

Item Description: Next Generation Sequencing Platform

Reference No: NIPER-G/148/EQP/NGS/GAP-125/2020-21 dated: 12.02.2021

a) General Terms and Conditions

General Terms and Conditions	Revised Terms and Conditions
1 a For imported items: A letter of credit will be established for 100% value with the following stipulations: I. 50% payment will be released against physical delivery of items at NIPER- Guwahati in good condition. II. 40% payment deducting Indian agency commission component after satisfactory installation, commissioning, demonstration, Training etc. The component of Indian agency commission will be released separately in equivalent Indian currency to Indian agent against submission of their claim. III. Balance 10% will be released after receiving performance bank guarantee to cover warranty obligation	The payment terms remain the same as mentioned in the tender document.

12. Delivery : As agreed by the institute and supplier, any delay in delivery of items beyond accepted date may attract penalty/liquidated damages as per tender enquiry/purchase orders. The ordered item needs to be delivered and installed at our new campus at	The shipment needs to be CIP/CIF Guwahati. The vendor's responsibility is to arrange the customs clearance and transportation from the nearest custom clearance agency to NIPER Guwahati.
Changsari as per the address given below	Institute will provide necessary documents like DSIR/CDECcertificates upon request.

b) Technical Specifications for NGS

S.	Technical Specification	Revised Specification
No. 1	The next-generation sequencing (NGS) system should be a compact benchtop model with minimal foot print and the system should offer throughput upto 120 Gb (400 million reads) or better in a single run to address multiple applications like sequencing of large genomes, whole transcriptomes, targeted re- sequencing, shotgun metagenomics, small RNA seq, methylation analysis, GBS, ChIPseq etc.	The next-generation sequencing (NGS) system should be a compact benchtop model with minimal foot print and the system should offer throughput to maximum of 120 Gb (400 million reads) or betterin a single run to address multiple applications like sequencing of large genomes, whole transcriptomes, targeted re-sequencing, shotgun metagenomics, small RNA seq, methylation analysis, GBS, ChIPseq etc.
2	Standalone instrument should performs clonal amplification, sequencing, paired-end run and primary data analysis and secondary data analysis.	No Change
3	The sequencing chemistry should be robust and globally proven and allow for highly accurate sequencing with publications in	No Change

	high-impact international journals.			
4	The sample / library preparation protocol should be well defined and easy of use with minimal hands-on time. The manufacturer should also offer kits and reagents for library preparation from DNA/RNA.	No Change		
5	Sequencing technology should be capable of detecting and sequencing at least 15 bp homo- polymer stretches in the genomic sequence.	d be capable of detecting an - sequencing at least 10 bp o		
6	System should be able to sequence multiple samples at a time.	No Change		
7	The sequencing workflow should allow fully automated operation of paired- end chemistry without user intervention.	No Change.		
8	Clonal amplification of DNA template should be fully automated and integrated part of the system.	Clonal amplification of DNA template should be fully automated and integrated part of the system or ancillary system supplied with the main instrument.		
9	System should be able to sequence multiple samples at a time with option of using barcodes for sample multiplexing.	No Change.		
10	The system should include latest software, hardware, accessories and technology available at the time of installation which is needed for generating high quality sequence reads.	No Change		

11	System should offer flexible read	No Change
	length to support different applications.	
12	The system should come with an option to send data directly to a cloud-based server for data	No Change
	storage, sharing and analysis. In addition, there should be an option of deployment of an onsite server,	
	for the same function. (A) Accessories:	
(i)	The manufacturer must provide a suitable computer/laptop with the software's pre-installed to run the NGS platform	No Change
(ii)	Operation manuals and maintenance manuals should be included in the consignment	No Change
(iii)	Two extra copies of the operation software (in hard disks) should be made available as precautionary measure	No Change
(iv)	The manufacturer must provide a suitable UPS free of cost.	No Change
	(B) Training and demonstration:	
(i)	Training about usage of the instrument (Hardware and software) must be demonstrated to at least two individuals free of cost.	No Change
(ii)	Analysis of the sequencing data like quality check, de-multiplexing, base calling, etc. must be demonstrated.	No Change
(iii)	For training and demonstration purpose flow cells and reagents	No Change

	required preparing libraries and for	
	running flow cell must be provided	
	free of cost.	
	(C) Personnel:	
(i)	An on-site trained application specialist with experience with NGSplatforms should be placed at the facility for a period of 3 years to assist NGS experiments and trouble shooting and research.	An on-site trained application specialist with experience with NGSplatforms should be placed at the facility for a period of 3 years to assist NGS experiments and trouble shooting and research with equivalent salary of DST RA-II (PDF attached as Annexure 1)
	(D) Optional items:	
(i)	The prices for consumables and sample preparation kits and other	No Change

