



SOCIETY FOR ELECTRONIC TRANSACTIONS AND SECURITY [SETS]

CIT Campus, MGR Knowledge City, Taramani,
Chennai – 600 113, India.

Adv No : SETS/Chn/Rec/Proj/2020/03

Date : 29th January 2020

Society for Electronic Transactions and Security [SETS] is a non-profit society dedicated to research and development in the field of Information Security under the initiative of the Office of the Principal Scientific Advisor (PSA) to Government of India.

SETS invites applications from citizens of India for filling up the position of **Research Associate** for a sponsored project from **the Department of Science and Technology (DST), Government to India** to SETS for two years.

Short description of the project: Quantum Key Distribution (QKD) ensures secure communication between two parties using Cryptographic protocol and Quantum mechanisms. In this project, main goal is to develop new and efficient modules for data acquisition and post processing required for fibre-based and free-space QKD systems. In particular, the deliverable will be a QKD post processing engine running on FPGAs. The post processing engine will feature modules for sifting, error parameter estimation, synchronization, authentication, privacy amplification, error correction and verification.

The descriptions of positions, detailed qualification requirements and salary are given below:

Name of the Post	RESEARCH ASSOCIATE	
Number of Posts	One	
Age Limit	Not more than 37 years as on 19.02.2020	
Essential Qualification	i. PhD/MS in Engineering/ Science in the relevant area of the project or ii. First Class M.Tech /M.E (Microelectronics and Photonics/Laser and Electro optics/Applied Electronics/VLSI Design/Embedded System/ Communication System) or equivalent with at least three years of relevant experience.	
Work Experience / Desirable criteria	<ul style="list-style-type: none">• Candidates with experience in Quantum Key Distribution, Cryptography and System Design & Development using FPGAs.• Candidates with valid GATE Score	
Areas of Skill sets/ Knowledge required	a) Knowledge of Quantum Key Distribution protocols, high speed optical communication protocols (Aurora, IBERT). b) Hands-on exposure of FPGA implementation flow, Xilinx Vivado tools and FPGA boards. c) Hands-on exposure of Optical communication interface between FPGA boards	
Remuneration	Consolidated Salary during First Year	Rs.49,000/- per month plus 24% of HRA
	Consolidated Salary based on the performance of the 01 st Year	Rs.54,000/- per month plus 24% of HRA

The positions as proposed are purely temporary and would be filled on a contract basis with a consolidated salary under project mode for a period of 24 months. There is no scope of continuation/regularization/absorption under any circumstances.

Application Procedure:

1. Only applications received via email will be considered. The Subject line in the email should contain the “**Application for the post of Research Associate**”. The candidate is required to attach the following documents to the Email:

- a. Resume (doc/pdf format) and
- b. Personal Particulars form (pdf format) duly filled.

The Personal Particulars form is hosted at SETS homepage <https://setsindia.in/>.

2. The email should be sent to [hrqkd2020\(at\)setsindia.net](mailto:hrqkd2020@setsindia.net) .
3. **The last date for receiving applications by Email is 19.02.2020.**
4. Shortlisted candidates would be required to attend a Written Test and/or Interview at SETS, Chennai. The date and time for this would be intimated to shortlisted candidates by Email.

Terms and Conditions:

1. The shortlisted candidates would be required to bring all their original testimonials for verification on the test/interview day.
2. No TA/DA will be given to candidates appearing for written test or interview.
3. The prescribed qualifications are minimum and mere possession of the same does not entitle the candidate to be called for the written test or interview. The decision of the Executive Director of SETS in all matters relating to eligibility, acceptance or rejection of the applications, cancellation of advertisement and filling up or not filling up of post will be final and no inquiry or correspondence will be entertained in this matter.

Executive Director