



Jointly Organize

Hosted by
Department of Physics & IQAC

NATIONAL LEVEL ONLINE FACULTY DEVELOPMENT PROGRAMME IN SCIENCE PEDAGOGY

Dates: 09 – 16, August 2021
@2pm -4pm

CHEIF PATRONS



Shri. Ashok Kumar Mundhra
Secretary



Dr.S.Santhosh Baboo
Principal

Dwaraka Doss Goverdhan Doss Vaishnav College [Autonomous]

ORGANISERS



Dr. V.Renganayaki
Assistant Professor
Dept. of Physics



Dr. T. S. Prema
Coordinator - IQAC

Dwaraka Doss Goverdhan Doss Vaishnav College [Autonomous]

RESOURCE PERSONS



Dr.T.S.Natarajan
Professor of Physics, IIT
Tirupathi



Dr.O.S.K.S.Sastri
Professor of Physics,
Central University of Himachal Pradesh



Dr.D.Uthra
Associate Professor & Head,
Dept. of Physics,
D G Vaishnav College



Dr.Anupma Harshal
Consultant (Science Communication &
Public Engagement)



Dr.Anoop Jaiswal
Physicist by passion



Dr.Apurva Barve
Coordinator, Centre of Excellence
in Science and Mathematics
Education at Indian Institute of
Science Education and Research
(IISER) Pune



Dr.C.Vijayan
Professor of Physics,
IIT Madras



DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(AUTONOMOUS), Arumbakkam, Chennai - 600106
College with Potential for Excellence
Linguistic Minority Institution



In association with

INDIAN ASSOCIATION OF PHYSICS TEACHERS(RC-13)

Organises

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ABOUT THE COLLEGE

Dwaraka Doss Goverdhan Doss Vaishnav College, a linguistic minority institution was established in the year 1964 by the Rajasthanis and Gujaratis settled in Chennai for the cause of higher education. The college with a sole purpose of imparting knowledge and value based information saw its grand day on 30th June 1964 with one course in B.Sc., Mathematics with Shri. Totadari Iyengar (Teacher of Dr. APJ Abdul Kalam) as its first Principal. Dwaraka Doss Goverdhan Doss Vaishnav College has been a haven for generations of enthusiastic learners through five decades and more. With the sole purpose of imparting value based quality education and empowering the youth, the college has seen phenomenal growth in terms of its infrastructure and revamped curriculum to cater to the specific needs of the students community. Outstanding performance of the students in academics and extension activities has enabled the college to emerge one of the premier institutions of higher learning.

ABOUT THE DEPARTMENT

The Department of Physics was established in the year 1964 by the visionary Prof. S.R. Govindarajan. This Department has always been unique for nurturing skills along with academics through its Astronomy club and Photography club yesteryears and currently through its Triple Helix club (affiliated to VIGYAN PRASAR under DST, Govt. of India) and STEM activities. Currently our department has been popularizing Foldscope, an innovation of Stanford University through the DBT Foldscope project. The Department has always had a legacy of having great teachers who inspired students, took them into their folds through their absorbing lectures, interactions and this legacy continues. The Department has a well equipped lab, excellent teaching staff and lab assistants provide excellent facilities with a student friendly environment for the undergraduates to work individually as well as in groups. This gives each student the courage to hone their abilities, work habits and traits to evolve into graduates equipped with 21st century skills. The department is actively involved in Popularization of Science through STEM activities to various Chennai Corporation Schools and other Schools.

ABOUT IAPT

The Indian Association of Physics Teachers (IAPT) was established in the year 1984 by the great visionary, (Late) Dr. D. P. Khandelwal, with active support from some Physics teachers, with the aim of upgrading the quality of Physics teaching and Physics teachers at all levels. It has now grown into a major organisation with about 6500 life members spread all over about 1500 organisations throughout the country including about 100 members from abroad. The members include school, college, university teachers, research workers, science administrators and science savvy enthusiasts. For its grass root working, the country is divided into 20 regions, each with a regional council. IAPT RC-13 (Tamilnadu & Pondicherry) has been organising various activities to enhance Physics Teaching and learning process.

