

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

**LOK SABHA
UNSTARRED QUESTION No. 6035
(ANSWERED ON 04.04.2018)**

STATUS OF PROJECTS UNDER CSIR

6035. SHRI MOHITE PATIL VIJAYSINH SHANKARRAO:

DR. J. JAYAVARDHAN:

DR. HEENA VIJAYKUMAR GAVIT:

SHRI DHANANJAY MAHADIK:

SHRI SATAV RAJEEV:

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

- (a) the various ongoing research projects being taken up by Council of Scientific and Industrial Research (CSIR) as on date and their current status thereof, project-wise;**
- (b) the number and details of projects successfully completed by CSIR during each of the last three years and the current year, project-wise;**
- (c) whether CSIR is assisting or contemplating to assist the State Government in certain projects undertaken by them or by State universities and if so, the details thereof;**
- (d) the number of research papers published by CSIR during the above period; and**
- (e) the action taken by the Government to streamline the working of CSIR?**

ANSWER

**THE MINISTER OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(DR. HARSH VARDHAN)**

- (a) The various ongoing research projects being taken up by Council of Scientific and Industrial Research (CSIR) as on date and their current status thereof, project-wise are given at Annexure-I.**
- (b) CSIR has been implementing 159 projects during the 12th Five Year Plan period (2012-17). These projects were on-going during the years 2014-15 and 2015-16 and were completed in 2016-17. The number and details of projects completed by CSIR, cluster-wise and project-wise are given at Annexure-II.**

(c) **Yes, Madam. CSIR has been supporting the research projects at the State Universities. During the year 2017-18, CSIR has sponsored a total of 157 projects to the State Universities, the details of which are given at Annexure-III.**

(d) **The number of research papers published by the CSIR during the above period is given in the following table:**

Year	No. of Papers Published in SCI Journals
2014	5824
2015	5776
2016	5549
2017	5350 (Tentative)

(e) **A review of CSIR has recommended functional alignment of CSIR laboratories on eight thematic lines and linking of the R&D being carried out in the laboratories with technological thrust areas of Line Ministries to derive synergies.**

S. No.	Project Title
List of Fast Track Translation Projects	
1	Paper based affordable microfluidic kit for early pregnancy detection in cattle and buffaloes
2	Development of simple and affordable diagnostic protocols and diagnostic kit for genetic diagnosis of musculopathies and hemoglobinopathies
3	Clinical development of Candidate Drug 99/373 (Anti-osteoporotic)
4	Clinical development of candidate drug 97/78 (anti-malarial)
5	Know-how of the isolation of arabinoxylans from defatted cereal brans
6	Development and production of anti-obesity DAG Oil
7	Non-thermal processing of liquid foods
8	Technology for carbonated fruit juice beverages from selected fruit crops
9	Development of a high yielding variety of <i>Artemisia annua</i>
10	Development of improved variety for high root yield with better quality of Yellow Satawar (<i>Asparagus adscendens</i> Roxb.)
11	Development of a linalool rich cold tolerant <i>Ocimum</i> chemotype
12	Development of withanolide rich, quality root & early maturing advance breeding line with a novel ideotype
13	Calliterpenone for enhancing crop yields
14	GOMED - Platform for Genomics and other Omics technologies for Enabling Medical Decision
15	NGS based high resolution HLA typing kits
16	NGS for mitochondrial diagnosis
17	PulmoScan
18	Developing L-Asparaginase with Low Glutaminase Activity for Therapeutic Applications
19	Process for substituted cyclohexane-1-3-dione synthesis
20	Rapid Assay System and Clinical Validation of Biomarker for Rheumatic Heart Disease
21	Serum and urine-based kits for diagnosis (VL) and post kala-azar dermal leishmaniasis (PKDL) in the field setting
22	Mupirocin + IIM-1133/06: A topical formulation for improved bioefficacy
23	Agro-technology transfer and thymol crystal from Jammu monarda
24	IND filling of anti-cancer lead IIM (N)-290/13 (Cdk inhibitor)
25	Development of biosensors (<i>Indicator-eye Test Range</i>) for detection of adulterants in food products
26	Development of a new real time PCR based system for the quantification of small RNAs and circular RNA and development of a new kit for absolute quantification of miRNAs
27	An electric device for online drinking water disinfection
28	Technology for Recombinant Streptokinase
29	For marker-gelsolin estimation kit and gelsolin(s)
30	A universal expression platform for low cost production of biotherapeutic proteins in <i>S. prmbe</i>
31	Technology Development for production of pullulan
32	Production of a biomedically important glycolipid bio-surfactant sophorolipid
33	Thebaine rich opium poppy lines for suitable cultivation through narcotics department
34	Low grain arsenic rice variety for safer human consumption
35	Anacardic acid: A potential molecule to increase cotton fibre yield and quality
36	Development of Zinc Bromine redox flow battery (500 W)

