

**GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA**

UNSTARRED QUESTION NO:2128
ANSWERED ON:15.03.2017
Research Projects of CSIR
Muddahanumegowda Shri S.P.

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

- (a) whether the Council of Scientific and Industrial Research (CSIR) has taken up many research projects for new inventions in various fields for the benefit of the common people;
- (b) if so, the details of major projects undertaken by CSIR in various States, including Karnataka during the last three years;
- (c) the budget allocated for the projects, State-wise during the above period; and
- (d) the achievements made so far in these projects?

Answer

MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY AND EARTH SCIENCES

(SHRI Y. S. CHOWDARY)

(a) (b)&(c) The Council of Scientific and Industrial Research (CSIR), through its constituent laboratories, is implementing 158 projects as a part of its 12th Five Year Plan. The details of major projects, undertaken by CSIR in various States, including Karnataka during the last three years are in Annexure-I.

(d) The significant achievements made so far in these projects are in Annexure-II.

Annexure I

State-wise, Laboratory-wise, Project-wise Budget Expenditure during 2013-14 to 2015-16

Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

State / U.T. : Assam

Laboratory: CSIR-North East Institute of Science & Technology (CSIR-NEIST), Jorhat

1 New initiatives to boost agriculture productivity through maximizing pre- and post-harvest yields (AGROPATHY)	35.632	35.820	41.760
2 Bioprospection of plant resources and other natural products (BioprosPR)	15.789	13.225	16.400
3 Plant Diversity: Studying adaptation biology and understanding/exploiting medicinally important plants for useful bioactives (SIMPLE)	50.753	19.240	29.180
4 Introduction, domestication, improvement and cultivation of economically important plants (AGTEC)	30.062	31.568	31.447
5 Integrated NextGen approaches in health disease and environmental toxicity (INDEPTH)	37.497	23.625	24.250
6 Nanomaterials: Applications and Impact on Safety, Health and Environment (NanoSHE)	33.011	26.120	22.660
7 Therapeutics of Chronic Obstructive Pulmonary Disease (COPD) and Related Respiratory Disorders (TREAT)	32.355	11.190	14.000
8 Plant-Microbe and Soil Interactions (PMSI)	22.577	19.179	24.590
9 S&T interventions to combat malnutrition in women and children (HCP07)	2.589	12.684	15.443
10 Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS)	12.637	14.250	26.700
11 Membrane & Adsorbent Technology Platform for Effective Separation of Gases and Liquids (MATES)	94.958	47.744	38.080
12 Biocatalysts for Industrial Applications & Greener Organic Synthesis (BIAGOS)	72.482	45.700	34.500
13 Inherently Safer Practices for Industrial Risk Reduction (INSPIRE)	78.530	26.685	30.470
14 Organic reactions in generating innovative and natural scaffolds (ORIGIN)	85.849	80.364	35.500
15 Development of Sustainable Processes for Edible Oils with Health Benefits from Traditional and New Resources (PEOPLE HOPE)	22.437	32.387	17.137
16 Development of Sustainable Waste Management Technologies for Chemical and Allied Industries (SETCA)	52.197	49.451	50.860
17 Biomass to Energy (BioEn)	54.065	36.428	37.992

18 New generation lubricants and additives (GenLube) 74.224 40.745 34.270
19 Catalysts for Speciality Chemicals (CSC) 123.606 100.276 71.160
20 Natural Products as Affordable Healthcare Agents (NaPAHA) 179.840 158.335 97.377
21 Environmental Research Initiative for Paper and Process Industry (ERIPP) 168.975 139.584 104.800
22 Molecules to Materials to Devices (M2D) 46.120 42.548 35.334
23 Speciality Materials based on Engineered Clays (SPECS) 67.649 62.775 57.000
24 Advanced Polyolefins (SPIRIT) 49.808 69.450 50.000
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

25 North East Exploration for Pharmaceutical (NEEP) 122.802 148.500 83.000
26 Affordable Cancer Therapeutics (ACT) 44.082 78.300 35.088
27 CSIR Advanced Analytical Facility for North East (CAAF-NE) 131.740 316.625 26.263
28 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart
Built Environment (EDMISSIBLE) 47.409 29.320 17.680
29 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure
(KNOWGATE) 0.000 0.000 9.460
30 Advanced Research in Engineering & Earth Sciences: Data intensive
modelling and crowd sourcing approach (ARiEES) 21.391 19.600 15.700
31 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains
(IGP) and Himalayan Regions (AIM-IGPHim) 27.102 8.538 7.984

Total : CSIR-NEIST 1838.170 1740.256 1136.085

Total Assam 1838.170 1740.256 1136.085

State / U.T. : Chandigarh (U.T.)

Laboratory: CSIR-Central Scientific Instruments Organisation (CSIR-CSIO), Chandigarh

1 Nanomaterials: Applications and Impact on Safety, Health and Environment
(NanoSHE) 12.693 7.041 7.201
2 Effective Application of Community Health Efforts through New Age,
Based Modes (EACH-IT) 0.000 5.418 4.311
3 Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS) 5.500 6.364 10.144
4 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart
Built Environment (EDMISSIBLE) 86.508 29.332 24.500
5 Development of Novel CSIR Technologies for Manufacturing Tailored and
Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable
Cost (BIOCERAM) 16.548 18.865 6.761
6 Development and Application of Technologies for Sustainable
Transportation (SUSTRANS) 9.277 6.310 3.999
7 Innovative Technologies for Health Assessment and Damage Mitigation of
Structures (I-HEAL) 30.113 41.647 34.350
8 Robotics and Micro Machines (ROuM) 21.959 27.806 12.691
9 Autonomous Underwater Robotics (UnWaR) 37.243 38.371 30.064
10 Clean Water: Sustainable Options (Clean Water) 0.000 14.983 50.926
11 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure
(KNOWGATE) 0.000 0.000 1.735
12 Advanced Instrumentation Solutions for Health Care and Agro-based
Applications (ASHA) 391.938 391.481 251.613
13 Opto-Mechatronics Technologies for Next Generation Sensors and
Applications (OMEGA) 1296.959 890.420 1536.190
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

Total : CSIR-CSIO 1908.739 1478.038 1974.488

Laboratory: CSIR-Institute of Microbial Technology (CSIR-IMTECH), Chandigarh

1 Emerging and re-emerging challenges in infectious diseases: Systems
based drug design for infectious diseases (SPlenDID) 48.700 48.086 53.101
2 Nanomaterials: Applications and Impact on Safety, Health and Environment
(NanoSHE) 15.740 20.580 23.128
3 Understanding supra molecular ensembles and machines (UNSEEN) 264.953 59.999 66.638

4 Host Interactome analysis: Understanding the Role of Host molecules in 7.240 8.971 14.150
Parasitic Infection (HOPE)
5 Plant-Microbe and Soil Interactions (PMSI) 28.700 28.775 35.212
6 Epigenetics in Health and Disease (EpiHeD) 27.875 25.749 22.250
7 Man as a Superorganism: Understanding the Human Microbiome (HUM) 226.725 209.603 294.792
8 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 1187.863 556.755 1428.907
9 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 278.417 277.191 293.600
10 Multidirectional approaches for molecular and systems level understanding 425.309 321.889 389.500
of regulatory networks in pathogenic microbes (INFECT)
11 Drug Discovery: Bugs to Drugs Programme (BUGS TO DRUGS) 297.751 239.509 367.922
12 Expansion and Modernization of the Microbial Type Culture Collection and 273.764 972.486 1526.314
Gene Bank (MTCC)
13 Natural Products as Affordable Healthcare Agents (NaPAHA) 5.400 4.100 5.755
14 Environmental Research Initiative for Paper and Process Industry (ERIPP) 17.095 15.351 13.350
15 Advanced ceramics materials and components for energy and structural 7.942 10.701 14.434
application (CERMESA)
16 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 6.572 2.735
(KNOWGATE)

