

DEPARTMENT OF PHYSICS

PROVIDENCE WOMEN'S COLLEGE

NEWSLETTER 2023-24

Centre for Research and Post Graduate Studies

OUR HIGHLIGHTS



PROGRAMS OFFERED

- BACHELOR'S DEGREE IN PHYSICS
- MASTER'S DEGREE IN PHYSICS
- DOCTORAL PROGRAM IN PHYSICS

- DYNAMIC EDUCATORS
- SCOPUS INDEXED PUBLICATIONS
- ISRO & DST FUNDED PROJECTS
- IUCAA CENTRE FOR ASTRONOMY RESEARCH AND DEVELOPMENT : NODAL CENTER
- NATIONAL LEVEL WORKSHOPS
- TRAINING PROGRAMS FOR TEACHERS
- CERTIFICATE & SKILL COURSES
- ACADEMIC ADVANCEMENT PROGRAM
- STUDENT-LED INITIATIVES
- FIELD TRIPS & STUDY TOURS

ONGOING PROJECTS/ FUNDS ALLOCATED

MAJOR PROJECTS

Principal Investigator: Dr. Jeena K

Funding Agency: ISRO

Topic: Astrosat Observations of AGNs:
broadband spectral analysis and variability

Principal Investigator: Ashna V M

Mentor: Dr. Sini R

Scheme: Women Scientist Scheme A (Wos-A)

Funding Agency: Ministry of Science and Technology

Fund utilized in 2023-2024: Rs. 6,50,829/-

WORKSHOP / REFRESHER COURSE

Higher Secondary School Teachers Transformation Programme

Date : 16/2/2024 to 25/2/2024

Type: Refresher Course

Funding: Department of General education, Gov. of Kerala

Fund utilized: Rs. 8,46,230/-

AstroSat &XPoSat Workshop 2024

Date: 28/2/2024 to 3/3/2024

Type: Workshop

Funding: ISRO

Fund utilized: Rs. 8,38,787/-

ICARD ACTIVITIES

- Poster Making competitions
- One Day Seminar And Interactive Session: Exploring Solar System & Beyond
- Telescope Making Workshop

Funding: IUCAA

Fund utilized: Rs. 30000/-

DBT STAR COLLEGE SCHEME

- Recurring fund utilized: Rs. 1,50,000/-
- Non Recurring fund utilized: Rs.5,00,000/-

SCHOLARSHIP/ENDOWMENTS FOR STUDENTS

- Aluminae : Rs. 5000/-
- Retired and present Teachers: 10000/-
- Department association : 6000/-

TOTAL FUND UTILIZED: 30, 36,846/-

EDUCATORS IN VARIOUS ROLES

Dr. A. Sobha

- Chairperson of PG Examination Calicut University
- Chairperson of Question Paper Setter Kannur University
- Member of Question Paper setter St. Joseph College Devagiri
- DBT STAR College Scheme Department Coordinator
- Linways LMS coordinator
- Active Participation in Assessment and Evaluation Process

Dr. Jeena K

- ICARD Director
- IQAC Member
- NAAC Criteria 3 Coordinator
- Curie Project Co Investigator
- Member of Question Paper setter St. Joseph College Devagiri
- Active Participation in Assessment and Evaluation Process

Shija K

- Staff treasurer
- College Handbook Coordinator
- Member of NAAC video committee
- Student Solar workshop convener
- Active participation in Assessment and evaluation processes

Dr. Sr. Riya Jose

- NAAC - Campus beautification committee coordinator
- Active participation in assessment & evaluation processes

Dr.Sini R

- Head of the department
- IQAC Member
- UBA and CSS Coordinator
- NAAC exhibition committee Coordinators
- UGC Fellowship Nodal officer & Research Admission Committee Coordinator
- NAAC Criteria 7 Coordinator
- HSSTTP Coordinator
- PM USHA Nodal officer
- Discipline committee member
- Active Participation in Assessment and Evaluation Process