S. No.	Project Title
37	Electrochemical remediation of industrial effluents and recovery of chromium
38	Development of accurate, reliable and cost effective sensor for the electrochemical detection of multiple analytes
39	Development of High temperature ceramic Thermal barrier coatings for Missile components
40	Coal dust collecting and briquetting system
41	Waterless chrome tanning
42	High grade gelatine and protein hydrolysate from trimmings
43	Zero Wastewater Discharge Technology
44	Cocktail of carbohydrases for rapid fiber opening
45	Technology for double fortified salt composition containing iron and iodine to control both deficiencies
46	Hollow fiber membrane based high flux domestic filter for water clarification and disinfection
47	Novel cost effective process for high purity solar salt production with reduced contents of carbon, iodine, suspended solids and sulfate content directly in solar salt fields from high sulfate containing brines (particularly for Rajasthan inland/lake brines)
48	A consolidated biomass process for integrated production of multiple products from fresh marine macroalgae
49	Development of multipurpose thermal insulation coatings for different substrates
50	Development of novel processes towards Eribulin, Nicotine, Bedaquiline
51	Discovery of Novel Anticancer Agent (HDAC Inhibitor)
52	Polymeric excipients for pharmaceutical applications
53	Setting up 1 TPD pilot plant for converting waste plastics to diesel
54	Technology demonstration and process flexibility for production of Bio-Aviation fuels
55	Demonstration and Process Validation of Laboratory scale Vacuum Swing Adsorption (VSA) Process for Biogas Up-gradation to Pipeline Quality Fuel from Raw Biogas
56	Development of Adsorption Based Technology for the Production of Ultra Low Sulfur Diesel meeting BS IV /BS VI specification Development Positioning
57	Synthesis of 5-Hydroxymethyl furfural from sacharides
58	Continuous Dinitration for Manufacturing of Pendimethalin
59	Development of penicillin V acylase system for industrial production of semi-synthetic antibiotics
60	Non-vascular self-expandable stents
61	<i>In-situ</i> bioremediation technology
62	Herbal product for management of pain
63	Membrane Based Process Technology for Commercial Production of Biomolecules
64	Modular Bricks from Brahmaputra River Bed Sand
65	IR reflecting rare earth blue pigment for solar heat control cool-roof applications
66	Scaled up process for the upgradation of Low grade of Ilmenites
67	Development of process for large scale production of β -glucosidase (BGL) enzyme for blending in biomass hydrolyzing cocktails to be used in Lignocellulosic Biorefineries
68	Aluminium Composite Foams (ACFs) for Crashworthiness Applications
69	Fibre and particulate reinforced hybrid polymeric composite as architectural interior for building construction material
70	Building products using Kota stone cutting and slurry waste
71	Foundation system for light structures
72	Development of a boring machine based on trenchless technology