Total : CSIR-IMTECH 3113.474 2806.317 4551.787

Total Chandigarh (U.T.) 5022.213 6024.611 6526.275

State / U.T. : Delhi

Laboratory: CSIR-Central Road Research Institute(CSIR-CRRI), New Delhi

1 Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS) 7.178 12.264 26.019
2 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart 29.071 26.777 19.627
Built Environment (EDMISSIBLE)
3 Development and Application of Technologies for Sustainable 404.351 309.907 326.117
Transportation (SUSTRANS)
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

4 Innovative Technologies for Health Assessment and Damage Mitigation of 19.623 14.369 16.266
Structures (I-HEAL)
5 Autonomous Underwater Robotics (UnWaR) 24.504 32.756 38.650
6 Evaluation of Economic Loss Due to Idling of Vehicles at Signalized and 104.971 73.125 40.807
Mitigation Measures (ELSIM)
7 Development of Indian Highway Capacity Manual (Indo-HCM) 302.180 208.596 117.806
8 Clean Water: Sustainable Options (Clean Water) 1.594 3.400 4.000
9 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 5.390 0.936 0.000
(KNOWGATE)
10 Vulnerability assessment and development of adaption strategies for 0.000 0.000 54.889
climate change impact with special reference to coasts and island
ecosystems of India (VACCIN)
11 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains 6.872 5.808 6.984
(IGP) and Himalayan Regions (AIM-IGPHim)

Total : CSIR-CRRI 905.735 687.938 651.166

Laboratory: Council of Scientific & Industrial Research (CSIR-HQ)

1 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 3.734 4.762 6.009
2 S&T interventions to combat malnutrition in women and children (HCP07) 0.000 0.020 0.146
3 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 0.000 3.565
(KNOWGATE)
4 Patinformatics (Patinformatics) 91.225 102.009 126.350
5 Chembioinformatics for Drug Discovery (ISC0203) 80.943 88.944 114.370
6 Open Science and Open Innovation Infrastructure (OSOI) 85.738 118.652 79.492

Total : CSIR-HQ 261.640 314.387 329.931

Laboratory: CSIR-Institute of Genomic & Integrative Biology (CSIR-IGIB), New Delhi

1 New Approaches Towards Understanding of Disease Dynamics and to 42.300 21.049 29.653
Accelerate Drug Discovery (UNDO)
2 Emerging and re-emerging challenges in infectious diseases: Systems 21.350 33.305 20.345
based drug design for infectious diseases (SPlenDID)
3 Integrated NextGen approaches in health disease and environmental 54.365 36.810 34.834
toxicity (INDEPTH)
4 Nanomaterials: Applications and Impact on Safety, Health and Environment 23.170 12.287 16.767

(NanoSHE)

5 Therapeutics of Chronic Obstructive Pulmonary Disease (COPD) and Related Respiratory Disorders (TREAT) 156.213 140.610 174.595

6 Epigenetics in Health and Disease (EpiHeD) 117.625 114.224 75.609

7 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 31.900 26.998 29.574

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

8 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 69.703 55.743 40.979

9 Centre for Cardiovascular and Metabolic Disease Research (CARDIOMED) 1292.175 737.906 898.964

10 Genome Dynamics in cellular organization, differentiation and enantiostasis (GenCODE) 865.875 747.885 982.398

11 CSIR-NCL-IGIB Joint Research Initiative: Interfacing Chemistry and Biology (CSIR-NCL-IGIB-JRI) 131.750 144.187 201.934

12 Wellness Genomics Project - Understanding genomic signatures of healthy living in Indian population (WG 100) 439.325 99.961 48.444

13 Towards Understanding skin Cell Homeostasis (TOUCH) 1034.052 676.946 881.238

14 Effective Application of Community Health Efforts through New Age, IT Based Modes (EACH-IT) 0.000 49.787 82.010

15 Visualisation of Organisms in Action (VISION) 123.000 105.602 1209.136

16 Advance Drug Delivery System (ADD) 3.650 4.570 5.992

17 Centre of Excellence: Waste Utilization and Management (WUM) 14.390 6.706 8.686

18 Clean Water: Sustainable Options (Clean Water) 0.000 10.987 15.475

19 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 3.997 0.880

20 Vulnerability assessment and development of adaption strategies for climate change impact with special reference to coasts and island ecosystems of India (VACCIN) 0.000 0.000 73.836

Total : CSIR-IGIB 4420.842 3029.560 4831.351

Laboratory: CSIR-National Institute of Science Communication and Information Resources (CSIR-NISCAIR), New Delhi

1 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 89.934 117.431 68.609

2 Vulnerability assessment and development of adaption strategies for climate change impact with special reference to coasts and island ecosystems of India (VACCIN) 0.000 0.000 121.181

3 CSIR--Wide Consortium Access to Online Information Resources (NKRC) 1812.646 1920.772 2016.825

Total : CSIR-NISCAIR 1902.580 2038.203 2206.615

Laboratory: CSIR-National Institute of Science, Technology and Development Studies (CSIR-NISTADS), New Delhi

1 Indian S&T and Innovation Policy (ISTIP) 186.386 212.330 103.709

Total : CSIR-NISTADS 186.386 212.330 103.709

Laboratory: CSIR-National Physical Laboratory (CSIR-NPL), New Delhi

1 Nanomaterials: Applications and Impact on Safety, Health and Environment (NanoSHE) 75.295 10.277 10.860

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

2 Intelligent Coatings (IntelCoat) 11.067 10.134 15.630

3 Development of Novel CSIR Technologies for Manufacturing Tailored and Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM) 18.416 5.762 9.862

4 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 2.386 1.601 0.000

5 Very High Power Microwave Tubes : Design and Development Capabilities (MTDDC) 14.898 10.552 17.391

6 Research Initiative on Nano Devices and Nano-Sensors (R-Nano) 85.661 19.401 18.049

7 Development of Advanced Materials for Next-Generation Energy-Efficient Devices (D-NEED) 278.850 138.874 934.129

8 Advanced Quantum Research and Innovation with Ultra Small Systems 511.438 6.073 386.126

(AQuaRIUS)

9 Measurement for Innovation in Science & Technology (MIST) 514.154 437.054 807.339
10 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains 421.657 0.000 320.425
(IGP) and Himalayan Regions (AIM-IGPHim)
11 Research and Development on Single Trapped Ion based Frequency 285.399 52.595 219.952
Standard (STIOS)

Total : CSIR-NPL 2219.219 692.323 2739.764

Laboratory: CSIR-Traditional Knowledge Digital Library, HRDC

1 Analysis and Monitoring of patent applications in International Patent Office 208.684 121.517 131.860
for preventing misappropriation of India's Traditional Knowledge (TKDL)

Total : CSIR-TKDL 208.684 121.517 131.860

Total Delhi 10105.088 13120.869 10994.397

State / U.T. : Goa

Laboratory: CSIR-National Institute of Oceanography(CSIR-NIO), Dona Paula

1 Integrated NextGen approaches in health disease and environmental 56.693 52.740 73.670
toxicity (INDEPTH)

2 Autonomous Underwater Robotics (UnWaR) 77.044 110.260 123.700

3 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 5.645 2.328 0.000
(KNOWGATE)

4 Advanced Research in Engineering & Earth Sciences: Data intensive 43.350 7.975 9.700
modelling and crowd sourcing approach (ARIEES)

5 Vulnerability assessment and development of adaption strategies for 0.000 0.000 69.800
climate change impact with special reference to coasts and island
ecosystems of India (VACCIN)

6 Geodynamic and Earthquake generating processes in NE India and 160.500 177.000 26.000
Andaman Subduction Zone (GENIAS)

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

7 Ocean Science Towards Forecasting Indian Marine Living Resource 1431.380 698.052 1813.580
Potential (Ocean Finder)

8 Geological processes in the Indian Ocean - Understanding the input fluxes, 218.045 497.156 934.250
sinks and Paleoceanography (GEOSINKS)

