

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH**

LOK SABHA

**UNSTARRED QUESTION NO. 2816
(TO BE ANSWERED ON 03.08.2022)**

Research Facilities to Young Scientists

2816. SHRI GAJANAN KIRTIKAR:

SHRI C.N.ANNADURAI:

SHRI DHANUSH M.KUMAR:

SHRIMATI MANJULATA MANDAL:

SHRI SELVAM G:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Public Funded Research Institutions and companies in the private sector are providing research facilities to young scientists to carry out scientific innovation work;**
- (b) if so, the number of young scientists benefitted during each of the last three years and the current year;**
- (c) whether the Council for Scientific and Industrial Research (CSIR) has granted loans to various institutions/ companies on easy terms and conditions for research and development;**
- (d) if so, the details thereof along with the norms adopted for granting the loan;**
- (e) the number of companies to which the loan has been provided, the period of loan and the details of the projects being undertaken by them along with the present status of loan recovery; and**
- (f) whether any company has got sick after taking loan if so, the details thereof and the action taken thereon?**

**MINISTER OF STATE (INDEPENDENT CHARGE) OF SCIENCE AND
TECHNOLOGY & EARTH SCIENCES**

(DR.JITENDRA SINGH)

- (a) & (b) Yes Sir. Public Funded Research Institutions are providing research facilities to its Young Researchers/Scientists to carry out their scientific innovative work. The number of Young Fellows/ Researchers/Scientists benefitted during each of the last three years and the current year at the Research Institutions of the Department of Science and Technology (DST); Department of Biotechnology (DBT); Department of Atomic Energy (DAE); Department of Space and Council of Scientific and Industrial Research (CSIR) is at Annexure-I. The details pertaining to research facilities provided to Young Scientists by private sector companies is not available.**
- (c) Yes Sir. CSIR has granted loan to the companies under CSIR-New Millennium Indian Technology Leadership Initiative (CSIR-NMITLI) Programme.**
- (d) CSIR provides soft loan for R&D activities to companies under the New Millennium Indian Technology Leadership Initiative (NMITLI) Program. The financial support to the industry is in the form of soft loan with 3% interest. The loan is repaid in annual installments over a period of 10 years. The norms adopted for granting loan is based on the selection of project through Cabinet Committee on Economic Affairs (CCEA) approved procedure involving rigorous screening and project review. The criteria for selection of the project are based on novelty of the proposal, potential technological benefits and the ability of industry to capture those benefits.**

(e) Name of companies, name of projects, amount of loan given, period of loan given, status of loan recovery is given in Annexure-II.

(f) Two companies which received loan from CSIR has reported sick after taking the loan and CSIR has initiated arbitration against them.

LSQ 2816: Annexure-I**Department of Science and Technology (DST)**

Number of Young Scientists including Post-Doctoral Fellows benefitted during the last three years and the current year are given below:

2019	2020	2021	2022 (Till Date)
455	329	309	440

Department of Biotechnology (DBT)

Number of Fellows/Young Researchers benefitted during each of the last three years and the current year are given below:

2019-20	2020-21	2021-22	2022 (Till Date)
1280	1272	1417	1330

Department of Atomic Energy (DAE)

Number of Young Scientists benefitted during each of the last three years and the current year are given below:

2019	2020	2021	2022 (Till Date)
533	196	350	271

Department of Space (DoS)

Details of Research Personnel Supported under RESPOND Programme in last 3 years and current year:

2019	2020	2021	2022 (Till Date)
141	86	113	33

Council of Scientific and Industrial Research (CSIR)

Number of Young Scientists benefitted during each of the last three years and the current year are given below:

2019	2020	2021	2022 (Till Date)
2154	2111	2076	2026

Number of Young Doctoral and Post-Doctoral Fellows benefitted under CSIR Capacity Building and Human Resource Development Scheme during each of the last three years and the current year are given below:

2019	2020	2021	2022 (Till Date)
8500	9800	10400	10131

LSQ 2816: Annexure-II**Loan paid to Companies under CSIR-NMITLI scheme and their status**

S. No.	Name of Project	Company name	Loan disbursed (Rs in lakh)	Year	Status of loan recovery	Action Taken
1	5 & 25 kW decentralized power packs	Sud-Chemie India Ltd., New Delhi	50.000	2002-03	Repaid fully	--
2	Latent M. Tuberculosis: New Targets, Drug Delivery system, bio-enhancers and therapeutics	Lupin Ltd., Pune	1448.450	2001-02	Repaid fully	--
3	Nano-material catalysts and associated process technology for alkylation/acylation/nitration of well identified industrial chemicals, pre-reforming of hydro-carbons and sulphur removal (<50 ppm) from petroleum fuels	Sud-Chemie India Ltd., New Delhi	95.000	2002-03	Repaid fully	--
4	Versatile, portable PC based software for bioinformatics; and Development of Linux cluster version of Bio-suite	Tata Consultancy Services, Hyderabad	954.000	2001-02	Repaid fully	--
		Jalaja Technology, Bangalore	24.000	2001-02	Defaulted	Under arbitration
		Frontier Information Technologies	40.000	2001-02	Defaulted	Under arbitration

