#### **About the Institute:**

Established in the year 2001, JIIT Noida is a "Deemed to be University" under Section 3 of UGC Act 1956. The institute is NAAC (MHRD) accredited and NIRF (MHRD) ranked teaching excellence in and research. State-of-the-art environmentally conditioned comprises campus smart buildings with Wi-Fi connectivity covering the Academic Blocks, Business School cum Research Blocks, Faculty Residences, Student Hostels, and Annapurna, which provides a pleasant and ambience. stimulating institute has well-equipped modern laboratories and an intellectually stocked Learning Resource Centre and  $E_{-}$ Resources in the form of journals and other learning materials.

## **Primary focus areas:**

Quantum computing Quantum cryptography

## **Secondary focus areas:**

Quantum materials Quantum sensing

#### **Lab Sessions:**

Hands-on training using cloud-based quantum computers such as IBM quantum computer
Programming platforms related to Quskit, Qutip, Mathematica, Matlab

# **Resource persons:**

A set of eminent speakers from academia and industry will deliver talks on the latest research areas and related advanced topics. Few pedagogical lectures on basic concepts will also be delivered.

Every day there will be 2-3 lectures (with adequate time for discussion) and lab session or hands on training.



JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY
(Deemed to be University under section 3 of UGC act 1956)
A-10, Sector-62, Noida-201309, Uttar Pradesh

# One Week Faculty Development Program on "Quantum Computing and Quantum Cryptography"





17th - 21st July 2023

Organized by
Department of Physics and
Materials Science
& Engineering, JIIT Noida

## **About the Department:**

The Department of Physics and Materials Science and Engineering (PMSE) offers several basic and advanced courses on physics and materials science to B.Tech students of ECE. CSE, IT and Biotech branches. The Department also offers courses to PhD students and the students of two year M. Sc. program in Physics. The goal of Physics as perceived by the Department is to understand the working of everything in the physical world from the first principles. The Department combines physics and materials science to solve real-world associated problems with energy, nanotechnology, quantum devices, optics and other major engineering disciplines. The Department has research laboratories with stateof-the-art equipment.

The Department also has PhD program in research areas of Nanoscience and Multifunctional Nanomaterials. Energy and Advanced Functional Materials, Atomic and Molecular Physics, Photonics and Plasmonics, Quantum Optics and Quantum Information, Optical Sensors, Vibrational Spectroscopy, Raman Spectroscopy, Solid State Ionics, Diluted Semiconductors Magnetic (Spintronics), Thermoelectric and Superconducting Materials and Laser Plasma Interactions. In addition. faculty members of the Department mentor postdoctoral fellows. Presence of post-doctoral fellows and a good number of externally funded projects enhance the academic ambience of the Department.

### **Registration fee:**

Participants from Academia/Industry:

Rs 2500/- per person

**Participants from JIIT: NIL** 

The fee includes tea and snacks during the program. Please note that no TA/DA or accommodation will be provided to the participants.

## How to register:

Participants have to fill the below mentioned google form:

https://forms.gle/HSqiGtUsKbz1hmfa6

Payment link: Fee can be paid via scanning the QR code or using the link <a href="https://payments.cashfree.com/forms/FD">https://payments.cashfree.com/forms/FD</a>
<a href="PPMSE">PPMSE</a>



Last date of Registration: 10<sup>th</sup> July 2023

#### **Chief Patron:**

Hon'ble Shri Manoj Gaur (Chancellor, JIIT)

#### **Patrons:**

Prof. S.C. Saxena (Pro Chancellor, JIIT) Prof. B.R. Mehta (Vice Chancellor, JIIT)

#### **Program Chair:**

Prof. Anirban Pathak (HoD, PMSE)

#### **FDP Coordinators:**

Prof. Papia Chowdhury Dr. Sandeep Mishra Dr. Guruprasad Kadam

#### **Address for Communication:**

Department of Physics and Materials Science and Engineering, Jaypee Institute of Information Technology, Noida, A-10, Sector -62, Noida-201309, U. P.

Prof. Papia Chowdhury (papia.chowdhury@mail.jiit.ac.in, 9968055283)

Dr. Sandeep Mishra (sandeep.mishra@mail.jiit.ac.in,

9968470125)

Dr. Guruprasad Kadam (guruprasad.kadam@mail.jiit.ac.in, 7506081810)