S. No.	Project Title
73	Paper-based Ceramic Separator for Li-ion Battery Application
74	Packaged Fiber Laser Modules for Industrial and Medical Applications
75	Development of Reaction Bonded Silicon Nitride Ceramic Radome
76	Superior Refractory for Induction Furnace to enable Refining of Steel
77	SiAlON Insert for High Speed cutting of hard materials
78	Fast Recovery Trace moisture sensor and meter for detection of trace moisture present in transformer oil
79	Development of novel Ion doped Hydroxyapatite (HAp) by spray drying method and its utilization for plasma spray coating on medical implants with/without ion doping
80	Field deployment of indigenous 4-axis controller for multi-process micro machine
81	Graphene based Aqueous lubricants
82	Development of Domestic Iron Removal Filter
83	Micro Fuel Cell
84	Design and Development of different prototypes of Solar Power Tree for independent area electrification
85	Intelligent and Powered Wheel Chair
86	Process technology for manufacturing of ADI components for mining application
87	Design of Noise Barrier based on different Frequencies
88	Development and evaluation of "Soil Nailing Technique" for stabilisation of soil slope for the construction of underpass below Road traffic
89	Design & Performance of Cement Grouted Bituminous Mix (CGBM) for Urban Roads
90	Electrophoretic Deposition (EPD) for Industrial Application
91	Maximize the recovery of iron values from lean grade iron ore by reduction roasting and pelletisation of high LOI and high Blaine number iron ore fines
92	Process Development for production of flaky graphite, high purity graphite and graphite from natural graphite
93	Recovery of Alumina from fly ash
94	Design and Development of Cost Effective and Advanced Polymer Composite Processing Equipment
95	Fully Autonomous fixed wing mini UAVs under 5.0 kg class - Enhancement of existing UAV models
96	Design, development and certification of Avionics Video and Data FPGA based IP Core
97	VTOL based MAV using indigenously developed electrically driven co-axial motor (VTOL)
98	Development of Medium Wind-Solar Hybrid (WiSH) Systems of 7 – 10 kW class for Agricultural and other rural applications
99	Solar Disinfection Systems for potable water
100	Technology for extraction of tungsten (yellow tungsten oxide or ammonium paratungstate or metallic W-powder) from a variety of scraps
101	Development of Hydrogen standard in Steel
102	Low Phosphorus steel through furnace route using DRI as major ferruginous raw material-an industrial assessment
103	Glass Textile Reinforced Concrete Crash Barrier System
104	Design of Emergency Restoration System for Power Lines
105	Precast Ferrocement Toilet Core Unit (Prefer Toco)
106	Improved Design and Retrofit Methodology for Seismically Vulnerable Open Ground Storey (OGS) Structures
107	Development of cost effective water tanks using flowable cement mortar
108	Prevention of adulteration in milk-real time remote milk supply monitoring network

S. No.	Project Title
	(PRADUMAN)
109	Handheld milk quality analyser
110	Gas sensor for environmental monitoring
111	Development of 3D rigid and flexible Endoscopes for Denture examination
112	*Development of Silent Killer Gas Detector using LTCC Technology
113	High Frequency RF MEMS Capacitive Switches
114	Development of MEMS-based Accelerometer
115	Development of Water Quality Monitoring Watchdog Pod
116	Reading Machine for visually impaired
117	Power Quality Analyser
118	Head gesture based control module for Intelligent Patient Vehicle
119	Postural Stability Assessment System
120	Portable Energy Audit Tool
121	Pump Efficiency Monitoring System
122	AutoCEPH: A software for 2-D Computerized Cephalometric Analysis
123	Earthquake Warning System
124	Touch based Finger Gesture control for Intelligent Patient Vehicle
125	Antiglare Filter for Automobiles
126	Avionics Head Up Display Test Rig
127	Head up Display Mk1N-NP for Naval LCA
128	Head up Display for Intermediate Jet Trainer Aircraft
129	Indigenous development of laser lithotripsy system for medical applications
130	Earthquake hazard assessment of the Himalaya and the Indo-Gangetic plains
131	Imaging sub-volcanic mesozoics in Kerala-Konkan (KK) offshore from wide-angle seismic data (Energy and Mineral Resources)
132	Development of software for High resolution velocity analysis for mapping of gas hydrate deposits/support for strategic sector
133	Microbial consortium for aquaculture waste management and disease control
134	Melanin from sponge associated bacteria
135	Low cost Multipurpose Multichannel data logger unit
136	Low-cost Peltier based refrigerators for rural regions
137	Sunlight sensitized long afterglow phosphor powder & paint
138	Fonoclock with a time synchronization accuracy of ± 10 ms
R&D projects	
1.	Indigenous design, development & qualification of Ku band (140-210 watts) and Ka band (100-150 watts) Travelling wave tube (TWT)".
2.	Strengthening of Primary Time Scale Ensemble for nation-wide dissemination of Indian Standard Time
3.	Flight Testing and Evaluation of Saras PT1N
4.	Creation and Calibration Facility for LED and LED based Lighting
5.	Informatics for drug-repurposing and rescue discoveries (IDrRD);
6.	Intellectual Property Evaluation and Commercialization (IPEC);