Dr. Siji A J

- PG Nodal officer
- APT talent search exam coordinator
- Carrier guidance cell - in charge of the department
- WWS coordinator
- Prize day coordinator
- Member of NAAC video committee
- Active Participation in Assessment and Evaluation Process

Dr. Aswathy S

- NAAC cultural committee member
- R & D cell department coordinator
- Prize day coordinator
- Active participation in assessment & evaluation processes

Mariot Jose Panjikaran

- Question Paper Setter Kannur University
- Active participation in assessment & evaluation processes

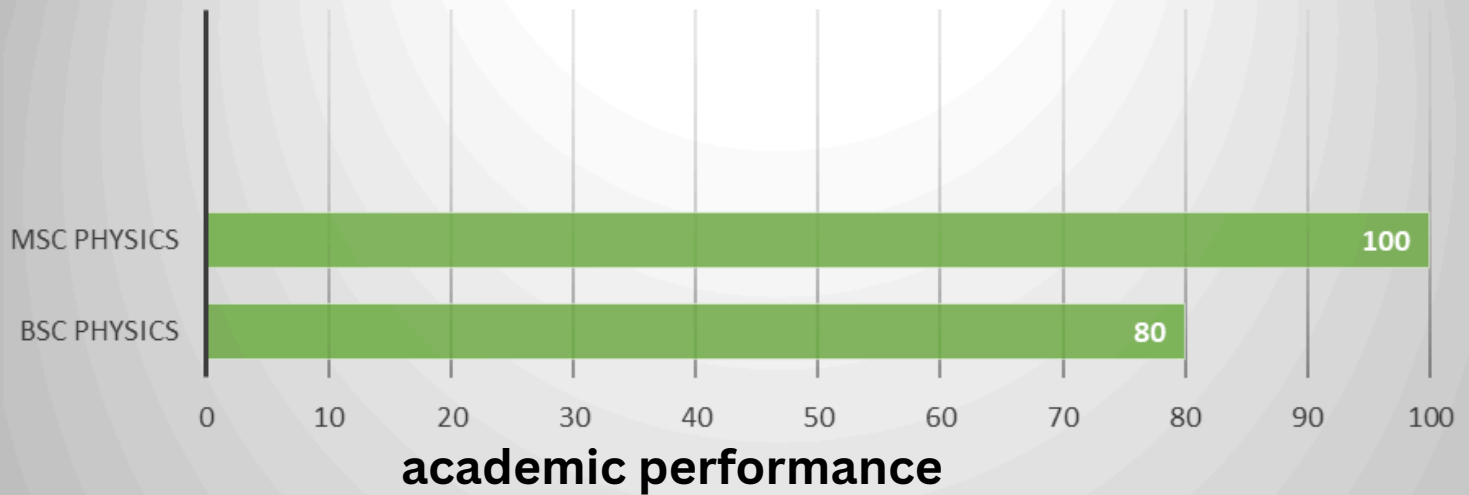
Faculty Development Programs Attended

- Dr Sobha A : NEP 2020 Orientation & Sensitization Programme
- Dr.Sini R : Faculty Development Programme on “Advanced Pedagogical Techniques”
- Dr. Jeena.K: NEP 2020 Orientation & Sensitization Programme

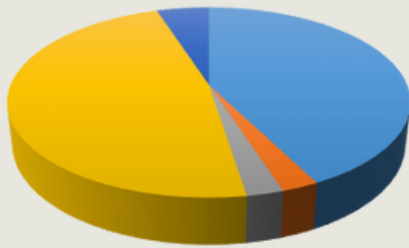
Faculty As Resource Person

- Dr. Sobha A : Invited talk on Attosecond light pulse to HSSTTP 23-24
- Dr. Sini R : ice breaking sessions for NSS volunteers of RSNPD YOGAM arts and Science college & St.Michels Girls Higher Secondary School
- Dr. Aswathy S: invited talk at the National Seminar on Artificial Intelligence in Astronomy & Astrophysics held at University of Calicut
- Dr. Riya Jose : Invited talk on Research Methodology to HSSTTP 23-24

