



राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान गुवाहाटी  
**NATIONAL INSTITUTE OF PHARMACEUTICAL  
EDUCATION AND RESEARCH GUWAHATI**

Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Govt. of India

*nur (Halugurisuk), P.O.: Changsari, Dist: Kamrup, Assam, Pin: 781101.*

**Item Description:** Optical Imaging and MicroCT System

**Reference No:** 1. NIPER-G/148/EQP/OIAMCTS/GAP-125/2020-21 dated: 12.02.2021

**a) General Terms and Conditions**

<b>General Terms and Conditions</b>	<b>Revised Terms and Conditions</b>
<p>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</p>	<p><b>The payment terms remain the same as mentioned in the tender document</b></p>

General Terms and Conditions	Revised Terms and Conditions
12. <b>Delivery:</b> 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 Changsari as per the address given below	<p>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.</p> <p>Institute will provide necessary documents like DSIR/CDEC certificates upon request.</p>

### b) Technical Specifications for Optical Imaging System

S. No.	Technical Specification	Revised Specification
1	Should be fully automatic system to image live small animals like mice, rats, hamster & should be suitable for fluorescence, bioluminescence, chemiluminescence and radio isotopic Cerenkov studies for <i>in-vivo</i> and <i>in-vitro</i> use with proven data.	No change
2	Complete system inclusive of light tight cabinet, CCD camera, excitation and emission filters, sample stage, gas anaesthesia system and computer workstation.	NO Change
3	Camera should be Grade one back thinned, back illuminated CCD camera; Thermoelectrically cooled to -86 C°(absolute) or low for better sensitivity.	NO Change
4	The quoted system should have min. 10 excitation & 18 emission filters which should accommodate most of the fluorescent dyes in the green to far red spectrum or better.	NO Change
5	The analysis software should perform background subtraction	The analysis software should perform background subtraction with the image

	with the image algorithms & able to perform spectrally unmixing of multiple reporters (at least 5) within same animal based on Compute Pure Spectra.	algorithms & able to perform spectrally unmixing of multiple reporters (at least 5) within the same animal.
6	System should preferably have flexibility of using up to 5 optical reporters simultaneously inside the same animal. Capable of performing up to 5 mice or 2 rats simultaneously	NO Change
7	Optical Field of View (FOV) cm min 3.9 x 3.9 cm to max 20 x 20 cm, or better.	NO Change
8	Stage movement should be Software controlled for different levels of magnifications.	NO Change
9	The system should provide 3D surface topography feature for single-view diffuse tomographic reconstructions of internal sources.	NO Change
10	The system should be able to create 3D images using optical light for accurate reconstruction of light sources in deep tissues	NO Change
11	The system should quantify the depth, geometry, and brightness of a fluorescent or bioluminescent source in 3- dimensional space using 3D tomography and should be able to co-register organs from the Mouse Atlas on a 3D image for exact positioning of point source.	The system should quantify the depth, geometry, and brightness of a fluorescent or bioluminescent source in 3- dimensional space using 3D tomography and should be able to co-register organs from the Mouse Atlas or any other equivalent technology (Vendor should submit the details of the users and literature for use of specific equivalent technology).
12	Data generated should be in absolute calibrated data according to the National Institute of Standards and Technology (NIST).	NO Change
13	The system should be sensitive enough to detect single cells <i>in vivo</i> & <i>in vitro</i> with proven data.	NO Change.
14	The system should be capable of doing both Epi-Illumination and	NO Change