9 Geo-scientific investigations for deciphering the Earth's internal processes 607.634 646.009 530.310
and exploration of energy resources (GEOSCAPE)

10 Indian Aquatic Ecosystems: Impact of Deoxygenation, Eutrophication and 303.610 199.920 742.643
Acidification (INDIAS IDEA)

11 Analyses and Harnessing of Marine Biodiversity for Bioremediation of 93.973 106.320 239.206
Aquaculture and Industrial Effluents (MARINEBIOTECH)

Total : CSIR-NIO 2997.873 2497.760 4562.858

Total Goa 2997.873 15618.629 4562.858

State / U.T. : Gujrat

Laboratory: CSIR-Central Salt & Marine Chemicals Research Institute (CSIR-CSMCRI), Bhavnagar

1 Bioprospection of plant resources and other natural products (BioprosPR) 15.950 26.750 38.080

2 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 7.750 14.422 15.262

3 Plant Diversity: Studying adaptation biology and understanding/exploiting 67.870 84.980 108.658
medicinally important plants for useful bioactives (SIMPLE)

4 Plant-Microbe and Soil Interactions (PMSI) 42.856 37.408 39.618

5 Towards Understanding skin Cell Homeostasis (TOUCH) 18.559 17.605 21.905

6 Multifunctional electrodes and Electrolytes for Future Technologies 8.975 5.090 12.402
(MUTLIFUN)

7 Clean Coal Technology (TapCoal) 139.870 80.987 53.466

8 Membrane & Adsorbent Technology Platform for Effective Separation of 89.170 67.250 54.492
Gases and Liquids (MATES)

9 Potassic (K) fertilizer Technology to Empower the Nation (K-TEN) 345.300 517.630 613.086

10 Intelligent Coatings (IntelCoat) 7.025 4.310 5.450

11 Energy Efficient Technologies (E2++) 3.458 5.193 6.856

12 Biomass to Energy (BioEn) 83.719 84.128 130.945

13 Waste to Wealth - Waste plastics (W2W) 43.685 32.818 39.190

14 Hydrogen Energy: Overcoming materials challenges in PEMFC towards 14.300 7.440 9.510

Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

16 A Multi-Scale Simulation and Modeling Approach to Designing Smart 15.494 17.239 15.078
Functional Materials for use in Energy, Electrochemistry and Bio-mimetics
(MSM)
17 Natural Products as Affordable Healthcare Agents (NaPAHA) 10.400 13.500 14.000
18 Environmental Research Initiative for Paper and Process Industry (ERIPP) 12.500 20.340 22.688
19 Molecules to Materials to Devices (M2D) 34.955 45.450 38.852
20 Speciality Materials based on Engineered Clays (SPECS) 37.700 17.337 21.197
21 High Purity Salt & Recovery of Valuable Metal Ions from Marine Resources 592.765 600.916 719.161
(HPSMC)
22 Clean Water: Sustainable Options (Clean Water) 0.000 6.050 9.050
23 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 0.000 10.120
(KNOWGATE)
24 Vulnerability assessment and development of adaption strategies for 0.000 0.000 67.176
climate change impact with special reference to coasts and island
ecosystems of India (VACCIN)
25 Ocean Science Towards Forecasting Indian Marine Living Resource 7.260 4.333 12.870
Potential (Ocean Finder)

Total : CSIR-CSMCRI 1733.810 1830.014 2198.567

Total Gujrat 1733.810 17448.643 2198.567

State / U.T. : Himachal Pradesh

Laboratory: CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT), Palampur

1 New initiatives to boost agriculture productivity through maximizing pre- 100.215 77.499 88.680
and post-harvest yields (AGROPATHY)
2 Bioprospection of plant resources and other natural products (BioprosPR) 33.600 39.994 49.392
3 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 146.000 86.390 159.800
4 Plant Diversity: Studying adaptation biology and understanding/exploiting 668.510 245.843 434.040
medicinally important plants for useful bioactives (SIMPLE)
5 Introduction, domestication, improvement and cultivation of economically 130.656 96.232 124.289
important plants (AGTEC)
6 Integrated NextGen approaches in health disease and environmental 72.844 27.520 20.390
toxicity (INDEPTH)
7 Nanomaterials: Applications and Impact on Safety, Health and Environment 10.320 6.660 9.880
(NanoSHE)
8 Plant-Microbe and Soil Interactions (PMSI) 78.940 86.027 115.939
9 Epigenetics in Health and Disease (EpiHeD) 72.765 26.922 22.930
10 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 5.920 64.530 9.669
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

11 S&T interventions to combat malnutrition in women and children (HCP07) 10.995 22.440 27.320
12 Establishment of Centre for High Altitude Biology (CeHAB) 222.927 355.047 461.400
13 Process and Products from Himalayan Region and their toxicological 180.897 250.690 236.840
evaluation (PROMOTE)
14 Plant Breeding, Genomics and Biotechnology (PLOMICS) 42.125 54.540 63.160
15 Organic reactions in generating innovative and natural scaffolds (ORIGIN) 21.720 25.063 28.650
16 Natural Products as Affordable Healthcare Agents (NaPAHA) 15.200 14.340 17.116
17 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 5.645 2.355 0.000
(KNOWGATE)
18 Advanced Instrumentation Solutions for Health Care and Agro-based 34.025 16.500 20.100
Applications (ASHA)
19 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains 18.492 11.638 15.984
(IGP) and Himalayan Regions (AIM-IGPHim)

Total : CSIR-IHBT 1871.798 1510.230 1905.578

Total Himachal Pradesh 1871.798 18958.873 1905.578

State / U.T. : Jammu & Kashmir

Laboratory: CSIR-Indian Institute of Integrative Medicine(CSIR-IIIM), Jammu

1 Bioprospection of plant resources and other natural products (BioprosPR) 33.200 47.349 59.312

2 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 0.000 0.020

3 Medicinal Chemistry for stem cell biology and regenerative medicine 284.779 213.050 271.950 (MEDCHEM)

4 Plant Diversity: Studying adaptation biology and understanding/exploiting 83.929 74.460 68.679 medicinally important plants for useful bioactives (SIMPLE)

5 Introduction, domestication, improvement and cultivation of economically 90.318 116.447 196.231 important plants (AGTEC)

6 Plant-Microbe and Soil Interactions (PMSI) 125.636 51.981 89.500

7 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 4.054 13.649 11.599

8 Nurturing a new Pan-CSIR drug pipe line: high intensity preclinical, clinical 758.515 973.166 723.461 studies on lead candidates (DPL)

9 Towards Understanding skin Cell Homeostasis (TOUCH) 33.716 23.103 36.429

10 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 5.645 2.328 0.000 (KNOWGATE)

Total : CSIR-IIIM 1419.791 1515.553 1457.161

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

Total Jammu & Kashmir 1419.791 20474.426 1457.161

State / U.T. : Jharkhand

Laboratory: CSIR-Central Institute of Mining & Fuel Research (CSIR-CIMFR), Dhanbad

1 Clean Coal Technology (TapCoal) 141.074 273.823 107.970

2 Potassic (K) fertilizer Technology to Empower the Nation (K-TEN) 92.510 96.215 44.784

3 Advanced ceramics materials and components for energy and structural 14.959 11.510 7.825 application (CERMESA)

4 Development of a technology for optimal extraction of locked-up coal from 236.310 353.152 132.169 underground mines using artificial pillars (DeCoalArt)

5 Development of Zero Waste Technology for Processing and Utilization of 7.739 9.684 11.489 Thermal Coal (ZWT-CUP)

6 Robotics and Micro Machines (ROuM) 48.194 25.800 33.227

7 Development of underground coal gasification technology in India 137.897 328.924 71.680 (CoalGasUrja)

8 Development of suitable design methodology for extraction of coal at 465.356 450.567 109.260 greater depths (>300 m) for Indian geomining conditions (DeepCoal)