ACADEMIC PERFORMANCE & PROGRESSION

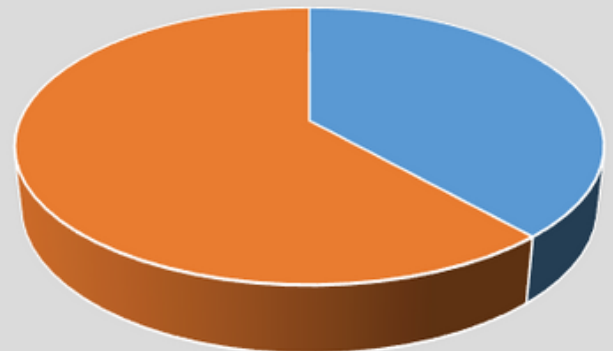


UG PROGRESSION



- M.Sc (17)
- B.Ed (1)
- LLB (1)
- PSC /UPSC Coaching (19)
- Nursing (2)

PG PROGRESSION



- B.Ed (5)
- NET/PSC/UPSC Coaching (8)

ACHIEVEMENTS



Dr. Siji A J

- Doctoral degree from NIT Calicut
- Mother veronica Bicentennial award for Best research publication award from science



Shija K

- Best Poster in International Conference on Light Matter Interaction & Ultrafast Processes (ICLMIUP 2024),



Ashna V M

- Mother veronica Bicentennial Scholarship for Best research Scholar



Shreya Ajith M

- All Kerala Physics Teachers Talent Search Exam 11th rank



PROVIDENCE WOMEN'S COLLEGE

[AUTONOMOUS]

DBT Star College

Re-Accredited with Grade A++ by NAAC

COLLEGE WITH POTENTIAL FOR EXCELLENCE [2016-21]

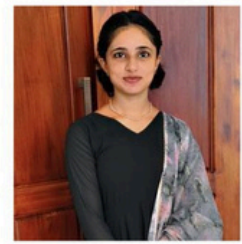
DEPARTMENT OF PHYSICS

Congratulations

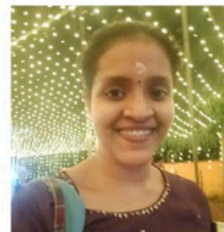
IIT JAM 2024



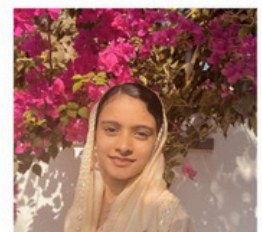
Ashida Nasreen
AIR 1117



Anjalikrishna A. K
AIR 2985



Gayathri. V
AIR 1588





Fida
AIR 1866


RESEARCH PUBLICATIONS



materialstoday
COMMUNICATIONS



Volume 37, December 2023, 107199

Modulating the fluorescence properties of carbon dots by varying the stoichiometric ratios of citric acid and urea during the synthesis

Jeesna MS,^a Abhishek Nambiar,^b Sobha A.^a  

Show more 


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<https://doi.org/10.1016/j.mtcomm.2023.107199>  [Get rights and content](#) 


**Jeesna MS, Abhishek Nambiar ,
Sobha A, Materials Today
Communications, Volume 37,
December 2023, 107199**


**S. A. John, A. K.
Satheesan, S.
Pushpan K., and C.
Keloth, Phys.
Chem. Chem. Phys.,
vol. 25, no. 23, pp.
15839–15845, 2023**

Issue 23, 2023 [Previous Article](#) | [Next Article](#)

 From the journal:
Physical Chemistry Chemical Physics

Photonic crystal cavity-mediated improved absorptive nonlinearity of C-4-hydroxy-3-methoxyphenilcalix[4]resorcinarene[†]  Check for updates


[Siji Alappattu John](#), ^{ab} [Athulya Kadeprath Satheesan](#),^a [Simi Pushpan K.](#),^c and [Chandrasekharan Keloth](#)^{*a}

