

GOVERNMENT OF INDIA
MINISTRY OF DEFENCE
DEFENCE RESEARCH & DEVELOPMENT ORGANISATION
LOK SABHA
UNSTARRED QUESTION NO. 3662
TO BE ANSWERED ON 21st March, 2025

RESEARCH AND DEVELOPMENT PROJECTS AT JCBCAT

3662. SHRI JAGANNATH SARKAR:

Will the Minister of DEFENCE be pleased to state:

- (a) the status of ongoing research and development projects at the Jagadish Chandra Bose Centre for Advanced Technology (JCBCAT) including key focus areas and notable achievements made so far;
- (b) the total number of scientists, professors and students who are currently engaged in research at JCBCAT along with a breakdown of their roles and contributions to various projects;
- (c) whether there are plans to expand the scope of research and development activities at JCBCAT and if so, the details thereof including the specific areas being prioritized; and
- (d) the details of future projects and emerging technologies which are being considered for development at JCBCAT particularly in research verticals such as unmanned robotics, directed energy weapons, secure systems, and other defence applications?

A N S W E R

MINISTER OF STATE
IN THE MINISTRY OF DEFENCE

(SHRI SANJAY SETH)

(a): The functional modalities of JCBCAT at Jadavpur University have been changed from self-accounting unit of DRDO to academia managed DRDO Industry Academia Centre of Excellence (DIA-CoE), with the approval of Hon'ble Raksha Mantri. This DIA-CoE is operating from IIT Kharagpur. All the ongoing research activities of JCBCAT are now managed by DIA-CoE, IIT Kharagpur.

JCBCAT had following key focus areas: -

- i. Unmanned and Robotics Technologies.
- ii. Secured Systems and Cognitive Technologies.
- iii. Directed Energy Technologies.

(b): 24 Grants-in-Aid projects were sanctioned to JCBCAT. The details of Professors, Researchers and Scientists from DRDO labs are as following: -

- i. Ongoing projects (3 Nos.): Professors: 10 Nos.; Researchers: 20 Nos.; Scientist from stake holding DRDO labs: 10 Nos.

- ii. Closed projects (21 Nos.): Professors: 65 Nos.; Researchers: 80 Nos.; Scientist from stake holding DRDO labs: 63 Nos.

The projects of JCBCAT have been transferred to DIA-CoE IIT Kharagpur for monitoring and governance. The engagements of the Professors are as Principle Investigators (PI) and as Co-principle investigators of the projects for executing the technical activities. Scientists from stake holding labs are involved as co-developer & provide regular inputs/feedback to the PIs for the progress of the project. Additionally, JRFs, SRFs, Research Associates and other technical manpower are recruited for the project activities.

(c) & (d): Yes, Sir. DRDO has taken initiative to further expand the scope of research at JCBCAT by adding new research areas like 'Underwater Robotics', 'Cyber physical defence systems' and 'Quality and Reliability and Safety Studies', to meet the futuristic technology requirement.