9 National Clean Air Mission (NCAM) 7.896 6.257 5.452

10 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 0.000 7.085 (KNOWGATE)

Total : CSIR-CIMFR 1151.936 1555.932 530.943

Laboratory: CSIR-National Metallurgical Laboratory (CSIR-NML), Jamshedpur

1 Sustainable Technologies for the Utilization of Rare Earths (SURE) 29.145 12.777 16.584

2 Development of Novel CSIR Technologies for Manufacturing Tailored and 18.251 9.339 10.823 Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM)

3 Advanced ceramics materials and components for energy and structural 4.396 8.369 10.029 application (CERMESA)

4 Development of Zero Waste Technology for Processing and Utilization of 102.234 105.609 204.382 Thermal Coal (ZWT-CUP)

5 Development of Magnesium Metal Production Technology (MPT) 301.787 99.259 99.253

6 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 4.655 2.849 (KNOWGATE)

7 Very High Power Microwave Tubes : Design and Development Capabilities 17.410 19.139 17.619 (MTDDC)

8 Measurement for Innovation in Science & Technology (MIST) 4.000 5.353 40.088

Total : CSIR-NML 477.223 264.500 401.628

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

Total Jharkhand 1629.159 22294.858 932.571

State / U.T. : Karnataka

Laboratory: CSIR-Fourth Paradigm Institute (CSIR-4PI), Bengaluru

1 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 7.704 5.142 5.145
2 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment (EDMISSIBLE) 31.826 19.139 7.566
3 Development of suitable design methodology for extraction of coal at greater depths (>300 m) for Indian geomining conditions (DeepCoal) 1.600 1.885 1.299
4 Advanced Research in Engineering & Earth Sciences: Data intensive modelling and crowd sourcing approach (ARiEES) 548.994 593.413 358.831
5 Vulnerability assessment and development of adaption strategies for climate change impact with special reference to coasts and island ecosystems of India (VACCIN) 0.000 0.000 36.949
6 Indian Aquatic Ecosystems: Impact of Deoxygenation, Eutrophication and Acidification (INDIAS IDEA) 4.397 7.120 8.978
7 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains (IGP) and Himalayan Regions (AIM-IGPHim) 5.341 6.437 11.243

Total : CSIR-4PI 599.861 633.136 430.012

Laboratory: CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysore

1 New Approaches Towards Understanding of Disease Dynamics and to Accelerate Drug Discovery (UNDO) 20.500 9.680 11.720
2 New initiatives to boost agriculture productivity through maximizing pre- and post-harvest yields (AGROPATHY) 633.750 584.984 546.228
3 Bioprospection of plant resources and other natural products (BioprosPR) 6.700 9.755 12.400
4 Nanomaterials: Applications and Impact on Safety, Health and Environment (NanoSHE) 2.750 3.300 5.300
5 S&T interventions to combat malnutrition in women and children (HCP07) 12.225 21.260 27.772
6 Wellness through Foods and Nutraceuticals (WELFO) 295.220 287.050 233.609
7 Lipidomics Center (LIPIC) 763.316 144.949 147.695
8 Creation of Advanced Research Facility in Molecular Nutrition (Nutri-ARM) 153.852 93.640 139.177
9 Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS) 49.230 47.468 48.720
10 Membrane & Adsorbent Technology Platform for Effective Separation of Gases and Liquids (MATES) 8.160 9.698 9.796
11 Development of Sustainable Processes for Edible Oils with Health Benefits from Traditional and New Resources (PEOPLE HOPE) 3.899 4.676 6.196
12 Encapsulated Microorganisms for Environmental Protection (EMEP) 35.060 35.390 27.880

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Rs. Lakh

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13 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 5.265 2.328 0.000
14 Measurement for Innovation in Science & Technology (MIST) 11.440 6.880 7.320

Total : CSIR-CFTRI 2001.367 1261.058 1223.812

Laboratory: CSIR-National Aerospace Laboratories (CSIR-NAL), Bengaluru

1 Novel Energy Effective Metallic Materials for Automotive and General Engineering Application (LWM) 48.728 6.800 9.300
2 Development of Novel CSIR Technologies for Manufacturing Tailored Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM) 65.433 18.489 20.563
3 Advanced ceramics materials and components for energy and structural application (CERMESA) 12.532 2.696 3.035
4 Development and Application of Technologies for Sustainable Transportation (SUSTRANS) 12.920 1.875 2.750
5 Technology Solutions for Micro Air Vehicle Development (MAT) 648.206 286.785 245.073
6 Robotics and Micro Machines (ROuM) 65.774 18.361 21.450
7 Avionics and Flight Controls Civil Aerospace Technologies (AFCCAT) 0.000 348.587 452.080
8 Advanced Structural Technologies for Aircraft (ASTA) 320.277 369.644 479.578

9 Aerodynamics and Propulsion Technologies for Next Generation Civil Aircraft (ADPR) 0.000 339.808 691.086
10 Transport Aircraft Design Bureau (TADB) 0.000 115.843 87.112
11 Augmentation and Refurbishment of National Trisonic Aerodynamic Facilities (NTAF) 148.418 260.875 193.882
12 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 6.905 2.850
13 Advanced Research in Engineering & Earth Sciences: Data intensive modelling and crowd sourcing approach (ARIEES) 43.400 14.650 18.400

Total : CSIR-NAL 1365.688 1791.318 2227.159

Total Karnataka 3966.916 25980.370 3880.982

State / U.T. : Kerala

Laboratory: CSIR-National Institute of Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram

1 Towards holistic understanding of Complex Diseases: Unraveling the Threads of Complex Diseases (THUNDER) 24.700 11.015 15.050

2 New Approaches Towards Understanding of Disease Dynamics and to Accelerate Drug Discovery (UNDO) 16.540 13.580 11.000

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

3 New initiatives to boost agriculture productivity through maximizing pre- and post-harvest yields (AGROPATHY) 16.215 28.820 23.769
4 Bioprospection of plant resources and other natural products (BioprosPR) 5.245 5.736 7.250
5 Integrated NextGen approaches in health disease and environmental toxicity (INDEPTH) 9.595 4.475 5.890
6 Nanomaterials: Applications and Impact on Safety, Health and Environment (NanoSHE) 18.820 10.540 12.020
7 Plant-Microbe and Soil Interactions (PMSI) 8.750 7.638 11.250
8 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 7.700 3.973 5.700
9 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 8.975 11.050 18.100
10 S&T interventions to combat malnutrition in women and children (HCP07) 7.593 29.112 38.750
11 Multifunctional electrodes and Electrolytes for Future Technologies (MUTLIFUN) 17.040 14.155 51.940
12 Organic reactions in generating innovative and natural scaffolds (ORIGIN) 77.000 51.500 85.000
13 Development of Sustainable Processes for Edible Oils with Health Benefits from Traditional and New Resources (PEOPLE HOPE) 69.277 52.112 47.822
14 Intelligent Coatings (IntelCoat) 102.300 107.925 61.000
15 Waste to Wealth - Waste plastics (W2W) 27.990 8.625 10.900
16 Innovate, develop and up-scale modular, agile, intensified and continuous processes and plants (Indus MAGIC) 31.125 33.775 39.250
17 Catalysts for Speciality Chemicals (CSC) 23.795 30.068 31.000
18 Encapsulated Microorganisms for Environmental Protection (EMEP) 26.960 29.714 19.660
19 A Multi-Scale Simulation and Modeling Approach to Designing Smart Functional Materials for use in Energy, Electrochemistry and Bio-mimetics (MSM) 24.146 16.034 32.455
20 Natural Products as Affordable Healthcare Agents (NaPAHA) 223.170 89.990 94.500
21 Environmental Research Initiative for Paper and Process Industry (ERIPP) 50.000 62.816 45.550
22 Sustainable Technologies for the Utilization of Rare Earths (SURE) 332.733 461.726 254.156
23 Development of functional foods and their formulations for potential health benefits of common man (FUNHEALTH) 237.770 124.434 151.236
24 Molecules to Materials to Devices (M2D) 224.153 245.496 205.541
25 Speciality Materials based on Engineered Clays (SPECS) 58.375 67.533 53.000
26 Novel Energy Effective Metallic Materials for Automotive and General Engineering Application (LWM) 43.125 24.644 35.500
27 Clean Water: Sustainable Options (Clean Water) 0.000 6.451 18.910
28 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 5.645 2.328 0.000

