

## Replies to questions asked in the parliament

Starred/ Unstarred Dairy No- S3407 Date 23/07/2024

### "Institutions Under the Ministry"

- (i) Vacancies in each institutions and year wise data since 2014.  
 (ii) Number of contract workers and permanent staff in each institution. Give year wise data since 2014.

### Reply

- (i) **Vacancies in each institution and year wise data since 2014.**

SN	Year	Vacancies Faculty/ Non-Faculty Regular Positions as on 31 <sup>st</sup> March
1	2014	No regular positions except Director
2	2015	
3	2016	
4	2017	
5	2018	
6	2019	
7	2020	34
8	2021	34
9	2022	33
10	2023	35
11	2024	25

\*Total number of positions –

- Faculty – 33 sanctioned in 2019
- non-faculty 37 – (25 sanctioned in 2019 & 12 Sanctioned in 2020).

- (ii) **Number of contract workers and permanent staff in each institution. Give year wise data since 2014.**

Year	Permanent Staff as on 31 <sup>st</sup> March	Contract Worker / Contractual Staff as on 31 <sup>st</sup> March
Mar-24	45	Nil
Mar-23	35	4
Mar-22	37	6
Mar-21	36	13
Mar-20	24	9
Mar-19	1	31
Mar-18	1	27
Mar-17	1	25
Mar-16	1	23
Mar-15	1	21
Mar-14	1	19

- **Lok Sabha D.No. 2867 for answer on 09/02/2024 on "Generative AI in Pharmaceutical Research"**

**Reply:**

The Government is well aware of recent advancements in Generative AI (Gen AI) and has started working in that direction. The government has launched initiatives like India AI to support AI startups and plans to establish AI centers of excellence in educational institutions. NITI Aayog provides over 30 policy recommendations to invest in scientific research, encourage reskilling and training, accelerate the adoption of AI across the value chain, and promote ethics, privacy, and security in AI. Indian Council of Medical Research (ICMR), may approve protocols for conducting various phases of clinical trials for Generative AI technology use in patient cohorts for clinical trials. Govt has also requested the drug development industry to adopt or take the help of Gen (AI) in selecting the best candidate among the various candidates to speed up the existing drug discovery process. DoP has suggested NIPERs to collaborate with the organizations that have specialization in AI and start framing projects involving AI and drug discovery. DoP has also suggested to introduce courses on AI in the M.S Pharm syllabus.

- **Reply to the Lok Sabha Starred Question No. 108 for answer on 11.12.2023 on "Tribal Development"**

NIPER-Ahmedabad has released approx Rs. 1.93 Cr. in the form of fellowship to ST students in last 9 years. NIPER-A is also following Govt of India reservation norms in the recruitment of staff as well in admission process of students. Institute has waived off the tuition fees of ST students as per the NIPER JEE admission process. The Institute has also constituted an internal SC/ST/OBC Committee for the welfare of Students and Staff.

To promote the Gol policy to ensure the upliftment of ST Category NIPER-A is following the reservation rules as notified time to time by Gol, in the recruitment process of various faculty and non faculty positions.

- **Reply - Inputs from NIPER-A on the Lok Sabha Diary No. 4941 on ‘Artificial Intelligence and Block Chain Technologies in Pharmaceutical Sector’.**

**Reply:**

NIPER-A is performing cutting edge research in the domain of pharmaceutical sciences and medical devices. Towards making the research more advanced and its availability to public in a time bound fashion recent advancements have been adopted. Use of Artificial intelligence (AI) in drug discovery is one such approaches that has been gradually adopted by NIPER. Presently, NIPER-A is using AI at the initial stages of de novo drug design and in silico evaluation for a new chemical entity (NCE) or a drug molecule. As advancement to this is highly required, NIPER-A has explored possibilities for its scientific association with organization that have a strong expertise in the field of AI. In the past, NIPER-A initiated preliminary talks with DA-IICT, Gandhinagar to explore the possibilities of implementing AI robustly in its ongoing drug discovery projects for yielding effective outcomes in drug discovery to benefit public health and support affordable healthcare for the country. NIPER-A is presently not working on block chain technology.

- **Inputs for Parliament Question (Rajya Sabha) Dy. No.S2008 07/12/2023(Thursday)-reg. ‘Innovations and entrepreneurs in the country’.**

Inputs to the Parliamentary Questions (Rajya Sabha) Dy. No S2008.

