



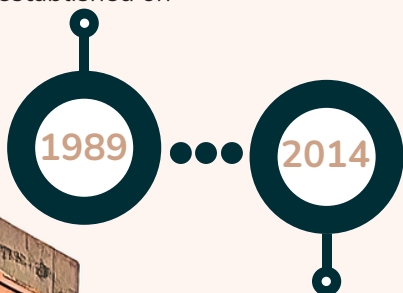
Branch at a Glance

DEPARTMENT OF PHYSICS

In 1989, Department of Physics inculcated as a separate department. The Department of Physics and Mathematics founded in 1926 along with ISM and subsequently converted into Department of Applied Science in 1984 and restructured as Department of Physics. Department caters to the needs of under-graduate and post-graduate under different courses as such Preparatory, B. Tech, two-years M. Sc. The department also runs PhD. programme in front line areas of research.



Department established on



B.Tech in Engineering Physics was introduced.

DOMAINS OF STUDY

- Optics
- Nuclear Physics
- Quantum Mechanics
- Quantum Materials
- High Energy Physics
- Spectroscopy
- Statistical Mechanics
- Laser's

RESEARCH INITIATIVES

- Quantum Technology
- Biophysics
- Nanoscience and Technology
- Semiconductor Technology

LABORATORIES - UG, PG

- UG Common Physics Lab
- Optics Lab,
- Spectroscopy Lab
- Waves and Acoustics Lab
- Mechanics Lab
- Thermal physics and Electronics Lab.

Courses	Strength
B. Tech	22
MSc. Tech	45
Ph.D	88

PLACEMENTS & INTERNSHIPS

51+ LPA
Max. CTC

18+ LPA
Median CTC

75k / mo
Median Stipend during Internship

Past recruiters



University collaborations



& many more...

updated data from 23-24'

Research & Development

Meet our HOD



Prof. BOBBY KACHAPPILLY ANTONY

(Professor)

26-07-2022 - Present

B.Sc.- Christ College, Irinjalakuda (1996)

M.Sc.-University of Calicut (1998)

PhD- SP University / Open University (2005)

Primary Areas of Research

Atomic and Molecular Physics, Molecular Spectroscopy



Achievements

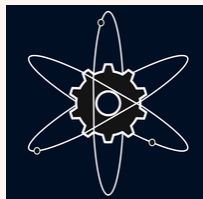
- ASEM DUO PROFESSOR'S FELLOWSHIP- ASEM DUO (2022)
- POST DOCTORAL RESEARCH FELLOWSHIP-University of Massachusetts Lowell, USA
- SENIOR RESEARCH FELLOWSHIP-CSIR, India

Ongoing & Completed Departmental Research

1. Peckle techniques for optimum utilization of irrigation water by monitoring in-situ plant water stress. Domain of Work: Optical Interferometry and Biophysics. Department of Science and Technology, New Delhi- Funding Amount: 38.38 Lakh Rupees.
2. Design of a webserver based hybrid physiological sensor with optical cloth for real-time health specialist care. Domain of Work- Sensors and Transducers and Biophysics. Department of Science and Technology(SERB), New Delhi- Funding Amount: 40 Lakh Rupees
3. Photo-thermal optimization of upconversion nanoparticles as contrast enhancer for Optical Coherence Tomography (OCT). Domain of Work: Optical Coherence Tomography. Department of Science and Technology (SERB), New Delhi- Funding Amount: 19.29 Lakh Rupees.
4. Single Crystal Growth and Study of Frustrated Magnetism in Triangular Lattice Cuprates $\text{Ba}_3\text{Cu}(\text{Nb}/\text{Ta})_{209}$. Domain of Work: Condensed Matter Physics. Project No. DST(SERB) (368)/2022- 2023/972/PHYSICS. Department of Science and Technology (SERB), New Delhi- Funding Amount: 26.52 Lakh Rupees.
5. Study of Strongly Coupled Non-Ideal Plasma States of Carbon At Extreme Conditions. Domain of Work: Thermal Kinetics. Project No. DST(SERB)(357)/2022- 2023/956/PHYSICS. Department of Science and Technology (SERB), New Delhi- Funding Amount: 30.10 Lakh Rupees.
6. Investigations of Strongly Correlated Topological Phases In Heavy Fermion And Rare-Earth Materials. Domain of Work: Condensed Matter Physics. Project No. DST(SERB)(358)/2022- 2023/957/PHYSICS. Department of Science and Technology (SERB), New Delhi- Funding Amount: 25.68 Lakh Rupees.
7. Project Title- Monitoring the aggregation kinetics of amyloid-beta and its inhibition. Domain of Work: Biophysics. Project No. DST(362)/2022-2023/965/PHYSICS. Department of Science and Technology (SERB), New Delhi- Funding Amount – 32.59 Lakh Rupees.

Student Activities and More

Society of Physics



Objectives of the Society

- The idea is to create an environment for discussions research.
- To encourage people to explore themselves in the cutting-edge interdisciplinary research going all around the world.

Guest Talks by the Society

- The society organizes various guest lectures from renowned professors on various fields of physics such as Nuclear Science, Particle Physics, Nanoscience , Astronomy and Quantum Computing.

Foreign University Collaborations

- Uppsala University, Sweden
- Technical University of Dresden, Germany
- Technical University of Darmstadt, Germany
- Technical University of Hamburg, Germany
- Max Planck Institute Dresden, Germany

GATE RESULTS

- GATE 2024- 10 selections (M.Sc.)
- GATE 2023- 12 selections (M.Sc.)
- GATE 2022- 15 selections (M.Sc.)

Major Equipment

- PHI 5000 versa Probe III
- High Temperature (1600°C) Horizontal Single Zone Tubular Furnace
- Photoluminescence Spectroscopy, Photoacoustic Spectroscopy, Upconversion emission Spectroscopy
- Modified DHI for nanoparticle characterization

Specific Areas of research

- Prof. R Thangavel- Condensed Matter Physics.
- Prof. Tusharkanti Dey- Experimental Condensed Matter Physics.
- Prof. Kaushal Kumar-Spectroscopy of Rare Earth ions.
- Prof. A.K. Nirala- Optical Interferometry, Speckle based measurement and DHI.

Research scholars working with faculty members

- A team of Research Scholars working under Prof. R Thangavel in X- Ray Photoelectron Spectroscopy (XPS) lab-CRF
- A team of Research Scholars working under Prof. Tusharkanti Dey in Quantum Magnetism Lab
- A team of Research Scholars working under Prof. Kaushal Kumar in Upconversion Emission Laboratory
- A team of Research Scholars working under Prof. A.K. Nirala in Laser and Holography Lab (Room No-527B)