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

29 Vulnerability assessment and development of adaption strategies for 0.000 0.000 26.500
climate change impact with special reference to coasts and island
ecosystems of India (VACCIN)

Total : CSIR-NIIST 1698.737 1555.265 1412.699

Total Kerala 1698.737 27535.635 1412.699

State / U.T. : Madya Pradesh

Laboratory: CSIR-Advanced Materials & Process Research Institute (CSIR-AMPRI), Bhopal

1 Molecules to Materials to Devices (M2D) 32.553 10.128 9.078

2 Novel Energy Effective Metallic Materials for Automotive and General 209.460 192.504 156.070

Engineering Application (LWM)

3 Development of Novel CSIR Technologies for Manufacturing Tailored and 11.105 5.848 8.466

Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable

Cost (BIOCERAM)

4 Advanced ceramics materials and components for energy and structural 5.604 5.981 1.636

application (CERMESA)

5 Design and Development of Thermo Responsive & Magnetic Shape 171.847 91.931 207.002

Memory Materials and Devices for Engineering Applications (TR&MSMM)

6 Clean Water: Sustainable Options (Clean Water) 0.000 4.914 3.646

7 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 7.895 2.286 0.000

(KNOWGATE)

Total : CSIR-AMPRI 438.465 313.592 385.897

Total Madya Pradesh 438.465 27849.227 385.897

State / U.T. : Maharashtra

Laboratory: CSIR-National Chemical Laboratory (CSIR-NCL), Pune

1 New Approaches Towards Understanding of Disease Dynamics and to 36.450 19.440 29.400

Accelerate Drug Discovery (UNDO)

2 Emerging and re-emerging challenges in infectious diseases: Systems 7.180 4.724 6.300

based drug design for infectious diseases (SPlenDID)

3 Bioprospection of plant resources and other natural products (BioprosPR) 6.240 7.080 7.423

4 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 13.960 10.390 14.500

5 Plant Diversity: Studying adaptation biology and understanding/exploiting 143.760 38.360 51.280

medicinally important plants for useful bioactives (SIMPLE)

6 Integrated NextGen approaches in health disease and environmental 29.130 19.960 27.960

toxicity (INDEPTH)

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

7 Nanomaterials: Applications and Impact on Safety, Health and Environment 52.790 29.130 18.540
(NanoSHE)

8 Host Interactome analysis: Understanding the Role of Host molecules in 5.420 6.148 10.820

Parasitic Infection (HOPE)

9 Neurodegenerative diseases: Causes and Corrections (miND) 36.094 20.625 32.600

10 Plant-Microbe and Soil Interactions (PMSI) 44.606 48.075 72.000

11 Man as a Superorganism: Understanding the Human Microbiome (HUM) 83.955 39.610 58.380

12 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 57.090 74.200 45.900

13 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 17.500 27.160 23.968

14 Genome Dynamics in cellular organization, differentiation and enantiostasis 45.750 55.500 64.994

(GenCODE)

15 CSIR-NCL-IGIB Joint Research Initiative: Interfacing Chemistry and Biology 161.400 137.655 171.021

(CSIR-NCL-IGIB-JRI)

16 Towards Understanding skin Cell Homeostasis (TOUCH) 30.259 43.169 46.949

17 Clean Coal Technology (TapCoal) 114.642 136.827 86.200

18 Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS) 15.605 11.890 16.036

19 Membrane & Adsorbent Technology Platform for Effective Separation of 8.395 7.665 6.320

Gases and Liquids (MATES)

20 Biocatalysts for Industrial Applications & Greener Organic Synthesis 82.732 68.941 69.500

(BIAGOS)

21 Inherently Safer Practices for Industrial Risk Reduction (INSPIRE) 12.100 4.754 6.227

22 Organic reactions in generating innovative and natural scaffolds (ORIGIN) 234.707 320.449 501.763

23 Non-Infringing chemistry and engineering for pharmaceuticals (NICE-P) 16.960 18.135 30.448

24 Metabolic profiling of human body fluids by MS and NMR (CMET) 28.330 15.877 17.230

25 Screening molecules in lead exploration (SMiLE) 24.760 29.140 23.116
26 Development of Sustainable Processes for Edible Oils with Health Benefits 54.200 13.633 16.707
from Traditional and New Resources (PEOPLE HOPE)
27 Development of Sustainable Waste Management Technologies for 55.190 43.722 30.660
Chemical and Allied Industries (SETCA)
28 Energy Efficient Technologies (E2++) 27.620 22.122 23.630
29 Catalysts for Sustainable Energy (ECat) 102.872 29.072 37.810
30 Research Initiative for Low Emissions (RILE) 7.100 2.088 3.000
31 Hydrogen Energy: Overcoming materials challenges in PEMFC towards 211.379 149.640 219.982
generation, separation, storage and conversion of hydrogen (HYDEN)
32 Innovate, develop and up-scale modular, agile, intensified and continuous 640.700 746.564 809.425
processes and plants (Indus MAGIC)
33 Catalysts for Speciality Chemicals (CSC) 109.850 114.236 126.742
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

34 Encapsulated Microorganisms for Environmental Protection (EMEP) 58.858 45.680 46.460
35 Creating intellectual property and capabilities for the development of 63.648 87.210 66.540
improved security features and substrates for the Indian currency note
(FUTURE)
36 A Multi-Scale Simulation and Modeling Approach to Designing Smart 407.150 203.567 167.283
Functional Materials for use in Energy, Electrochemistry and Bio-mimetics
(MSM)
37 Natural Products as Affordable Healthcare Agents (NaPAHA) 187.665 128.693 142.856
38 Development of functional foods and their formulations for potential health 165.220 61.270 73.922
benefits of common man (FUNHEALTH)
39 Molecules to Materials to Devices (M2D) 194.250 224.305 218.600
40 Affordable Cancer Therapeutics (ACT) 17.911 25.244 24.876
41 Advance Drug Delivery System (ADD) 77.229 48.378 66.274
42 Centre for Surface and Interface Science Research (CSISR) 112.300 14.574 24.362
43 Nuclear Magnetic Resonance Centre for Advanced Research (NMRCAR) 106.092 64.925 88.808
44 National Repository of Molecules (NORMS) 244.619 209.929 312.884
45 Up gradation of Facilities/National Repository of Molecules and National 74.675 19.870 29.944
Collection of Industrial Micro Organisms Resource Centre (NCIMRC)
46 Clean Water: Sustainable Options (Clean Water) 0.000 34.350 40.844
47 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 0.000 9.972
(KNOWGATE)

Total : CSIR-NCL 4228.342 3483.976 4020.458

Laboratory: CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur

1 Integrated NextGen approaches in health disease and environmental 25.073 34.130 29.180
toxicity (INDEPTH)
2 Clean Coal Technology (TapCoal) 4.720 3.061 3.880
3 Waste to Wealth - Waste plastics (W2W) 4.452 3.559 3.243
4 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart 17.270 25.540 10.089
Built Environment (EDMISSIBLE)
5 Centre of Excellence: Waste Utilization and Management (WUM) 481.178 456.774 314.911
6 National Clean Air Mission (NCAM) 496.288 184.073 150.851
7 Clean Water: Sustainable Options (Clean Water) 72.514 183.859 198.970
8 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 7.139 1.668 0.000
(KNOWGATE)
9 Vulnerability assessment and development of adaption strategies for 0.000 0.000 42.650
climate change impact with special reference to coasts and island
ecosystems of India (VACCIN)
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