OtherTerms and Conditions (No change in the general Terms & Conditions)

The company should provide a comprehensive plan for onsite training, conducting workshops and software upgrade every six months during warranty period

- 1. Company should provide free of cost training in first 3 months after installation to multiple users of NIPER plus onsite training session to multiple users for every six months for the entire period of warranty or AMC.
- 2. Warranty will start from date of successful installation and completion of Training.
- 3. During the warranty period, the supplier is required to visit consignees site at 2 times in the year commencing from the date installation for preventive maintenance of equipments/stores.

The remaining all other terms and conditions remains same as mentioned in the original tender document.

Sd/-Stores and Purchase officer

SR/S9/Z-08/2018 Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi-110016

Dated: January 30, 2019

OFFICE MEMORANDUM

Subject: Revision of emoluments and guidelines on service conditions for research personnel engaged in R& D programme of the Central Government Departments/Agencies

Attention is invited to the Office Memorandum (O.M.) No. SR/S9/Z-09/2012 dated 21.10.2014 issued by the Department of Science and Technology, Government of India on the above subject. The matter has been further considered by the Government and the following revised emoluments have been approved. The O.M. is applicable to the research personnel working on R&D programmes funded by the Central Government Department/Agencies.

1) Emoluments:

A. Junior Research Fellow (JRF) / Senior Research Fellow (SRF)

SI. No.	Designation & Qualification	Revised Emoluments per month
ı	Junior Research Fellow (JRF)	Rs. 31,000/-
	Post Graduate Degree in Basic Science OR Graduate / Post Graduate Degree in Professional Course selected through a process described through any one of the following:	
	 a. Scholars who are selected through National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) and GATE. 	
	 b. The selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc. 	
11	Senior Research Fellow (SRF)	Rs. 35,000/-
	Qualification prescribed for JRF with two years of research experience	

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A.1 After completion of two years, an external assessment by the Institution where the student is enrolled for Ph.D. is mandatory for upgradation from JRF to SRF. The fellow may be awarded SRF after successful assessment.

A.2 Annual Satisfactory Assessment is mandatory to continue the benefit of fellowship during SRF period.

B. Research Associate

Research associates may be fixed at a consolidated amount at one of the 3 pay levels given below depending upon the qualification and experience. The Institute/Organization concerned may decide the level in which a particular associate should be placed based on the experience. The Essential Qualification (EQ) for RA is as follows:

Ph.D/MD/MS/MDS or equivalent degree or having 3 years of research, teaching and design and development experience after MVSc/M.Pharm/ME/M.Tech with at least one research paper in Science Citation Indexed (SCI) journal.

SI. No.	Category	Revised Emoluments per month
1	Research Associate –I	Rs. 47,000/-
11	Research Associate –II	Rs. 49,000/-
III	Research Associate –III	Rs. 54,000/-

2. Service Conditions:

DA: JRFs, SRFs and Research Associates will not be entitled to DA.

(ii) House Rent Allowance (HRA): All research fellows may be provided hostel accommodation wherever available. Research fellowship holder residing in hostels shall not be entitled for HRA. Wherever provision of hostel accommodation is not possible, HRA may be allowed to all the above categories viz. JRF, SRF and RA as per Central Government norms applicable in the city/location where they are working. The percentage required for calculating HRA will be based on the fellowship amount.

(iii) Medical Benefits: The research fellows and research associates (JRF/SRF/RA) will be entitled for medical allowance as applicable in the implementing institution.

(iv) Leave and other entitlements: The JRF/SRF are eligible only for casual leave while Research Associates are entitled to leave as per rules of the host institution. Participation of any of these categories (JRF/SRF/RA) in scientific event/workshops held in India or abroad will be treated as "on duty" with due approval of the host institution. The travel entitlement for JRF/SRF/RA for participation in scientific events/workshops in India will continue to be the same as earlier i.e. 2nd AC by rail. Maternity leave as per the Govt. of India instructions issued from time to time would be available to female candidates in all categories.

(v) Bonus & Leave Travel Concession: JRFs, SRFs and Research Associates will not be entitled to these allowances.

(vi) Retirement Benefits: JRFs, SRFs and Research Associates will not be entitled to these benefits.