S. No.	Project Title
7.	Creation of E-Markets for Knowledge Products and Services
8.	“Digitisation of Sowa Rigpa, Ancient Manuscripts and Oral Traditional Indian Systems of Medicine
9.	Modernization and upgradation of Information Technology Infrastructure of Traditional Knowledge Digital Library Unit (TKDL)”
10.	Digitising Traditional Indian Systems of Medicine
Mission Mode Projects	
1.	Catalysis for Sustainable Development;
2.	CSIR Sickle Cell Anemia (SCA) Mission;
3.	Innovative Processes and Technologies for Indian Pharmaceuticals and Agrochemical Industries (INPROTICS)
4.	CSIR Aroma Mission
5.	Intelligent Systems (IS) - Intelligent Technologies and Solutions
6.	Nano-Biosensors and Microfluidics for Healthcare
7.	CSIR Phytopharmaceuticals Mission.

List of 12th Five Year Plan Projects Completed during 2016-17

Project Title	
Cluster Area: Biological Sciences	
1.	Factors Governing competent gamete production and reproductive dysfunction (PROGRAM)
2.	Towards holistic understanding of Complex Diseases: Unraveling the Threads of Complex Diseases (THUNDER)
3.	New Approaches Towards Understanding of Disease Dynamics and to Accelerate Drug Discovery (UNDO)
4.	Emerging and re-emerging challenges in infectious diseases: Systems based drug design for infectious diseases (SPlenDID)
5.	New initiatives to boost agriculture productivity through maximizing pre- and post-harvest yields (AGROPATHY)
6.	Bioprospection of plant resources and other natural products (BioprosPR)
7.	Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen)
8.	Medicinal Chemistry for stem cell biology and regenerative medicine (MEDCHEM)
9.	Plant Diversity: Studying adaptation biology and understanding/exploiting medicinally important plants for useful bioactives (SIMPLE)
10.	Introduction, domestication, improvement and cultivation of economically important plants (AGTEC)
11.	Integrated NextGen approaches in health disease and environmental toxicity (INDEPTH)
12.	Nanomaterials: Applications and Impact on Safety, Health and Environment (NanoSHE)
13.	Understanding supra molecular ensembles and machines (UNSEEN)
14.	Host Interactome analysis: Understanding the Role of Host molecules in Parasitic Infection (HOPE)
15.	Neurodegenerative diseases: Causes and Corrections (miND)
16.	Therapeutics of Chronic Obstructive Pulmonary Disease (COPD) and Related Respiratory Disorders (TREAT)
17.	Plant-Microbe and Soil Interactions (PMSI)
18.	Epigenetics in Health and Disease (EpiHeD)
19.	Man as a Superorganism: Understanding the Human Microbiome (HUM)
20.	Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY)
21.	Genomics and Informatics Solutions for Integrating Biology (GENESIS)
22.	Centre for Cardiovascular and Metabolic Disease Research (CARDIOMED)
23.	Genome Dynamics in cellular organization, differentiation and enantiostasis (GenCODE)
24.	CSIR-NCL-IGIB Joint Research Initiative: Interfacing Chemistry and Biology (CSIR-NCL-IGIB-)
25.	S&T interventions to combat malnutrition in women and children (HCP07)
26.	Anabolic Skeletal Targets in Health and Illness (ASTHI)
27.	Wellness through Foods and Nutraceuticals (WELFO)
28.	Chemical Biology of Ocimum and other Aromatic Plants (ChemBio)