		Ltd., Secunderabad				
5	Development of an oral herbal formulation for treatment of psoriasis	Lupin Ltd., Pune	1644.580	2002-03	Repaid fully	--
6	Development of novel biotech therapeutic molecule – Lysostaphin	Bharat Biotech International Limited, Hyderabad	713.991	2002-03	Repaid fully	--
	Development of novel biotech therapeutic molecule – Lysostaphin Phase II/III Clinical Studies	Bharat Biotech International Limited, Hyderabad	167.230	2016-17	Repaid fully	--
7	Microbiological conversion of Erythromycin to Clarithromycin and other novel biologically active molecules	Alembic Ltd., Vadodara	28.500	2002-03	Repaid fully	--
8	Novel molecular diagnostics for eye diseases and low vision enhancement devices	Lensel Optics Pvt. Ltd., Pune	14.750	2003-04	Repaid fully	--
		Xcyton Diagnostics Limited, Bangalore	69.560	2005-06	Tenth Instalment defaulted	In arbitration
9	Value added polymeric materials from renewable resources: Lactic acid and lactic acid based polymers	Godavari Sugar Mills, Mumbai	485.000	2006-07	Defaulted	Under arbitration

10	Recombinant approach to produce a-linolenic acid and docosahexaenoic acid (DHA) in sunflower and yeast	Avesthgen Pvt. Ltd., Bangalore	303.500	2003-04	Defaulted	Under arbitration
11	A cost effective Simple Office Computing (Sofcomp) platform to replace PC (Phase I & II)	Encore Software Ltd., Bangalore	320.000	2003-04	Defaulted	Under arbitration
12	A PC based high-end 3D visualization platform for computational biology – ‘Darshee’	Strand Life Sciences Pvt. Ltd., Bangalore	186.400	2003-04	Repaid fully	--
13	Improved Genome Annotation Through a Combination of Machine Learning and Experimental Methods: <i>Plasmodium falciparum</i> As a Case Study	Tata Consultancy Services, Hyderabad	291.000	2004-05	Repaid fully	--
14	Development of Novel Fungicides	Rallis Research Centre, Bangalore	188.290	2004-05	Repaid fully	--
15	Novel Expression System	Biocon, Bangalore	33.125	2004-05	Repaid fully	--
		Shantha Biotechics, Hyderabad	56.070	2004-05	Repaid fully	--

16	Development of Globally competitive 'Triple-Play' Broadband Technology	Divinet, Pune	938.750	2004-05	Defaulted	Under arbitration
17	Market seeding of SofComp and Mobilis to develop wide-ranging applications as well as increase awareness	Encore Software Ltd., Bangalore	537.000	2005-06	Defaulted	Under arbitration
18	Development of an integrated micro PCR system with In-situ Identification	Bigtech Pvt. Ltd., Bangalore	925.100	2005-06	Repaid fully	--
19	Development of high throughput marker assisted selection systems for improvement of drought tolerance and fibre quality related traits in Cotton	JK Agri-Genetics Ltd., Hyderabad	736.790	2006-07	Repaid fully	--
20	Novel method for development of B-type Natriuretic peptide (BNP) for diagnosis and treatment of congestive heart failure	Virchow Biotech Pvt. Ltd., Hyderabad	414.700	2006-07	Repaid fully	--

21	Development of Next Generation Plasma Display Technology a 50" High Definition (HD) TV Prototype	Samtel Color, Ghaziabad	2063.000	2006-07	Defaulted Declared Sick	Under arbitration-NCLT
22	Development of sensor networks chipset based on ultra-wide band technology	Virtual wire tech, New Delhi	422.000	2006-07	Defaulted	Under arbitration
23	Design and development of cushion bonded/rigid bonded organic, cerametallic cookie & single/fuel sintered buttons (copper/Iron based), ceramic cookies and annular ring clutch discs and matching cover assemblies	Clutch Auto Ltd., Faridabad	1493.350	2007-08	Defaulted Declared Sick	Under arbitration-NCLT
24	Intelligent Video Surveillance System	Mind Tree Ltd., Bangalore	458.090	2008-09	Loan repaid fully	--
25	Novel therapy for management of sepsis	Cadila Pharma Ltd., Ahmedabad	2084.960	2007-08	Being paid on time	--

