

Dehradun, in collaboration with GAIL (India) Ltd., a Maharatna company has undertaken research to convert polyolefinic type waste plastics to various products like gasoline, diesel and aromatics.

(c) CSIR-IIP and GAIL (India) have jointly developed an environment friendly technology to convert waste polyolefins into exclusively any one of the products, viz. gasoline, diesel or petrochemicals. The liquid fuel (gasoline/diesel) meets most of the Euro III specifications.

(d) Does not arise.

CSIR laboratory in Bihar

4321. SHRI RAM KRIPAL YADAV: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government has any plan to establish atleast one CSIR laboratory in Bihar;

(b) if not, the reasons therefor;

(c) whether it is a fact that presently CSIR is having 37 laboratories/institutes, 39 outreach centres and 4 units in all over the country, out of that not a single laboratory in that State;

(d) if so, whether that students from that State have no option, but to go outside for their further research works; and

(e) if so, the details thereof?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI S. JAIPAL REDDY):

(a) to (e) The Council of Scientific and Industrial Research (CSIR) has thirty seven national laboratories/institutes spread across the country which undertake research and development projects in diverse fields of science and technology, covering domains ranging from affordable healthcare to sustainable energy, from smart and functional materials to chemistry and environment and from micro machines and robotics to infrastructure engineering. Historically, the first few laboratories of CSIR, viz., CSIR-Central Fuel Research Institute (CSIR-CFRI), Dhanbad, CSIR-National

Metallurgical Laboratory (CSIR-NML), Jamshedpur and CSIR-Central Mining Research Institute (CSIR-CMRI), Dhanbad were established in the state of Bihar. CSIR-Central Institute of Mining and Fuel Research (CSIR-CIMFR), Dhanbad was formed later by integrating the core competencies of CSIR-CFRI and CSIR-CMRI.

The knowledgebase of CSIR benefits the various states through the technology transfer to industry and human resource development and thus helps in the socio-economic development of the country as a whole. CSIR also helps in developing competence to deal with emerging areas of Science and Technology. Towards this, CSIR provides research funding through Extramural Research schemes to researchers/academicians across all states including the state of Bihar. In addition, CSIR Fellowships/Scholarships are awarded to students from all states in the country. The list of CSIR Extramural Research schemes sanctioned to researchers/academicians and CSIR Fellowships/Scholarships awarded to students from state of Bihar for the period 2007-2013 is provided in the Statement (*See below*).

After bifurcation of Bihar state in 2000, CSIR laboratories *viz.*, CSIR-NML and CSIR-CIMFR have fallen into Jharkhand state. Since 2000, CSIR has not established any new laboratory.

Statement

CSIR Extramural Research schemes sanctioned to researchers/academicians and CSIR Fellowships/Scholarships awarded to students from state of Bihar

1. Four extramural research projects have been sanctioned during the Eleventh (Eleventh) Five Year Plan period (2007-12) and one project during 2012-13 to the researchers/academicians working in the institutions located in the state of Bihar. Details are furnished below:

Sl.No.	File No./Name and Address of the Principal Investigator	Date of start (S) and Date of Completion (C)	Title of the Scheme
1	2	3	4
2007-12			
1.	38(1165)/07 Dr. Sharadendu	S: 01-10-2007	Bioprospecting of plants and

1	2	3	4
	Department of Botany Science College, Patna University, Patna- 800 005	C: 31-08-2011	microbes for <i>in situ</i> arsenic phytoremediation in the aquifers of Bihar
2.	03(1183)/10 Dr. Naveen Kumar Nishchal Department of Physics IIT, New Govt. Polytech. Centre, Patna -800 013	S: 01-04-2011 C: 31-03-2015	Study on digital holography based information security schemes
3.	25(0195)/11 Dr. Nutan Kumar Tomar Department of Maths IIT, Patna -800 013	S: 01-04-2011 C: 31-03-2014	Descriptor system: modeling and control in infinite- dimensional spaces
4.	01(2523)/11 Dr. Debabrata Seth Department of Chemistry IIT, Patna -800 013	S: 15-02-2012 C: 28-02-2015	Study of osmotic and activity coefficients of binary systems containing room temperature ionic liquids (RTILs) and molecular solvents by vapor pressure osmometry.
2012-13			
1.	03(1242)/12 Dr Manoranjan Kar Department of Physics IIT, Patna -800 013	S: 01-08-2012 C: 31-07-2015	Ferrimagnetic nanocrystalline arrays in ferroelectric or conducting polymer for soft magnetic applications.

2. A total of 49 and 10 students who qualified CSIR National Eligibility Test (NET) for the award of CSIR Junior Research Fellowships (JRF) during Eleventh (Eleventh) Five Year Plan period (2007-12) and 2012-13, respectively have done their post graduation in basic sciences from the institutions located in the state of Bihar. Out of them, 19 have joined various R and D institutions/colleges and universities located in the state of Bihar for carrying out their doctoral research work. Information with regard to students who qualified the CSIR NET for JRF and availed

the CSIR JRF and working at various institutions of the state of Bihar is given in the tables below:

(a) Universities from where students cleared the CSIR NET for award of JRF during Eleventh Five Year Plan period (2007-12) and 2012-13.

Sl. No.	University	Number of students qualified CSIR NET for JRF
1.	Babasaheb Bhimrao Ambedkar Bihar University	21
2.	Patna University	27
3.	Magadh University	8
4.	Jaiprakash Vishwavidyalaya	2
5.	Lalit Narayan Mithila University	1
TOTAL		59

(b) Universities/institutions/colleges where CSIR JRF NET fellowship holders have been pursuing their doctoral research during Eleventh (Eleventh) Five Year Plan period (2007-12) and 2012-13.

Sl. No.	Univ./Inst. Name	No. of Fellows pursuing PhD
1.	Indian Institute of Technology Patna, Patna	8
2.	Rajendra Memorial Research Institute of Medical Sciences, Patna	3
3.	Patna University, Patna	3
4.	Patna Science College, Patna	1
5.	College of Commerce, Patna	1
6.	T.M.Bhagalpur University, Bhagalpur	1
7.	S.B. College, Ara	1
8.	AN College, Patna	1
TOTAL		19