 [Author affiliations](#)



**Aleena Wilson , Abhishek
Nambiar , A. Sobha, Materials
today Proceedings 3 May 2023**


materialstoday:
PROCEEDINGS



Available online 3 May 2023



In Press, Corrected Proof  [What's this?](#)

Synthesis of Graphene Quantum Dots by Liquid Phase Exfoliation Method and its Applications

Aleena Wilson,^a Abhishek Nambiar,^b A. Sobha^a  

Show more 

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<https://doi.org/10.1016/j.matpr.2023.04.362>  [Get rights and content](#) 

SEMINARS/ CONFERENCES ATTENDED BY FACULTY/ RESEARCH SCHOLARS/ STUDENTS



Ms. Rukkiyya V, 9th Regional Astronomy Meet, Manipal Centre for Natural Sciences



Dr Sini R, 10th IICGC: New Horizons and Singularities in Gravity, IIT Guwahati



Ms. Shija K, NCFMA-2024, CUSAT



Ms. Akhila K, Indo-French Workshop, IUCAA



Ms. Shija K, ICLMIUP 2024, Mahatma Gandhi University



Ms. Akhila K, Astrosat & XpoSat workshop



Ms. Shija K, ICTEP 2024, Farook College



IUCAA CENTRE FOR ASTRONOMY RESEARCH AND DEVELOPMENT :ACTIVITIES

EXPLORING SOLAR SYSTEM & BEYOND

one-day seminar on July 31st, 2023



TELESCOPE MAKING WORKSHOP

Outreach program for school children on 18/10/2023



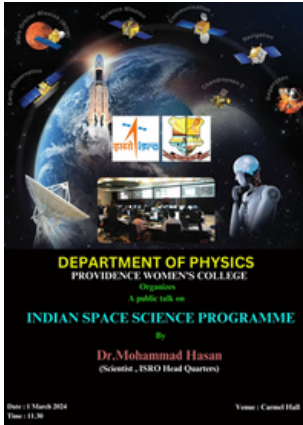
CITIZEN SCIENCE PROGRAM : ONE MILLION GALAXIES



Citizen Science program in collaboration with Pune Knowledge Cluster on 19-02-2024

IUCAA CENTRE FOR ASTRONOMY RESEARCH AND DEVELOPMENT :ACTIVITIES

PUBLIC TALK ON INDIAN SPACE SCIENCE PROGRAM



celebrated Science Day on 1/03/2024 by organizing a public speech on the 'Indian Space Science Program'

INTER COLLEGIATE POSTER MAKING COMPETITION



Poster making competition on 21/07/2023



ASTROSAT & XPOSAT WORKSHOP 2024

The AstroSat Science Support Cell (ASSC), IUCAA, ISRO and Department of physics, Providence Women's College, organized a five day workshop for Research Scholars and motivated M.Sc students from 28th february 2024 to 3rd March 2024.



AstroSat & XPoSat Workshop 2024

28 FEBRUARY 2024 - 03 MARCH 2024

Organised By
Providence Women's College Kozhikode and
Inter-University Centre for Astronomy and Astrophysics Pune
Sponsored By ISRO



PHYSICS ASSOCIATION INITIATIVES

CHANDRAYAAN 3 LAUNCH

A live presentation on the Chandrayaan 3 launch, a significant event in India's space exploration journey, on July 14th, 2023

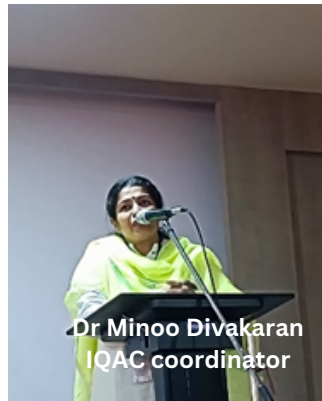


ASSOCIATION INAUGURATION

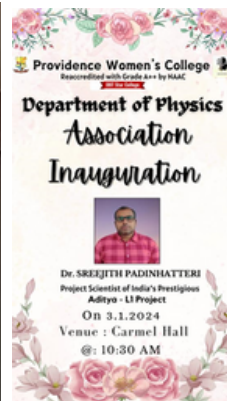
The Association inauguration of the Department of Physics, held on January 3rd, 2024, was a significant event marked by Dr. Sreejith Padinhatteeri, Assistant Professor at the Manipl Centre of Natural Science