OBJECTIVES OF FDP

- ☐ To empower the Faculty members with innovative pedagogy techniques for their professional development and student's enhanced learning
- ☐ To develop effective teaching skills for attaining excellence in higher education
- ☐ To enable them to develop suitable tools of teaching laboratory sessions
- ☐ To enable the participants to communicate effectively in the classroom
- ☐ To appreciate the relevance of active teaching methods for better student learning
- ☐ To inculcate and enhance the abilities of the faculty members to carry out independent research, write successful research projects
- ☐ To acquaint the Faculty members with teaching strategies that can promote independent, critical and creative thinking among the students

CONTENTS

- ☐ Different Pedagogical Methodologies
- ☐ Teaching Learning Process
- ☐ Research Based Pedagogical Tools
- ☐ Usage of Technological tools & simulation methodology
- ☐ Development of research proposals for various funding agencies

OUTCOMES

- ☐ Equip themselves with the usage of different Pedagogical techniques in their classroom
- ☐ Gain better understanding of how to enhance the critical thinking among students
- ☐ Design and implement evaluation schemes that can properly assess the student's learning
- ☐ Effectively improve the teaching learning process to make it student centric
- ☐ Equip themselves with the methods of submission of project proposals

PARTICIPANTS OF FDP

Faculty members of Physics, Chemistry, Biology, Mathematics and other related Science programmes. The FDP is offered at free of charge.

FDP DELIVERY MODE

- ☐ The FDP will be in device to device mode on the ONLINE platform with adequate facilities
- ☐ Participants will attend the sessions by logging in from their computer / laptop

FDP REGISTRATION LINK

<https://forms.gle/KiUvpCa2CJgDd6MB6>

FDP SESSION DAYS AND TIMING

- ☐ The programme will be conducted between 9 - 16, August 2021 excluding Sunday
- ☐ There will be one session per day from 2.00 pm to 4.00 pm

CERTIFICATION

- ☐ It is compulsory for the participants to attend all the sessions in order to receive an e-certificate of participation
- ☐ On completion and successfully clearing online quiz test, participants will be awarded e-certificate of participation

DATE	TIME	TOPIC	RESOURCE PERSON
09-08-2021	2pm - 4pm	Importance of Experiential Learning in Physics	Dr.T.S.Natarajan Professor of Physics, IIT Tirupathi
10-08-2021	2pm - 4pm	Simulation Methodology : A Step By Step Approach to Pedagogy of Computer Simulation Labs	Dr.O.S.K.S.Sastri Professor of Physics, Central University of Himachal Pradesh
11-08-2021	2pm - 4pm	Differentiated Classroom for STEM Teachers	Dr.D.Uthra Associate Professor & Head, Dept. of Physics, D G Vaishnav College
12-08-2021	2pm - 4pm	The Art of Storytelling	Dr.Anupma Harshal Consultant (Science Communication & Public Engagement)
13-08-2021	2pm - 4pm	Science at Play	Dr.Anoop Jaiswal Physicist by passion
14-08-2021	2pm - 4pm	Research-based Pedagogical Tools (RBPTS): What Are They And Why Do We Care?	Dr.Apurva Barve Coordinator, Centre of Excellence in Science and Mathematics Education at Indian Institute of Science Education and Research (IISER) Pune
16-08-2021	2pm - 4pm	Adventures With Science Teaching	Dr.C.Vijayan Professor of Physics, IIT Madras

Chief Patrons

Shri Ashok Kumar Mundhra, Secretary
Dr.S.Santhosh Baboo, Principal
Dwaraka Doss Goverdhan Doss Vaishnav College

Organising Committee

Dr.C.Vijayan, President, IAPT (RC-13), IITM
Dr.T.S.Prema, IQAC Coordinator
Dr.D.Uthra, Head, Dept. of Physics
Dwaraka Doss Goverdhan Doss Vaishnav College

Convenor

Dr.V.Renganayaki, Asst. Professor, Dept. of Physics

Organising Team

Dr.D.Syamala, Associate Professor, Dept. of Physics
Dr.V.Sangeetha, Asst. Professor, Dept. of Physics
Dr.D.Sridevi, Asst. Professor, Dept. of Physics
Ms.D.Pourkodee, Asst. Professor, Dept. of Physics
Dr.K.Selva Kothai Nachiyar, Asst. Professor, Dept. of Physics

For Further Details

Contact seminarphysicsday@gmail.com