	Trans-illumination for localization and quantification of deep tissue sources.	
15	System should be capable of use the 3D optical tomographic modules with integrated markers to seamlessly co-register with X-ray computed tomographic platform data.	No Change
16	Gas anaesthesia ports and 5 position manifold with gas flow controller should be supplied. Complete working configuration inclusive of hardware/software, tubing, valves, should be supplied.	No Change
17	The company should have complete in house reagent & cell line support manufactured by the same company or 3 <sup>rd</sup> party manufacture required for in vivo experiments. Vendor should offer minimum of 10 luciferase or GFP/RFP based cell lines and 10 animal imaging reagent kits for the in vivo validation purpose as well as Training during installation.	No Change
18	System work station is preferred to have latest Intel(R) 7th generation Intel® Core i7-7700 (Quad cor 3.6GHz, 4.2GHz Turbo 8Mb with HD360 graphics. Class 40 M2. PCIe NVMe 256Go SATA SSD Drive.500Go 3.5 inch ATA seral Drive (7,200 rpm) Hard drive 24 inch TFT high resolution monitor, CD /DVD/combo reader/writer. HDD 1Tb or above. Two separate image acquisition workstations for Optical and microCT System and one common data analysis workstation.	System work station is preferred to have latest Intel(R) 7th generation Intel® Core i7-7700 (Quad cor 3.6GHz, 4.2GHz Turbo 8Mb with HD360 graphics. Class 40 M2. PCIe NVMe 256Go SATA SSD Drive.500Go 3.5 inch ATA seral Drive (7,200 rpm) Hard drive 24 inch TFT high resolution monitor, CD /DVD/combo reader/writer. HDD 1Tb or above. Two separate image acquisition workstations for Optical and microCT System and one common data analysis workstation. The system should accompany at least 05 software licenses. The instrument should be supplied with the latest version of the Software. Any update or new version of the Software will be provided free of cost during the warranty period.

		After the warranty period, updates will be provided free and a new version will be chargeable.
19	System should operate on 220V / 50Hz and must come with High quality on line UPS with a backup of 30mins.	No Change
20	System must be minimum of 3-year standard warranted and vendor must provide minimum 2 years after warranty free services. (additional warranty period also will be considered for financial comparison).	System must be quoted with minimum of 3-year Standard warranty and also should quote for additional 2 years comprehensive AMC. (the price for an additional warranty period also will be considered for financial comparison).
21	The satisfactory Training is preferred on both operations of the system and standard maintenance by user level. Complete installation and application training is company's responsibility	No Change
22	Application Training and Support: a) Complete installation and Application Training and commissioning, - with a duration of minimum 15 days b) 365 days online trouble-shoot support. - Application and Engineering support (both hardware and Software) in Guwahati/North-East India based. c) Routine calibration support every six months using Mouse and Rat phantom at no extra cost.	No Change
23	Service support and parts availability: - At least 10 years after the installation - Agreement from Principle Company with NIPER Guwahati for at least 10 years support. Vendor should provide a list of important spares / components with the cost frozen for next five years	No Change
24	Should provide Technically qualified operator for 3 years. The Technical	Should provide Technically qualified operator for 3 years. The Technical

	operator should be present on all working days of the institute as per the norms. He/She should be able to train students on a periodic basis. This should be quoted with monthly salary of the operator to be comparable to that of a CSIR-RA/ICMR RA salary.	operator should be present on all working days of the institute as per the norms. He/She should be able to train students on a periodic basis. This should be quoted with monthly salary of the operator to be comparable to that of a CSIR-RA/ICMR RA/DST-RA II salary (PDF attached as Annexure 1).
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### Optional Accessories

S. No.	Technical Specification	Revised specification
1	Software should include capability of 3D viewing the animals in different angles and to also create a cross sectional image planes.	Software should include capability of 3D viewing the animals in different angles and to also create a cross sectional image planes.
2	It must also allow or upgradable to Image preferably non anesthetized animal imaging to avoid animal stress and spare time.	Specification omitted
3	Should quote for the a) Injection System b) ECG port c) Phantom Mice and Rat d) Isolation Chamber	No change.
4	List of Oncology Research Consumable quotation for 3 years.	No change.
5	Should also List of Accessories for infectious studies research and quotation for 3 years.	No change.

### C) Technical Specifications for MICRO-CT SYSTEM FOR SMALL ANIMALS

S. No.	Technical Specification	Revised Specification
1	The micro computed tomography (micro -CT) system should be capable to perform high speed and high-resolution imaging of in-vivo and ex-vivo organs such as lung, bone, kidney, heart, fat mass, lean mass and brain, marine and non-biological samples like biomaterials /scaffolds, geological samples, electronics etc	No Change
2	The system should have preinstalled latest generation software that enables to perform morphometric analysis of bone such as bone mineral density, bone mineral content, cancellous and cortical bone indices such as bone volume/tissue volume, trabecular thickness, number of trabeculae, trabecular separation, cortical density, callus formation during bone repair, structure thickness, separation and porosity support bone-implant studies and also bone tumor studies	No Change
3	The system should be capable to do imaging of the sample in 360 degree around the sample to acquire 3D data with any choice of viewing field and magnification to determine the most suitable scan settings as per need of the experiment.	No Change
4	The microCT system should be capable to do high speed imaging with less than 4 seconds scan time for whole mouse body imaging and system should be capable to perform imaging with optical	No Change