29.	Root Biology and its correlation to sustainable plant development and soil fertility (RootSF)
30.	Nurturing a new Pan-CSIR drug pipe line: high intensity preclinical, clinical studies on lead candidates (DPL)
31.	Bio-energetic Disorders: A multi-model approach to monitoring and management (BenD)
32.	Conservation of endangered animals of India: Molecular Genetics and Reproduction Approaches (ConservE)
33.	Biology of Ageing and Human Health (BioAGE)
34.	Establishment of Centre for High Altitude Biology (CeHAB)
35.	Multidirectional approaches for molecular and systems level understanding of regulatory networks in pathogenic microbes (INFECT)
36.	Drug Discovery: Bugs to Drugs Programme (BUGS TO)
37.	Wellness Genomics Project - Understanding genomic signatures of healthy living in Indian population (WG 100)
38.	Process and Products from Himalayan Region and their toxicological evaluation (PROMOTE)
39.	Plant Breeding, Genomics and Biotechnology (PLOMICS)
40.	Towards Understanding skin Cell Homeostasis (TOUCH)
41.	Effective Application of Community Health Efforts through New Age, IT Based Modes (EACH-IT)
42.	Lipidomics Center (LIPIC)
43.	Expansion and Modernization of the Microbial Type Culture Collection and Gene Bank (MTCC)
44.	Visualisation of Organisms in Action (VISION)
45.	Creation of Advanced Research Facility in Molecular Nutrition (Nutri-ARM)
46.	CSIR-Mayo Clinic Collaboration for Innovation and Translational Research (CKF)
Cluster Area: Chemical Sciences	
47.	Multifunctional electrodes and Electrolytes for Future Technologies (MUTLIFUN)
48.	Clean Coal Technology (TapCoal)
49.	Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS)
50.	Membrane & Adsorbent Technology Platform for Effective Separation of Gases and Liquids (MATES)
51.	Potassic (K) fertilizer Technology to Empower the Nation (K-TEN)
52.	Biocatalysts for Industrial Applications & Greener Organic Synthesis (BIAGOS)
53.	Inherently Safer Practices for Industrial Risk Reduction (INSPIRE)
54.	Organic reactions in generating innovative and natural scaffolds (ORIGIN)
55.	Non-Infringing chemistry and engineering for pharmaceuticals (NICE-P)
56.	Metabolic profiling of human body fluids by MS and NMR (CMET)
57.	Screening molecules in lead exploration (SMiLE)
58.	Development of Sustainable Processes for Edible Oils with Health Benefits from Traditional and New Resources (PEOPLE HOPE)
59.	Development of Sustainable Waste Management Technologies for Chemical and Allied Industries (SETCA)
60.	Intelligent Coatings (IntelCoat)
61.	Energy Efficient Technologies (E2++)
62.	Biomass to Energy (BioEn)

63.	Catalysts for Sustainable Energy (ECat)
64.	New generation lubricants and additives (GenLube)
65.	Research Initiative for Low Emissions (RILE)
66.	Waste to Wealth - Waste plastics (W2W)
67.	Advanced Carbon Materials (AdCarbMate)
68.	Centre of Excellence for HRD in Hydrocarbon (AllTrain)
69.	Hydrogen Energy: Overcoming materials challenges in PEMFC towards generation, separation, storage and conversion of hydrogen (HYDEN)
70.	Innovate, develop and up-scale modular, agile, intensified and continuous processes and plants (Indus MAGIC)
71.	Catalysts for Speciality Chemicals (CSC)
72.	Encapsulated Microorganisms for Environmental Protection (EMEP)
73.	Creating intellectual property and capabilities for the development of improved security features and substrates for the Indian currency note (FUTURE)
74.	A Multi-Scale Simulation and Modeling Approach to Designing Smart Functional Materials for use in Energy, Electrochemistry and Bio-mimetics (MSM)
75.	Natural Products as Affordable Healthcare Agents (NaPAHA)
76.	Environmental Research Initiative for Paper and Process Industry (ERIPP)
77.	Sustainable Technologies for the Utilization of Rare Earths (SURE)
78.	Development of functional foods and their formulations for potential health benefits of common man (FUNHEALTH)
79.	Molecules to Materials to Devices (M2D)
80.	Speciality Materials based on Engineered Clays (SPECS)
81.	Science and Technology Revolution in Leather with a Green Touch (STRAIT)
82.	Research Initiative for Waterless Tanning (RIWT)
83.	High Purity Salt & Recovery of Valuable Metal Ions from Marine Resources (HPSMC)
84.	Development of Innovative Technologies for Strategic Fluorochemicals (DITSF)
85.	Development of Novel Vaccine Adjuvants (DENOVA)
86.	Advanced Polyolefins (SPIRIT)
87.	North East Exploration for Pharmaceutical (NEEP)
88.	Affordable Cancer Therapeutics (ACT)
89.	Advance Drug Delivery System (ADD)
90.	Design Innovation for Smart Material Transformation Yearning Leather Life Style Products (D'STYLE)
91.	Augmentation of Analytical Research Facilities (AARF)
92.	Centre for Surface and Interface Science Research (CSISR)
93.	Nuclear Magnetic Resonance Centre for Advanced Research (NMRCAR)
94.	National Repository of Molecules (NORMS)
95.	Up gradation of Facilities/National Repository of Molecules and National Collection of Industrial Micro Organisms Resource Centre (NCIMRC)
96.	CSIR Advanced Analytical Facility for North East (CAAF-NE)
Cluster Area: Engineering Sciences	
97.	Novel Energy Effective Metallic Materials for Automotive and General Engineering Application (LWM)
98.	Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment (EDMISSIBLE)