Dr Sreejith P
Aditya L1 Solar Mission
Project Scientist



Dr Minoo Divakaran
IQAC coordinator



KSEB POWER QUIZ

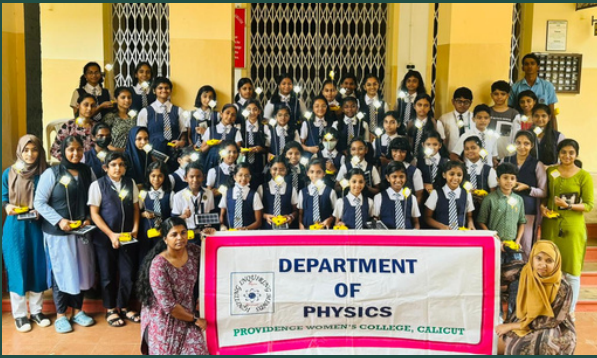
The Kerala State Electricity Board (KSEB) organize a college-level competition for State Level Power Quiz.



PHYSICS ASSOCIATION INITIATIVES

STUDENT SOLAR AMBASSADOR WORKSHOP

The Student Solar Ambassador workshop held on October 2nd, 2023, stands out as a collaborative effort between the Department of Physics, Providence Women's College and the Energy Swaraj Foundation.



FRESHERS DAY

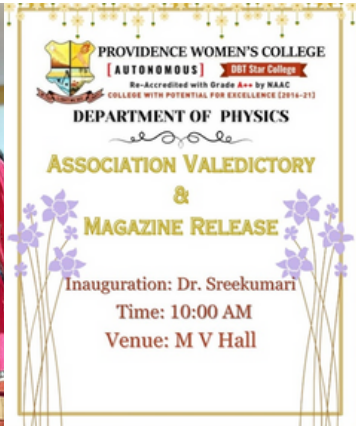


FAREWELL FUNCTION



PHYSICS ASSOCIATION INITIATIVES

ASSOCIATION VALEDICTORY & MAGAZINE RELEASE



Dr Sreekumari inaugurating association valedictory

The official valedictory function of the Physics Association was organized on March 25th, 2023. Dr. Sreekumari, esteemed Head of the Department of Malayalam, graced the occasion with her presence and inaugurated the program, underscoring the interdisciplinary spirit that permeates educational institutions



A highlight of the valedictory function was the release of the department magazine. Magazine editor Aysha Abid shared her insights and experiences about the magazine.



critical appreciation competition in English and Malayalam
National reading Day: 19 June 2024

DAYS OBSERVED



International Day against drug abuse: 26 June 2024



Pride month Celebration: 7 July 2024



Moon landing Day: 21 July 2024



Flash mob

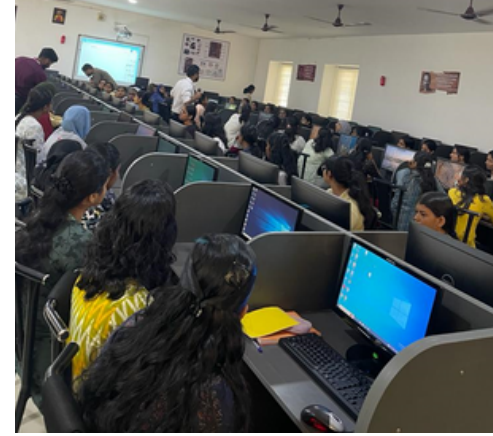
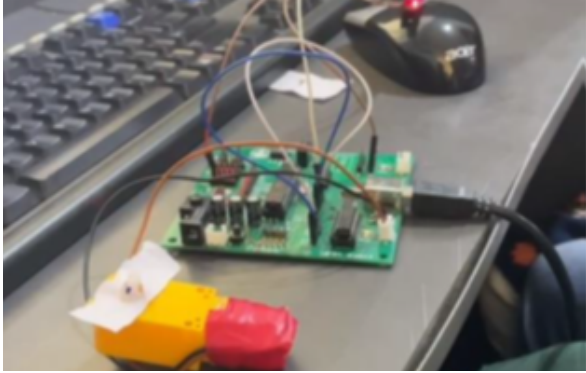