10 Very High Power Microwave Tubes : Design and Development Capabilities 21.161 41.540 29.120
(MTDDC)
11 Measurement for Innovation in Science & Technology (MIST) 24.749 16.550 64.301
12 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains 16.335 9.730 23.168
(IGP) and Himalayan Regions (AIM-IGPHim)

Total : CSIR-NEERI 1170.878 960.484 870.363

Total Maharashtra 5399.220 32293.687 4890.821

State / U.T. : Odisha

Laboratory: CSIR-Institute of Minerals & Materials Technology (CSIR-IMMT), Bhubaneswar

1 Multifunctional electrodes and Electrolytes for Future Technologies (MUTLIFUN) 37.693 24.062 63.834

2 Potassic (K) fertilizer Technology to Empower the Nation (K-TEN) 43.808 39.625 52.317

3 Development of Sustainable Waste Management Technologies for Chemical and Allied Industries (SETCA) 13.661 8.706 7.757

4 Biomass to Energy (BioEn) 16.944 9.694 12.450

5 Environmental Research Initiative for Paper and Process Industry (ERIPP) 24.228 6.112 7.143

6 Sustainable Technologies for the Utilization of Rare Earths (SURE) 60.338 29.463 21.907

7 Speciality Materials based on Engineered Clays (SPECS) 26.397 12.314 15.298

8 Novel Energy Effective Metallic Materials for Automotive and General Engineering Application (LWM) 59.619 47.753 12.725

9 Advanced ceramics materials and components for energy and structural application (CERMESA) 22.508 4.199 7.042

10 Development of Zero Waste Technology for Processing and Utilization of Thermal Coal (ZWT-CUP) 11.863 12.034 17.015

11 Robotics and Micro Machines (ROuM) 47.205 25.759 14.158

12 Minerals to Metals for Sustainable Planet (MINMET) 322.060 162.383 315.684

13 Processing of natural gemstones for aesthetic improvement and value addition (PNG) 752.990 117.294 128.720

14 Clean Water: Sustainable Options (Clean Water) 0.000 5.145 7.326

15 Centre for Special Materials (CSM) 289.381 184.882 120.556

16 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 0.000 6.966

17 Very High Power Microwave Tubes : Design and Development Capabilities (MTDDC) 61.677 35.028 14.350

18 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains (IGP) and Himalayan Regions (AIM-IGPHim) 12.148 9.199 11.690

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

Total : CSIR-IMMT 1802.520 733.652 836.940

Total Odisha 1802.520 33027.339 836.940

State / U.T. : Rajasthan

Laboratory: CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani

1 Effective Application of Community Health Efforts through New Age, IT Based Modes (EACH-IT) 0.000 9.450 14.050

2 Clean Coal Technology (TapCoal) 16.386 16.990 7.370

3 Creating intellectual property and capabilities for the development of improved security features and substrates for the Indian currency note (FUTURE) 53.973 18.435 55.282

4 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment (EDMISSIBLE) 101.535 53.850 54.450

5 Development of Novel CSIR Technologies for Manufacturing Tailored and Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM) 8.819 5.448 7.163

6 Technology Solutions for Micro Air Vehicle Development (MAT) 20.867 37.665 39.927

7 Innovative Technologies for Health Assessment and Damage Mitigation of Structures (I-HEAL) 44.000 24.475 21.091

8 Robotics and Micro Machines (ROuM) 12.040 15.428 19.510

9 Autonomous Underwater Robotics (UnWaR) 82.627 48.160 43.500

10 Clean Water: Sustainable Options (Clean Water) 0.000 7.830 6.130

11 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 6.906 2.851

12 Very High Power Microwave Tubes : Design and Development Capabilities (MTDDC) 1193.424 822.156 770.166

13 Research Initiative on Nano Devices and Nano-Sensors (R-Nano) 412.499 201.915 496.853

14 Advanced Instrumentation Solutions for Health Care and Agro-based Applications (ASHA) 22.523 19.728 7.251

15 Development of Advanced Materials for Next-Generation Energy-Efficient 103.200 40.500 115.833
Devices (D-NEED)
16 Advanced Quantum Research and Innovation with Ultra Small Systems 0.000 160.000 0.000
(AQuaRIUS)
17 Advanced Microsensors and Microsystems : Design, Development and 514.900 275.750 353.478
Applications (MicroSensys)
18 Advanced Facility for Nano Electronics (AFNE) 29.625 32.000 25.369

Total : CSIR-CEERI 2616.419 1796.686 2040.275

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

Total Rajasthan 2616.419 34824.025 2040.275

State / U.T. : Tamil Nadu

Laboratory: CSIR-Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi

1 Multifunctional electrodes and Electrolytes for Future Technologies 1468.597 910.535 2115.093
(MUTLIFUN)

2 Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS) 13.885 14.453 19.300

3 Potassic (K) fertilizer Technology to Empower the Nation (K-TEN) 26.550 39.600 30.000

4 Development of Sustainable Waste Management Technologies for 48.430 51.982 43.100
Chemical and Allied Industries (SETCA)

5 Intelligent Coatings (IntelCoat) 674.417 231.206 231.400

6 Advanced Carbon Materials (AdCarbMate) 29.199 38.014 27.820

7 Hydrogen Energy: Overcoming materials challenges in PEMFC towards 110.863 148.225 172.880
generation, separation, storage and conversion of hydrogen (HYDEN)

8 A Multi-Scale Simulation and Modeling Approach to Designing Smart 19.875 23.031 18.750

Functional Materials for use in Energy, Electrochemistry and Bio-mimetics
(MSM)

9 Sustainable Technologies for the Utilization of Rare Earths (SURE) 47.189 38.188 45.808

10 Molecules to Materials to Devices (M2D) 313.065 242.102 83.873

11 Innovative Technologies for Health Assessment and Damage Mitigation of 23.700 21.675 21.200
Structures (I-HEAL)

12 Clean Water: Sustainable Options (Clean Water) 0.000 4.750 6.250

13 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 5.125 2.328 0.000
(KNOWGATE)

14 Very High Power Microwave Tubes : Design and Development Capabilities 27.410 6.750 8.490
(MTDDC)

15 Development of Advanced Materials for Next-Generation Energy-Efficient 7.500 9.229 12.500
Devices (D-NEED)

Total : CSIR-CECRI 2815.805 1782.068 2836.463

Laboratory: CSIR-Central Leather Research Institute (CSIR-CLRI), Chennai

1 Integrated NextGen approaches in health disease and environmental 29.312 13.177 18.590
toxicity (INDEPTH)

2 Nanomaterials: Applications and Impact on Safety, Health and Environment 18.709 16.010 21.264
(NanoSHE)

3 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 3.550 2.080 5.813

4 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 39.925 3.130 3.219

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

5 Zero Emission Research Initiative for Solid Wastes from Leather (ZERIS) 200.378 249.208 353.624

6 Membrane & Adsorbent Technology Platform for Effective Separation of 10.303 9.749 9.016
Gases and Liquids (MATES)

7 Development of Sustainable Waste Management Technologies for 27.264 19.312 19.236
Chemical and Allied Industries (SETCA)

8 Biomass to Energy (BioEn) 18.511 14.523 12.901

9 Innovate, develop and up-scale modular, agile, intensified and continuous 17.210 14.845 23.364
processes and plants (Indus MAGIC)