99.	Development of Novel CSIR Technologies for Manufacturing Tailored and Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM)
100.	Advanced ceramics materials and components for energy and structural application (CERMESA)
101.	Development of a technology for optimal extraction of locked-up coal from underground mines using artificial pillars (DeCoalArt)
102.	Development and Application of Technologies for Sustainable Transportation (SUSTRANS)
103.	Technology Solutions for Micro Air Vehicle Development (MAT)
104.	Centre of Excellence: Waste Utilization and Management (WUM)
105.	Development of Zero Waste Technology for Processing and Utilization of Thermal Coal (ZWT-CUP)
106.	Innovative Technologies for Health Assessment and Damage Mitigation of Structures (I-HEAL)
107.	Robotics and Micro Machines (ROuM)
108.	Autonomous Underwater Robotics (UnWaR)
109.	Design and Development of Thermo Responsive & Magnetic Shape Memory Materials and Devices for Engineering Applications (TR&MSMM)
110.	Leadership in Specialty Glass and Optical Fiber Technologies (GLASSFIB)
111.	Intelligent devices and smart actuators (InDeSa)
112.	Evaluation of Economic Loss Due to Idling of Vehicles at Signalized and Mitigation Measures (ELSIM)
113.	Minerals to Metals for Sustainable Planet (MINMET)
114.	Processing of natural gemstones for aesthetic improvement and value addition (PNG)
115.	Engineering Sustainable Materials and Structures Action Plan I: Sustainability Through Eco-Balancing (SUSMAS)
116.	Engineering Sustainable Materials and Structures Action Plan II: Sustainability Through Nano-Technology and Bio-Mimetics (eNano-Tics)
117.	Avionics and Flight Controls Civil Aerospace Technologies (AFCCAT)
118.	Advanced Structural Technologies for Aircraft (ASTA)
119.	Aerodynamics and Propulsion Technologies for Next Generation Civil Aircraft (ADPR)
120.	Innovative Materials and Technologies for Next Generation Green buildings (INMATE-NGGB)
121.	Development of underground coal gasification technology in India (CoalGasUrja)
122.	Development of suitable design methodology for extraction of coal at greater depths (>300 m) for Indian geominig conditions (DeepCoal)
123.	Development of Indian Highway Capacity Manual (Indo-HCM)
124.	National Clean Air Mission (NCAM)
125.	Clean Water: Sustainable Options (Clean Water)
126.	Centre for Special Materials (CSM)
127.	Transport Aircraft Design Bureau (TADB)
128.	Augmentation and Refurbishment of National Trisonic Aerodynamic Facilities (NTAF)
129.	Development of Magnesium Metal Production Technology (MPT)
Cluster Area: Information Sciences	
130.	Analysis and Monitoring of patent applications in International Patent Office for preventing misappropriation of Indias Traditional Knowledge (HCP006)