Poster competition

Energy conservation day: 20 December 2024

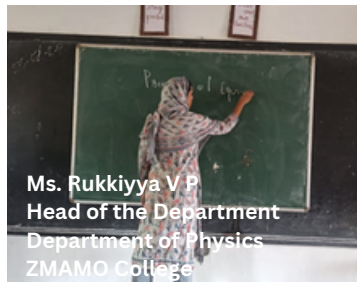
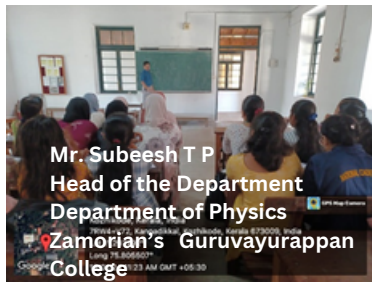
PHYSICS DEPARTMENT ENDEAVORS

ROBOTICS & AI WORKSHOP



4day AI workshop from November 28 to December 1, 2023, as part of the DBT Star Scheme

FACULTY EXCHANGE PROGRAM CLASS ON INTERIOR DESIGNING



On November 2nd, the Department of Physics arranged a class focused on interior design



TRAINING FOR LAB STAFF



JAM EXAM ORIENTATION

IIT JAM entrance exam orientation was conducted on 23 /6/2023

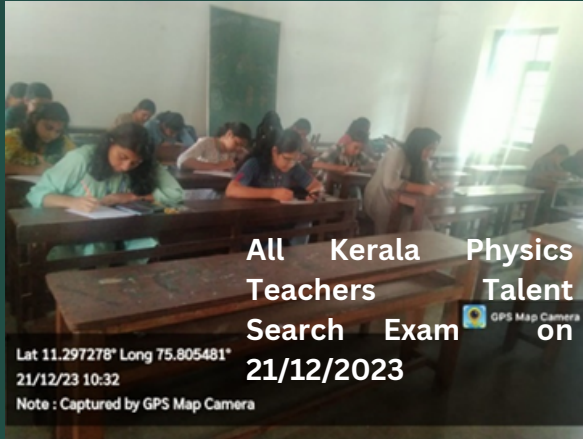


A comprehensive training program was held on March 4th and 5th for laboratory staff in collaboration with the Prominent Group



PHYSICS DEPARTMENT ENDEAVORS

APT TALENT SEARCH EXAM



PARENT-TEACHER ASSOCIATION



EMBRACING THE DIGITAL FUTURE



Providence Women's College
Re accredited with A++ by NAAC
DEPARTMENT OF PHYSICS

Embracing the Digital Future

Explore cutting-edge topics with expert speakers from DUK, and embrace the opportunities that the digital era presents.