10 Encapsulated Microorganisms for Environmental Protection (EMEP) 26.419 23.548 14.809

11 A Multi-Scale Simulation and Modeling Approach to Designing Smart 4.234 21.070 3.167

Functional Materials for use in Energy, Electrochemistry and Bio-mimetics

(MSM)

12 Environmental Research Initiative for Paper and Process Industry (ERIPP) 18.250 13.845 15.042

13 Sustainable Technologies for the Utilization of Rare Earths (SURE) 5.502 11.564 4.890

14 Molecules to Materials to Devices (M2D) 23.381 15.438 12.013

15 Science and Technology Revolution in Leather with a Green Touch 1270.978 1024.402 1188.840

(STRAIT)

16 Research Initiative for Waterless Tanning (RWT) 44.504 41.340 159.672

17 Advance Drug Delivery System (ADD) 25.384 15.333 21.504

18 Design Innovation for Smart Material Transformation Yeanning Leather Life 114.240 41.026 94.600

Style Products (D'STYLE)

19 Development and Application of Technologies for Sustainable 19.775 14.617 14.811

Transportation (SUSTRANS)

20 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 0.000 9.176

(KNOWGATE)

Total : CSIR-CLRI 1917.827 1564.217 2005.552

Laboratory: CSIR-Madras Complex, Chennai

1 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 6.906 2.826

(KNOWGATE)

Total : CSIR-MDCX 0.000 6.906 2.826

Laboratory: CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai

1 Potassic (K) fertilizer Technology to Empower the Nation (K-TEN) 4.935 6.070 6.260

2 Innovative Technologies for Health Assessment and Damage Mitigation of 394.035 401.770 449.507

Structures (I-HEAL)

3 Engineering Sustainable Materials and Structures Action Plan I: 588.579 690.894 659.240

Sustainability Through Eco-Balancing (SUSMAS)

4 Engineering Sustainable Materials and Structures Action Plan II: 590.866 608.257 554.964

Sustainability Through Nano-Technology and Bio-Mimetics (eNano-Tics)

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

5 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 7.321 2.850

(KNOWGATE)

Total : CSIR-SERC 1578.414 1714.312 1672.820

Total Tamil Nadu 6312.047 39891.528 6517.662

State / U.T. : Telengana

Laboratory: CSIR-Centre for Cellular & Molecular Biology (CSIR-CCMB), Hyderabad

1 Factors Governing competent gamete production and reproductive 53.750 53.580 80.000

dysfunction (PROGRAM)

2 Towards holistic understanding of Complex Diseases: Unraveling the 60.300 62.750 78.240

Threads of Complex Diseases (THUNDER)

3 New Approaches Towards Understanding of Disease Dynamics and to 190.300 187.622 388.592

Accelerate Drug Discovery (UNDO)

4 Emerging and re-emerging challenges in infectious diseases: Systems 46.500 29.050 40.900

based drug design for infectious diseases (SPlenDID)

5 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 4.440 4.895 5.170

6 Medicinal Chemistry for stem cell biology and regenerative medicine 233.000 87.150 120.500

(MEDCHEM)

7 Integrated NextGen approaches in health disease and environmental 47.345 45.400 59.350

toxicity (INDEPTH)

8 Nanomaterials: Applications and Impact on Safety, Health and Environment 79.815 77.130 86.990

(NanoSHE)

9 Understanding supra molecular ensembles and machines (UNSEEN) 51.500 43.300 49.068

10 Host Interactome analysis: Understanding the Role of Host molecules in 30.140 29.798 50.862

Parasitic Infection (HOPE)

11 Neurodegenerative diseases: Causes and Corrections (miND) 275.543 133.920 192.932

12 Plant-Microbe and Soil Interactions (PMSI) 157.621 115.550 143.050

13 Epigenetics in Health and Disease (EpiHeD) 510.738 425.840 854.131

14 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 42.250 26.300 23.404

15 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 193.450 186.240 213.147

16 Centre for Cardiovascular and Metabolic Disease Research (CARDIOMED) 282.000 139.175 193.744

17 Genome Dynamics in cellular organization, differentiation and enantiostasis 26.000 29.625 47.915

(GenCODE)

18 Conservation of endangered animals of India: Molecular Genetics and 174.400 155.696 176.000
Reproduction Approaches (ConservE)
19 Biology of Ageing and Human Health (BioAGE) 1069.500 595.890 709.116
20 Plant Breeding, Genomics and Biotechnology (PLOMICS) 200.510 204.040 245.113

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

21 Towards Understanding skin Cell Homeostasis (TOUCH) 13.904 16.106 22.808
22 Natural Products as Affordable Healthcare Agents (NaPAHA) 19.400 8.100 11.500
23 Development of Novel CSIR Technologies for Manufacturing Tailored and 10.292 11.132 13.739
Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable
Cost (BIOCERAM)
24 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 0.000 9.030
(KNOWGATE)
25 Indian Aquatic Ecosystems: Impact of Deoxygenation, Eutrophication and 13.240 15.625 38.645
Acidification (INDIAS IDEA)

Total : CSIR-CCMB 3785.938 2683.914 3853.946

Laboratory: CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad

1 Towards holistic understanding of Complex Diseases: Unraveling the 33.550 12.080 15.600
Threads of Complex Diseases (THUNDER)
2 New Approaches Towards Understanding of Disease Dynamics and to 15.900 19.540 102.600
Accelerate Drug Discovery (UNDO)
3 Nanomaterials: Applications and Impact on Safety, Health and Environment 89.900 8.680 11.040
(NanoSHE)
4 Neurodegenerative diseases: Causes and Corrections (miND) 57.600 25.615 45.900
5 Therapeutics of Chronic Obstructive Pulmonary Disease (COPD) and 43.500 32.950 47.500
Related Respiratory Disorders (TREAT)
6 Epigenetics in Health and Disease (EpiHeD) 46.473 26.529 38.945
7 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 72.160 25.492 32.314
8 Genome Dynamics in cellular organization, differentiation and enantiostasis 55.500 49.875 85.500
(GenCODE)
9 Multifunctional electrodes and Electrolytes for Future Technologies 35.480 11.713 0.000
(MUTLIFUN)
10 Membrane & Adsorbent Technology Platform for Effective Separation of 68.590 50.160 35.030
Gases and Liquids (MATES)
11 Biocatalysts for Industrial Applications & Greener Organic Synthesis 62.247 70.200 56.800
(BIAGOS)
12 Inherently Safer Practices for Industrial Risk Reduction (INSPIRE) 85.308 84.450 55.000
13 Organic reactions in generating innovative and natural scaffolds (ORIGIN) 691.620 854.193 950.950
14 Non-Infringing chemistry and engineering for pharmaceuticals (NICE-P) 46.705 41.739 45.240
15 Metabolic profiling of human body fluids by MS and NMR (CMET) 77.170 136.647 118.530
16 Screening molecules in lead exploration (SMiLE) 402.650 257.263 822.190
17 Development of Sustainable Processes for Edible Oils with Health Benefits 278.708 141.956 185.342
from Traditional and New Resources (PEOPLE HOPE)
18 Development of Sustainable Waste Management Technologies for 90.160 103.497 123.950
Chemical and Allied Industries (SETCA)
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

19 Intelligent Coatings (IntelCoat) 529.490 380.889 257.566
20 Biomass to Energy (BioEn) 152.551 119.362 100.206
21 New generation lubricants and additives (GenLube) 20.218 6.876 6.475
22 Innovate, develop and up-scale modular, agile, intensified and continuous 204.750 180.400 193.000
processes and plants (Indus MAGIC)
23 Catalysts for Speciality Chemicals (CSC) 64.110 40.980 31.600
24 Natural Products as Affordable Healthcare Agents (NaPAHA) 28.050 30.900 30.100
25 Sustainable Technologies for the Utilization of Rare Earths (SURE) 48.765 42.040 25.704
26 Development of functional foods and their formulations for potential health 10.900 12.075 12.500
benefits of common man (FUNHEALTH)
27 Molecules to Materials to Devices (M2D) 85.499 27.795 101.980