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(vii) Publication/Patent: The results of JRF/SRF/RA's research work may be published preferably in standard refereed journals with the concurrence of the Fellow and his/her Supervisor / Advisor. It should be ensured by the fellow that the assistance provided by the funding agency of Government of India is acknowledged in all such publications.

(viii) Obligation of JRF/SRF/RA:

a) He/She shall be governed by the disciplinary regulations of the host Institute where he/she is working.

b) The JRF/SRF/RA must send a report of the research work done during the period of Fellowship as may be asked by the sponsoring agency.

3. Ministry/Department may consider fixing the number of fellowships considering their budgetary outlays. Central Government Departments /Agencies are requested to ensure that the above guidelines are followed in regard to the remuneration and other benefits to the research personnel engaged in R&D projects funded by them.

4. Selection for award of fellowship shall ordinarily be through common competitive examinations. However, for subjects where there is no examination presently, Government Departments and their authorized agencies and institutions may start conducting examination to screen candidates for award of fellowships. This shall not be applied retrospectively and the persons already enrolled shall be exempted.

5. **Date of Effect:** The revised emoluments will take effect from 01.01.2019. Respective Departments should meet the additionality from their existing budget through matching savings in other schemes. At the time of main budget for 2019-20, this may be reviewed.

6. In order to further enhance value, quality and experience in doctoral research, the Government has agreed to incentivize the research output, for e.g. in the form of publications and patents. An Inter-Ministerial Empowered Committee of the Government is to evolve the modalities of implementation. The Committee will periodically examine all the fellowship matters including disbursement and quantum of fellowship.

7. This issues with the concurrence of the Department of Expenditure, Ministry of Finance vide DoE ID Note No 33(14)/PFC-II/2018 dated 28.01.2019.

James Kuman

(Mano)³Kumar) Director (Finance) Tele: 011-26962743

То

1. All Ministries/Departments/Agencies of the Government of India

2. All Heads of DST

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SR/S9/Z-05/2019 Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi-110016

Dated: August 21, 2019

OFFICE MEMORANDUM

Subject: Scientific / Technical Manpower other than JRF/SRF/RA in R&D programmes of Central Government Departments / Agencies: Guidelines and emoluments

Several Departments and Agencies under various Ministries of the Government are sponsoring many extramural and intramural R&D projects every year. These projects have been sanctioned with well-defined objectives for a specific duration. A large number of scientific / technical personnel, other than Junior Research Fellow (JRF) / Senior Research Fellow (SRF) / Research Associate (RA) are inducted into these projects.

2. In order to identify the type of scientific / technical manpower, other than JRF/SRF/RA suitable for R&D projects and to formulate guidelines for their management including recruitment and remuneration etc., an Inter-Departmental Committee has been constituted. Based on the recommendations of the Inter-Departmental Committee, the Department has approved specific manpower positions suitable for inducting in R&D projects. The remuneration, essential qualification and upper age-limit are given against each manpower position as detailed in *Annexure*.

3. The guidelines help the Principal Investigators (PIs) / Institutes to choose appropriate manpower positions with required qualifications for successful implementation of projects. All Manpower positions in projects will co-terminus with the project.

4. These norms become effective from 1st April 2019 for all categories of Scientific / Technical Manpower positions in R&D projects.

5. This issues with the approval of Secretary, DST vide Dy. No. EF 23171 dated 21.08.2019 and concurrence of IFD, DST vide Dy. No. C/2301 dated 21.08.2019.

(Ďr Praveenkumar S) Scientist E / SERC Tele: 011 - 26963695

То

- 1. All Scientific Ministries / Departments
- 2. All Heads of DST
- 3. Senior PPS to Secretary, DST
- 4. Heads of Als of DST / Secretary, SERB
- 5. IFD, DST
- 6. CAO / PAO, DST

A. <u>Scientific / Technical Manpower positions with remuneration, essential</u> <u>qualification and upper age-limit</u>

SI. No.	Manpower Position	Essential Qualification	Upper Age limit (years)	Monthly Emoluments (Rs.)
1.	Scientific Administrative Assistant / Field Worker	Graduate degree in any discipline	50	18,000/- + HRA
2.	Laboratory Assistant/Technician / Project Assistant / Technical Assistant / Field Assistant	B.Sc./ 3 years Diploma in Engineering & Technology	50	20,000/- + HRA Increment of 15% for 3 years of experience with maximum ceiling of 4 such revisions i.e. upto 12 years of experience.
3.	A. Project Associate-I	Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent	35	31,000/- + HRA
	B. Project Associate-II	 (i) Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent; and 	35	35,000/- + HRA
		 (ii) 2 years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services 		
4.	Senior Project Associate	 (i) Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent; and (ii) Four years' experience in Research and Development 	40	42,000/- + HRA