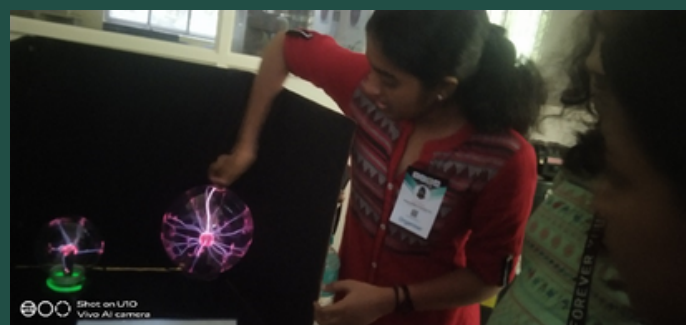
IN ASSOCIATION WITH

DIGITAL UNIVERSITY OF KERALA
THIRUVANANTHURAM

24/1/2023 1:30 PM A V HALL

The Department of Physics organized an interaction with expert speakers from the Digital University of Kerala on the 24th of January 2024

CURIOCON : PLASMA EXHIBITION



A unique opportunity to serve as scientific volunteers at "The 4th State Plasma Exhibition," a flagship event organized as part of the scientific outreach endeavours of the Institute for Plasma Research (IPR) in Gandhinagar, Gujarat

PHYSICS DEPARTMENT ENDEAVORS

THE GLOBAL SCIENCE FESTIVAL: FIELD TRIP



Providence Women's College's Department of Physics organized an educational tour to the Global Science Festival in Thiruvananthapuram from January 31st to February 2nd, 2024. The tour included 23 1st year UG students, 27 2nd year UG students, and 16 1st year PG students

selfie contest

PHYSICS DEPARTMENT ENDEAVORS

INDUSTRIAL VISIT: TIFR BALLOON FACILITY, HYDERABAD



Providence Women's College's Department of Physics organized an industrial visit to the Tata Institute of Fundamental Research (TIFR) Balloon Facility in Hyderabad on 9th January 2024 with final year BSc Physics Students.

HIGHER SECONDARY SCHOOL TEACHERS TRANSFORMATION PROGRAM 2024

The Higher Secondary School Teachers Transformation Program, a 10-day refresher program, was orchestrated by the Director of General Education in collaboration with Collegiate Education, Kerala. This year, it commenced on February 16, 2024, and concluded on February 25, 2024



Inauguration by Prof. Dr. M. K. Jayaraj, the esteemed Vice-Chancellor of the University of Calicut



Prof. Ajith Kembave's talk



Experimental demonstration session



inter-departmental visits



Lab sessions



Student Interactions



SERC research coordinator



Field trip



Blended interaction with Deputy Director



Group activities

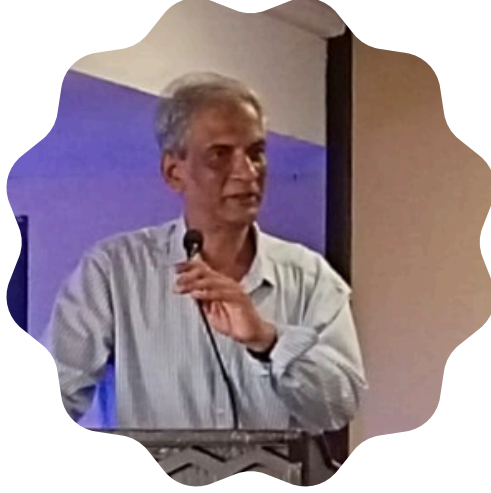


Valedictory

DISTINGUISHED VISITORS IN 2024



Prof. Ajit Kembhavi
Professor (Retd),
Former Director IUCAA
Pune Knowledge Cluster



Prof. Ranjeev Misra
Dean, Visitor Academic Programmes
Senior Professor, IUCAA



Prof. M K Jayaraj
Vice-Chancellor of
University of Calicut



Dr. Mohammed Hassan
SPO, ISRO HQ, Bangalore



Prof. Sudhansu Barway
Associated Professor, IIA



Dr. Sreejith Padinhatteri
Assistant Professor
Manipal Centre of Natural Science



Dr. Disha Sawant
Pune Knowledge Cluster



Ms. Netra S Pillai
Scientist, URSC Bangalore



Kozhikode, Kerala, India
7RW4+V72, Kannadikkal, Kozhikode, Kerala 673
Lat 11.297627°
Long 75.805254°
22/08/23 03:49 PM



ERS OF
MENTAL BAL
COMPETITION