131.	CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE)
132.	Indian S&T and Innovation Policy (ISTIP)
133.	Patinformatics (Patinformatics)
134.	Chembiinformatics for Drug Discovery (ISC0203)
135.	Open Science and Open Innovation Infrastructure (OSOI)
136.	Traditional Knowledge Digital Library 2020 (Enhanced TKDL-)
137.	Advanced Research in Engineering & Earth Sciences: Data intensive modelling and crowd sourcing approach (ARiEES)
138.	CSIR--Wide Consortium Access to Online Information Resources (NKRC)
139.	Vulnerability assessment and development of adaption strategies for climate change impact with special reference to coasts and island ecosystems of India (VACCINE)
Cluster Area: Physical Sciences	
140.	Very High Power Microwave Tubes : Design and Development Capabilities (MTDDC)
141.	Research Initiative on Nano Devices and Nano-Sensors (R-Nano)
142.	Advanced Instrumentation Solutions for Health Care and Agro-based Applications (ASHA)
143.	Geodynamic and Earthquake generating processes in NE India and Andaman Subduction Zone (GENIAS)
144.	Ocean Science Towards Forecasting Indian Marine Living Resource Potential (Ocean Finder)
145.	Geological processes in the Indian Ocean - Understanding the input fluxes, sinks and Paleoceanography (GEOSINKS)
146.	Geo-scientific investigations for deciphering the Earth's internal processes and exploration of energy resources (GEOSCAPE)
147.	Indian Aquatic Ecosystems: Impact of Deoxygenation, Eutrophication and Acidification (INDIAS IDEA)
148.	Development of Advanced Materials for Next-Generation Energy-Efficient Devices (D-NEED)
149.	Advanced Quantum Research and Innovation with Ultra Small Systems (AQuaRIUS)
150.	Measurement for Innovation in Science & Technology (MIST)
151.	Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains (IGP) and Himalayan Regions (AIM-IGPHim)
152.	Advanced Microsensors and Microsystems : Design, Development and Applications (MicroSensys)
153.	Opto-Mechatronics Technologies for Next Generation Sensors and Applications (OMEGA)
154.	Hazard due to Earthquakes and Tsunami in the Indian region (HEART)
155.	India Deep Earth Exploration Programme (INDEX)
156.	Shallow subsurface imaging of India for resource exploration (SHORE)
157.	Analyses and Harnessing of Marine Biodiversity for Bioremediation of Aquaculture and Industrial Effluents (MARINEBIOTE)
158.	Research and Development on Single Trapped Ion based Frequency Standard (STIOS)
159.	Advanced Facility for Nano Electronics (AFNE)

Status of the project sanctioned by CSIR to State Universities during 2017-18

Name of the University	Number of projects	Cost of the Project (Rs.)
Acharya Nagarjuna Univ	2	1881000
Andhra University	1	732000
Anna University	4	2632500
Annamalai University	1	291000
Bangalore University	2	1151333
Bengal Engineering and Science University, West Bengal	1	253500
Bharathiar Univ	3	5032000
Bharathidasan Univ	3	4490000
Burdwan University	2	2052000
Calcutta University, West Bengal	10	7590667
CSI HP Agricultural Univ, Palampur	1	832000
DCR Univ of SC & Tech	1	75000
Deen Dayal Gorakhpur University	1	582000
Dibrugarh University, Assam	1	380000
Dr YSP Univ of Horti & Forest	2	1614000
Gautam Budh University, Gautam Budh Nagar (U.P.)	3	3278000
GGSIU, Delhi	2	1048000
Gitam University, Andhra Pradesh	2	1764000
GNDU Amritsar	17	14308000
Goa University	3	2162000
Gujarat Forensic Sciences University, Gujarat	1	700000
Jadavpur University, West Bengal	20	12826167
Kalyani University	6	4896000
KIIT Univ	2	600000
Kumaun Univ	1	1332000
M.K. Bhavnagar University	1	341000
M.S.University of Baroda	5	3291500
Madras University	1	549000
Madurai Kamaraj University, Tamil Nadu	3	1007000
Mahatma Gandhi University, Kottayam	1	1996000
MD Univ. Rohtak Haryana	1	105333
North Maharashtra University, Jalgaon	1	1250000
Osmania University, Telangana	4	2525500
Panjab University, Punjab	5	1957167
Periyar University, Tamil Nadu	3	932000
Pondicherry Univ	1	360000
Presidency University	4	4013000
Punjab University, Chandigarh	6	5165000
Punjabi Univ Patiala	1	732000

Name of the University	Number of projects	Cost of the Project (Rs.)
Rajasthan University	1	682000
Ravenshaw University, Odisha	3	2895500
Sambalpur Univ	1	145000
Sastra University	1	549000
Sathyabhama Univ. Chennai	1	1221000
Saurashtra University	1	341000
Savitribai Phule Univ.Pune	5	2096000
Shivaji Univ, Kolhapur	1	533500
Sri Venkateswara University	1	1022000
Thapar University	1	291000
Thiruvalluvar Univ	1	700000
Tripura University	1	200000
University of Kalyani, West Bengal	1	480000
University of Lucknow, Uttar Pradesh	1	950000
University of North Bengal, West Bengal	1	582000
V S K University, Karnataka	1	120000
Veer Surendra Sai University of Technology, Odisha	1	270000
Venkateswara Univ	1	582000
Vidyasagar University	3	3241000
Vikrama Simhapuri Univ PG CTR	1	400000
VIT Univ	1	670000
WBUT Kolkatta	1	732000
Total	157	113549667