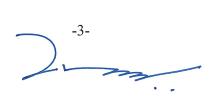
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		in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services OR Doctoral Degree in Science / Engineering / Technology / Pharma / MD / MS from a recognized University or equivalent		
5.	Principal Project Associate	 (i) Master's Degree in Natural or Agricultural Sciences or Bachelor's Degree in Engineering or Technology or Medicine from a recognised University or equivalent; and 	40	49,000/- + HRA
		 (ii) Eight years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services 		
		OR (i) Doctoral Degree in Science / Engineering / Technology / Pharma / MD / MS from a recognized University or equivalent; and		
		 (ii) Four years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services 		
6.	Project Scientist I	Doctoral Degree in Science or Master's Degree in Engineering or Technology from a recognized University or equivalent	35	56,000/- + HRA
7.	Project Scientist II	 (i) Doctoral Degree in Science or Master's Degree in Engineering or Technology 	40	67,000/- + HRA

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		from a recognized University or equivalent; and (ii) Three years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services		
8.	Project Scientist III	 (i) Doctoral Degree in Science or Master's Degree in Engineering or Technology from a recognized University or equivalent; and (ii) Six years' experience in Research and Development in Industrial and Academic 	42	78,000/- + HRA
		Institutions or Science and Technology Organisations and Scientific activities and services		
9.	*Project Scientist B	Master's Degree in Science or Bachelor's Degree in Engineering or Technology with minimum 60% marks from a recognized University or equivalent	35	56,000/- + HRA Increment of 5% for every 2 years of experience subject to performance review.
10.	*Project Scientist C	 (i) Master's Degree in Science or Bachelor's Degree in Engineering or Technology with minimum 60% marks from a recognized University or equivalent; and 	40	67,000/- + HRA Increment of 5% for every 2 years of experience subject to performance review.
		 (ii) Three years' experience in Research and Development in the relevant field. 		
11.	*Project Scientist D	 (i) Master's Degree in Science or Bachelor's Degree in Engineering or Technology with minimum 60% marks from a recognized University or equivalent; and 	45	78,000/- + HRA Increment of 5% for every 2 years of experience subject to performance review.
		(ii) Seven years' experience in Research and Development in the relevant field.		



12.	PI/Project Coordinator – I (For Non- Governmental / Voluntary Organizations)	Doctoral Degree in Engineering / Sciences / Medicine / Pharma / Social Sciences / MD	As per the scheme	60,000/- (Consolidated)
13.	PI/Project Coordinator – II (For Non- Governmental / Voluntary Organizations)	Master`s Degree in Engineering / Sciences / Social Sciences	As per the scheme	30,000/- (Consolidated)
14.	#Project Manager	Doctoral Degree in Science or Master's Degree in Engineering or Technology from a recognized University or equivalent with 20 years of experience in relevant field.	Minimum age of 45 years	1,25,000/- (Consolidated)

* These positions are meant for undertaking the R&D work of the Science Ministries and their institutions and which have been approved through the SFC/EFC/Cabinet notes and by the competent authority.

This position is meant for big-ticket projects (costing more than Rs. 10.0 crore) or for a Center which manages Central Facilities of the Institute.

B. <u>Service conditions of Scientific / Technical manpower</u>

(i) **DA & CCA**: Scientific / Technical Manpower in projects are not entitled to DA & CCA.

(ii) **House Rent Allowance (HRA)**: HRA is allowed to all categories, except for Project Investigator (PI) / Project Coordinators in Non-Governmental / Voluntary Organizations (NGO/VO) / Project Manager as per Central Government norms applicable in the city/location where they are working. The percentage required for calculating HRA will be based on the remuneration.

(iii) **Medical Benefits**: The Scientific / Technical manpower will be entitled for medical benefits as applicable in the implementing institution.

(iv) **Leave and other entitlements**: The Scientific / Technical manpower are entitled to leave as per rules of the host institution. Maternity leave as per the Govt. of India instructions issued from time to time would be available to all categories. The travel entitlement is as per Institute norms.

(v) **Bonus, Gratuity & Leave Travel Concession**: The Scientific / Technical manpower will not be entitled to these allowances.

