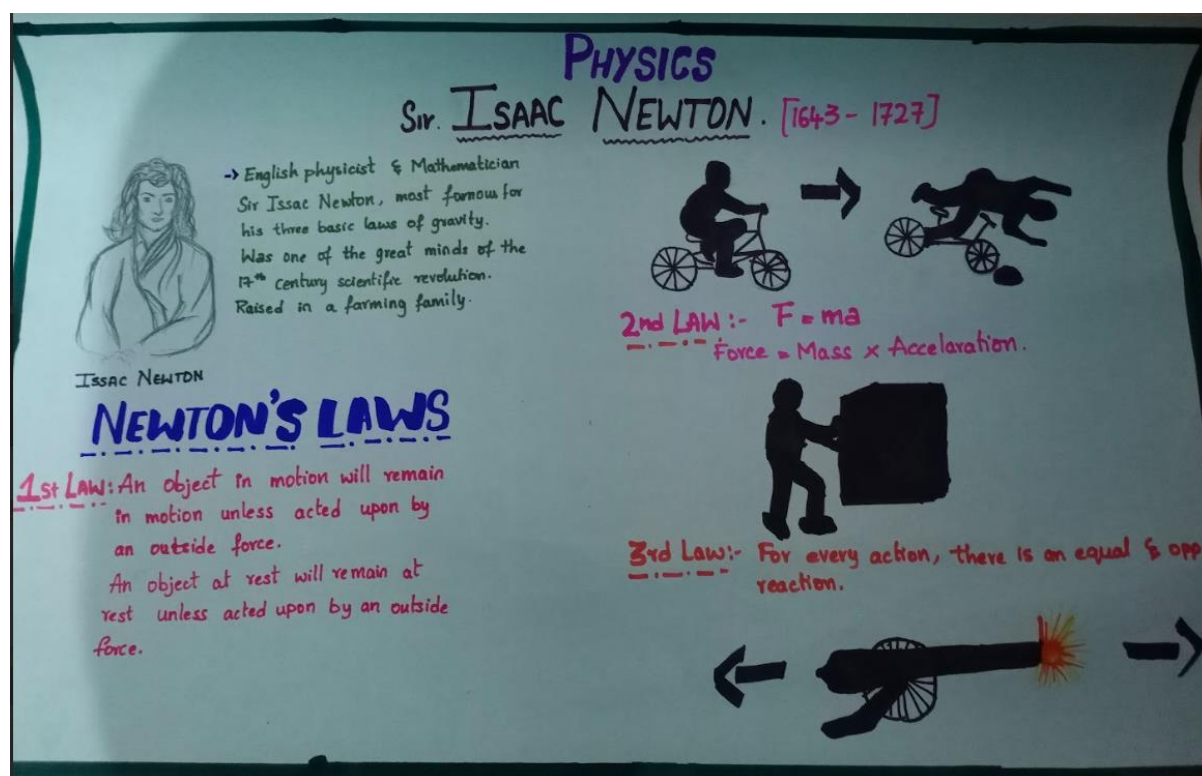
**Date: 06/07/2021**

**Venue: Online**

**Participants: students (17)**

The poster presentation aimed to highlight the groundbreaking contributions of prominent physicists throughout history. It focused on showcasing their significant discoveries and how they have shaped our understanding of the universe.

The poster design aimed for clarity and visual appeal. Each physicist was presented with a brief biography alongside their most notable contribution. Graphical elements such as timelines, equations, and illustrations of experiments were incorporated to enhance understanding. The poster presentation effectively highlighted the pivotal roles played by various physicists in advancing the field of physics. It served as a tribute to their intellect, perseverance, and enduring impact on scientific progress.



Student of 1 BSC MPC presented a poster on ISSAC NEW



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## Stephen Hawking

Name: Haripriya Yeleswarapu  
Class: B.Sc.MPC1  
Roll no.: 201020441004

*Stephen William Hawking was an English Theoretical physicist, cosmologist and author who was the director of research at the Centre for theoretical cosmology at the University of Cambridge. Stephen Hawking discovered "The Laws of Black hole mechanics."*



**Haripriya BSC MPC 1 presented a poster on Stephen hawking**