26	Development of DNA Macro-Chips for simultaneous detection of pathogens causing acute encephalitic syndrome (AES) Septicaemia and antibiotic resistance	Xcyton Diagnostics Limited, Bangalore	506.398	2007-08	Defaulted	Under arbitration
27	Development of Characterization of an indigenous vaccine for Johne's disease	Biovet, Bangalore	429.010	2008-09	Being paid on time	--
28	Evaluation of RNAi-based constructs for conferring resistance on transgenic rice against the blast fungus Magnaporthe grisea	Metahelix Life Sciences Ltd., Bangalore	83.270	2008-09	Loan repaid fully	--
29	Development of caerulomycins as novel immunosuppressive agents to prevent organ rejection after transplantation and to address various autoimmune and allergic disorders	EnEm Nostrum Remedies Pvt. Ltd., Mumbai	800.000	2009-10	Eighth Instalment defaulted in FY 2021-22	CSIR is pursuing for repayment with company
30	Novel DPP IV Inhibitors for	Cadila Pharma Ltd., Ahmedabad	769.500	2009-10	Being paid on time	--

	the treatment of Diabetes					
31	Development and production of a therapeutic monoclonal antibody against eNAMPT, a novel inflammatory target	Gennova Biopharmaceuticals Ltd., Pune	1841.400	2010-11	Being paid on time	--
32	Design, Development and demonstration of high performance parabolic trough based 300 kW Solar Thermal Power Plant	Milman Thin Film Systems Pvt. Ltd., Pune	1103.250	2010-11	Defaulted	Under arbitration
33	Development and commercialisation of “Vennfer” – unique H.264 high definition software based multiparty, multipoint video conferencing solution on multipoint network transmission protocol	Intellisys Technologies & Research Ltd., Kolkata	296.000	2010-11	Defaulted	Under arbitration
34	Development and commercialisation of NXR-4D: A lithium-Ion battery	Mahindra Reva Electric Vehicles Pvt. Ltd., Bengaluru	1751.800	2011-12	Being paid on time	--

	powered 4-door next generation electric car (4-seater capacity)					
35	Design and fabrication of All-fibre supercontinuum light source with application demonstration to detect fake pills	Vinvish Technologies Pvt. Ltd., Thiruvananthapuram	225.250	2011-12	Being paid on time	--
36	Development and commercialization of Soleckshaw Lite - An innovative electrical Green transport platform	Kinetic Engg. Ltd., Pune	1317.170	2012-13	Being paid on time	--
37	Customized adaptation of nonClonable ID technology to establish authenticity of medical products	Bilcare Ltd., Pune	893.460	2011-12	Defaulted	Under arbitration
38	Development of a diagnostic system for affordable, point of need testing to manage HIV and TB	ReaMetrix India Pvt. Ltd., Bengaluru	816.800	2011-12	Defaulted	Under arbitration
39	System based computational model of skin (SoCoMOS)	Persistent Systems. Ltd., Pune	184.485	2011-12	Being paid on time	--

40	Development of integrated technological solutions for security and operations based on UV sensor technologies	Aron Universal Ltd., Bengaluru	43.100	2013-14	Being paid on time	--
41	Design and development of photonic crystal cladded and double called Er and Er/Yb fibers, and application demonstration of high-power optical amplifier	Vinvish Technologies Ltd., Thiruvananthapuram	133.000	2014-15	Being paid on time	--
42	Demonstration and Validation of a LT-PEMFC system for automotive application	KPIT, Pune	187.550	2015-16	Loan repaid fully	--
43	Development of an antidiabetic agent based on the phytopharmaceutical drug guidelines from <i>Enicostemma littorale blume</i>	Viridis Biopharma, Mumbai	62.520	2016-17	Loan repaid fully	--
44	<i>Kappaphycus alvarezii</i> and red seaweed based formulations for improving productivity and health of	Aquaagri Processing, New Delhi	75.000	2016-17	Being paid on time	--

	dairy and poultry animals					
45	Automation of Ghani operation through vacuum conveying system	Fare Labs, Gurgaon	481.670	2016-17	Being paid on time	--
46	Development of Mycobacterium W for COVID-19: Safety and efficacy trial in critically ill, hospitalized and at risk patients	Cadila Pharma Ltd., Ahmedabad	69.160	2020-21	Being paid on time	--
47	Development of innovative eco-friendly/ formaldehyde free fluorescent pigments for vast array of water and solvent based applications	Aron Universal Ltd., Bengaluru	145.290	2020-21	Repayment Not Due	--
48	Development of Novel DPP IV Inhibitor - Phase III study	Cadila Pharmaceuticals Ltd., Ahmedabad	1057.270	2021-22	Being paid in time	--
49	Industrially scalable Ashwagandha (<i>Withania somnifera</i>) charged formulation for better bone health	Pharmanza Herbal Pvt. Ltd., Gujarat	20.250	2021-22	Repayment Not Due	--

50	Development, manufacturing and marketing of Micro Raman Spectrometer system with additional capabilities of carrying out photo-luminescence spectroscopy and optical emission spectroscopy	TechnoS Instruments, Jaipur	125.500	2021-22	Repayment Not Due	--
-----------	---	------------------------------------	----------------	----------------	--------------------------	-----------