(c) The details of innovations and research works done in various manufacturing fields in the country during the last five years; and

**Reply:**

NIPER-Ahmedabad pursues diverse research that is focused on pioneering solutions for medical and industry challenges. Biotechnology performs research on cancer biomarkers and AMR. Medicinal Chemistry studied HDACs for cancer treatments through green chemistry approach,PKM2 and peptides. Medical Devices explored biomaterial applications and disease models. Natural Products probed herbal extracts for anti-diabetic potential. Pharmaceutical Analysis focused on drug metabolism. Pharmacology and toxicology researches on strokes,spinal cord injury, diabetes, and cancer. Pharmaceutics innovated novel polymeric nanomaterials for precise cancer therapy delivery. Medical devices work on biosensors, biomaterial and polymer based pharmaceutical products.

**(d) The steps taken or proposed to be taken by the Govt. using such innovation for making more entrepreneurs in the country?**

**Reply:**

NIPER Ahmedabad has established the Biopharma Incubation Center (BIC) with financial support from BIRAC (BioNEST) to nurture innovations in pharma and medical devices. BIC has more than 15 start-ups offering employment to more than 32 individuals. BIC has organized 50+ capacity-building workshops, seminars, mentoring sessions, etc., benefiting around 1000+ individuals."

- **Rajya Sabha Unstarred Question No. 136 dt. 20/7/2023. As desired, the reply from NIPER Ahmedabad on the below mentioned point is as follows: -**

**REPLY:**

The National Institute of Pharmaceuticals Education and Research, Ahmedabad (NIPER-A) is actively involved in a range of initiatives to enhance the human capital in the pharmaceutical sector. The strengthening of educational infrastructure, fostering industry-academia collaboration, promoting research innovation, and emphasizing skill development are few initiatives. NIPER-A strive to equip the workforce with the necessary knowledge and competencies to meet the increasing demands of the pharmaceutical industry.

NIPER-A is offering postgraduate and Ph.D. courses, which are relevant to the pharmaceutical industry. Approx. 1100 PG and Ph.D. students have graduated from the institute. These students are well placed in the profession.

As per the vision plan of the Department of Pharmaceuticals, the institute seats are increasing every year.

<b>Year</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Intake/Number of seats	124	135	170	205	235

In order to ensure the continuous professional development of the pharmaceutical workforce, we organize short term training programs, hands on training, seminars, and conferences that address emerging trends, regulatory updates, and technological advancements in the field. These initiatives facilitate lifelong learning and skill upgradation for professionals working in the pharmaceutical sector.

- **Reply - Parliament Question : Unstarred: Diary No : 14716 (March 23, 2023) regarding Faculty Vacancies in NIPER Institutes.**

(a) The total number of faculty positions in National Institute of Pharmaceutical Education and Research (NIPER) Ahmedabad;

**Reply- 33**

(b) The number of faculty positions that are filled and vacant as of date;

**Reply - 18**

(c) whether the Government has taken any steps to fill the faculty vacancies in NIPER

**Reply – Yes**

and

(d) if so, the details thereof and if not, the reasons therefor?

**Reply –** As per the DoPT OM F.No.43012/04/2022-Estt.B(Part) Dated 25<sup>th</sup> January, 2023

- **Reply to the Lok Sabha Admitted Unstarred Qn No 1456 for 10.02.2023 regarding "Research and development in Pharma Sector"**

**Steps taken by the Government to promote Research and Development in Pharmaceutical Sector of the country during the last five years.**

NIPER-A is consistently working towards promoting Research and Development in Pharmaceutical Sector. Establishment of NIPERs in past was one of the initiatives in this direction where the Govt could align the research institute with the industry to cater the R & D needs of the industry. A continuous process of reforms and directives are being formulated to give impetus to the research and development of pharma sector. Following are the steps taken:

1. More than 800 research publications and patents to promote research and pharmaceutical development in the country since inception.
2. NIPER-A supported SMEs and MSMEs through sample analysis with the available infrastructure of NIPERs.
3. Incorporate credit systems and incentives to the students and scientists to translate innovative medical device products from lab-to-commercialization.
4. Creation of Technology Development Cell to conduct regular training modules for pharma students/personnel as per needs of the industry.
5. Support to SMEs and MSMEs towards 'Affordable Medicines at Homeland'

**Steps taken/Proposed to be taken by the Govt.to promote the private sector participation in the R & D**

**NIPER-A is taking the following steps:**

- 1) Innovation and incubation Centre to initiate Entrepreneurial activities.

- 2) Establishing of Centre of Excellence in different sectors
- 3) Establishing centres for Pilot scale in collaboration with industry
- 4) Innovation program in collaboration with the industry to cater existing problems in marketed Medical Devices
- 5) Improve on academia- industry interaction for collaborative industrial projects.
- 6) Innovation policy framed by Govt for establishing an ecosystem for translating academic research.