	resolution under 6 microns (not Software enhanced). System with circular/spiral scanning option is preferred.	
5	The system should be equipped with a very high resolution CCD/CMOS camera and should have large field of view of 75 mm X 75 mm or better.	No Change
6	The system must be capable to scan sample size of 200 mm or higher in length and in more than 150mm Gantry for large animals whole body such as Hamster & rabbit with scan speed under 4 seconds for whole mouse body imaging.	No Change
7	The X-ray Detector should be with variable energy from 20 to 90kv or more with focal spot minimum 5 micron or less for high degree of spatial resolution and sensitivity for imaging.	The X-ray Detector should be with variable energy from 20 to 80kv or better with a focal spot minimum 5 microns or less for the high degree of spatial resolution and sensitivity for imaging.
8	The system should be capable to do image with true spatial resolution less than 10 micron. Supporting certification similar to Quality Assurance in Radiology & Medicine needs to be enclosed.	The system should be capable to do image with true optical / voxel resolution less than 10 micron. Supporting certification similar to Quality Assurance in Radiology & Medicine needs to be enclosed
9	The system equipped with automatic X-ray filter changer with minimum slots for 4 filters or higher to avoid saturation, improve the scanning quality and to reduce the dose to animal during live imaging.	The system should be equipped with an automatic or manual X-ray filter changer with minimum slots for 4 filters or higher to avoid saturation, improve the scanning quality, and reduce the dose to animals during live imaging.
10	The system should be delivered with interchangeable animal beds for rat, mouse and ex-vivo samples for whole body imaging and also suitable for multimodality imaging with multiple systems.	No Change



11	The system should come along with replaceable animal cassettes: for rats mice, hamsters & rabbits with necessary gas connections.	No Change
12	The Software controlled basic operation control of the instrument like scanning protocols such as selection of filters, adjusting animal position and control of imaging and scanning	No Change
13	The system should have physiological monitoring for breathing, movement detection, ECG and for gating and time-resolved 4D micro-tomography.	No Change
14	The system should be compatible with inhalation anaesthesia setup for live animal imaging.	No Change
15	The system should provide bone density calibration phantoms for Mice & Rats	No Change
16	The system should be supplied with high configuration computer workstation with pre installed complete software package for control, scanning, visualization and analysis	The system should be supplied with high configuration computer workstation with a pre-installed complete software package for control, scanning, visualization and analysis
17	The system should provide one complete PC For acquisition, reconstruction and analysis and one separate complete PC system for data handling and analysis while main PC is busy in imaging. The main PC should have following minimum or better configuration: Dual Intel XEON processor E5-2640 v3, 124 GB DDR4 2400 MHz RAM, NVIDIA Quadro Graphical card, 12 TB (3x 4 TB) SATA HDD in RAID for data and 512GB solid state drive (SSD) for operating system and programs, DVD+/- RW drive. OR Higher configuration for both acquisition and analysis in single	No Change

	system is required for easy work flow.	
18	The system should be supplied with latest generation CPU, GPU fastest 3D reconstruction software to make the post scanning reconstruction as fast as possible	No Change
19	Additional software license for visualization and analysis software's need to be provided without any additional cost.	No Change
20	Vendor should provide regular software updates and Training at no cost for life time	The vendor should provide regular software updates/ new versions free of cost during the warranty period. Any new software or new version after the warranty period may be charged as per the prevailing rate.
21	The radiation safety should be < 1 $\mu$ Sv/h at any point on the instrument surface.	No Change.
22	The system should have on screen dosimetry during live sample imaging should be provided.	No Change
23	The manufacturer should be ISO certified. Enclose the copy of the certificate.	No Change
24	The manufacturer should provide license from national and international regulatory authorities.	No Change
25	There should be minimum of 3 installations of microCT platforms in the country from the manufacturer. Performance certificate from user needs to be attached.	No Change
26	Trained service engineer and application trainer should be locally available. Please enclose the training certificates.	No Change
27	Vendor should provide comprehensive warranty for three years including service, yearly validation (during this period the vendor should provide preventive	No Change

	<p>maintenance visits as per manufacturer's recommendation) and all consumables, also mention cost of AMC for next two years in quote after warranty which will be considered for financial comparison.</p>	
28	<p>Vendor must ensure the availability of spares for next 10 years. Current price list for spare need to be enclosed.</p>	No Change
29	<p>Applications and use of the system should be evidenced by large number of publications in high impact reputed journals</p>	No Change
30	<p>Calibration and validation of the system will be a part of the installation process. All standards, test samples, other consumables, etc. needed will be arranged by the supplier/ manufacturing company</p>	No Change
31	<p>On site application training should also be arranged for Institute's scientists.</p>	No Change
32	<p>Application Training and Support: Complete installation and Application training and commissioning, with a duration of minimum 15 days and 365 days online trouble-shoot support. - Application and Engineering support (both hardware and Software) in Guwahati/North-East India based.</p>	No Change
33	<p>Should provide Technically qualified operator for 3 years. The Technical operator should be present on all working days of the institute as per the norms. He/She should be able to train students on a periodic basis. This should be quoted with monthly salary of the operator to be comparable to that of a CSIR-RA/ICMR RA salary.</p>	<p>Should provide Technically qualified operator for 3 years. The Technical operator should be present on all working days of the institute as per the norms. He/She should be able to train students on a periodic basis. This should be quoted with monthly salary of the operator to be comparable to that of a CSIR-RA/ICMR RA/DST RA II salary (PDF attached as Annexure 1).</p>
34	<p>System should operate on 220V /</p>	No Change

	50Hz and must come with High quality on line UPS with a backup of 30mins.	
35	System should quote with a software which can integrate with the data of imaging systems or PET/SPECT of own make/any other make.	No Change

### **Other Terms and Conditions for Both the systems**

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

1. The company should provide free of cost training in the first 3 months after installation to multiple users of NIPER plus onsite training sessions to various users every six months for the entire period of warranty and AMC.
2. Warranty will start from the date of successful installation and completion of Training.
3. During the warranty period, the supplier must visit the consignee's site at least 2 times in the year commencing from the date of installation for preventive maintenance of equipment/stores.
4. Should attend all breakdown calls within 48hrs of the receipt of information from the NIPER through mail/fax/mobile/SMS. Written assurance is compulsory at the time of bidding.
5. Equipment will be diagnosed with a problem within 3-4 days of receiving the complaint and repaired within 4 weeks, failing which the warranty period will be extended by the number of days the instrument is non-functional.

**Sd/-**

**Stores & 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)**

Sl. No.	Designation & Qualification	Revised Emoluments per month
I	<b>Junior Research Fellow (JRF)</b>  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.	Rs. 31,000/-
II	<b>Senior Research Fellow (SRF)</b>  Qualification prescribed for JRF with two years of research experience	Rs. 35,000/-

*Manoj Kumar*

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.

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

## 2. Service Conditions:

(i) **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. 2<sup>nd</sup> 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.

*Manoj Kumar*



(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.

  
(Manoj Kumar)  
Director (Finance)  
Tele: 011-26962743

To

1. All Ministries/Departments/Agencies of the Government of India
2. All Heads of DST

**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 1<sup>st</sup> 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.

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

To

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



**Annexure**

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

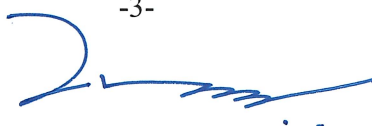
Sl. No.	Manpower Position	Essential Qualification	Upper Age limit (years)	Monthly Emoluments (Rs.)
1.	Scientific Administrative Assistant / Field Worker	Graduate degree in any discipline	50	18,000/- + HRA
2.	Laboratory Assistant/Technician / Project Assistant / Technical Assistant / Field Assistant	B.Sc./ 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 (ii) 2 years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services	35	35,000/- + HRA
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



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



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



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. Service conditions of Scientific / Technical manpower**

- (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.