28 Speciality Materials based on Engineered Clays (SPECS) 16.850 5.857 9.060
29 Development of Innovative Technologies for Strategic Fluorochemicals 146.750 197.900 104.000
(DITSF)
30 Development of Novel Vaccine Adjuvants (DENOVA) 134.397 114.293 236.440
31 Affordable Cancer Therapeutics (ACT) 198.830 203.570 180.836
32 Advance Drug Delivery System (ADD) 235.102 63.252 281.251
33 Augmentation of Analytical Research Facilities (AARF) 36.535 162.312 59.260
34 Centre of Excellence: Waste Utilization and Management (WUM) 14.035 7.535 7.455
35 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 6.906 2.850
(KNOWGATE)

Total : CSIR-IICT 4180.054 3555.521 4412.715

Laboratory: CSIR-National Geophysical Research Institute (CSIR-NGRI), Hyderabad

1 Potassic (K) fertilizer Technology to Empower the Nation (K-TEN) 6.195 14.025 17.050

2 Development of underground coal gasification technology in India 8.525 19.748 11.430

(CoalGasUrja)

3 Development of suitable design methodology for extraction of coal at 9.300 27.064 23.704

greater depths (>300 m) for Indian geomining conditions (DeepCoal)

4 Clean Water: Sustainable Options (Clean Water) 0.000 5.010 6.830

5 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 6.906 2.850

(KNOWGATE)

6 Advanced Research in Engineering & Earth Sciences: Data intensive 15.650 6.100 8.300

modelling and crowd sourcing approach (ARIEES)

7 Geodynamic and Earthquake generating processes in NE India and 208.150 186.153 203.250

Andaman Subduction Zone (GENIAS)

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

8 Geological processes in the Indian Ocean - Understanding the input fluxes, 3.000 4.280 13.100

sinks and Paleoceanography (GEOSINKS)

9 Geo-scientific investigations for deciphering the Earth's internal processes 124.405 153.280 181.560

and exploration of energy resources (GEOSCAPE)

10 Indian Aquatic Ecosystems: Impact of Deoxygenation, Eutrophication and 15.840 20.020 37.700

Acidification (INDIAS IDEA)

11 Hazard due to Earthquakes and Tsunami in the Indian region (HEART) 176.982 191.652 218.822

12 India Deep Earth Exploration Programme (INDEX) 440.195 312.663 362.750

13 Shallow subsurface imaging of India for resource exploration (SHORE) 889.601 520.050 597.215

Total : CSIR-NGRI 1897.843 1466.951 1684.561

Total Telengana 9863.835 47597.914 9951.222

State / U.T. : Uttar Pradesh

Laboratory: CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow

1 Factors Governing competent gamete production and reproductive 327.370 228.820 296.942

dysfunction (PROGRAM)

2 Towards holistic understanding of Complex Diseases: Unraveling the 710.550 515.680 454.298

Threads of Complex Diseases (THUNDER)

3 New Approaches Towards Understanding of Disease Dynamics and to 417.870 412.240 342.000

Accelerate Drug Discovery (UNDO)

4 Emerging and re-emerging challenges in infectious diseases: Systems 600.316 253.320 546.299

based drug design for infectious diseases (SPlenDID)

5 Bioprospection of plant resources and other natural products (BioprosPR) 117.750 119.353 148.500

6 Medicinal Chemistry for stem cell biology and regenerative medicine 57.650 25.679 36.000

(MEDCHEM)

7 Integrated NextGen approaches in health disease and environmental 88.623 62.918 75.910

toxicity (INDEPTH)

8 Nanomaterials: Applications and Impact on Safety, Health and Environment 58.220 20.520 26.020

(NanoSHE)

9 Understanding supra molecular ensembles and machines (UNSEEN) 140.650 82.904 137.550

10 Host Interactome analysis: Understanding the Role of Host molecules in 329.890 160.050 340.700

Parasitic Infection (HOPE)

11 Neurodegenerative diseases: Causes and Corrections (miND) 83.850 26.284 28.100

12 Epigenetics in Health and Disease (EpiHeD) 103.376 46.154 56.547

13 Man as a Superorganism: Understanding the Human Microbiome (HUM) 38.715 15.494 22.049

14 Centre for Biotherapeutic Molecule DISCOVERY (BIODISCOVERY) 100.751 120.200 57.500

15 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 24.850 20.948 32.101

Rs. Lakh

 Title of the Project 2013-14 2014-15 2015-16

16 Genome Dynamics in cellular organization, differentiation and enantiostasis (GenCODE) 21.250 22.910 36.750

17 Anabolic Skeletal Targets in Health and Illness (ASTHI) 469.888 328.200 292.497

18 Towards Understanding skin Cell Homeostasis (TOUCH) 0.000

19 Advance Drug Delivery System (ADD) 38.699 11.544 14.253

20 Development of Novel CSIR Technologies for Manufacturing Tailored and Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM) 70.969 15.669 25.309

21 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 5.645 2.322 0.000

22 Measurement for Innovation in Science & Technology (MIST) 24.000 16.400 15.001

Total : CSIR-CDRI 3830.881 2507.609 2984.325

Laboratory: CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP), Lucknow

1 New initiatives to boost agriculture productivity through maximizing pre- and post-harvest yields (AGROPATHY) 46.794 35.020 36.759

2 Bioprospection of plant resources and other natural products (BioprosPR) 30.534 31.959 38.846

3 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 42.522 28.380 43.121

4 Plant Diversity: Studying adaptation biology and understanding/exploiting medicinally important plants for useful bioactives (SIMPLE) 104.710 65.580 57.760

5 Introduction, domestication, improvement and cultivation of economically important plants (AGTEC) 116.879 84.103 125.625

6 Integrated NextGen approaches in health disease and environmental toxicity (INDEPTH) 30.335 22.910 26.560

7 Plant-Microbe and Soil Interactions (PMSI) 72.907 64.900 42.642

8 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 33.656 26.687 15.400

9 S&T interventions to combat malnutrition in women and children (HCP07) 10.125 12.540 14.634

10 Chemical Biology of Ocimum and other Aromatic Plants (ChemBio) 662.277 894.894 1021.686

11 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 0.000 9.832

Total : CSIR-CIMAP 1150.739 1266.973 1432.866

Laboratory: CSIR Human Resource Development Centre-(CSIR-HRDC), Ghaziabad

1 Traditional Knowledge Digital Library 2020 (Enhanced TKDL-2020) 197.040 242.450 197.006

Total : CSIR-HRDC 197.040 242.450 197.006

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Rs. Lakh

 Title of the Project 2013-14 2014-15 2015-16

Laboratory: CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow

1 New Approaches Towards Understanding of Disease Dynamics and to Accelerate Drug Discovery (UNDO) 105.900 69.040 99.200

2 Bioprospection of plant resources and other natural products (BioprosPR) 6.700 11.226 14.400

3 Medicinal Chemistry for stem cell biology and regenerative medicine (MEDCHEM) 15.125 16.632 20.650

4 Integrated NextGen approaches in health disease and environmental toxicity (INDEPTH) 352.124 324.070 415.380

5 Nanomaterials: Applications and Impact on Safety, Health and Environment (NanoSHE) 328.320 343.412 461.321

6 Neurodegenerative diseases: Causes and Corrections (miND) 73.250 88.151 105.500

7 Epigenetics in Health and Disease (EpiHeD) 18.450 19.300 26.250

8 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 19.300 7.251 12.800

9 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 13.370 25.321 19.970

10 Towards Understanding skin Cell Homeostasis (TOUCH) 46.163 45.375 54.125

11 Advance Drug Delivery System (ADD) 3.190 2.719 4.000

12 Clean Water: Sustainable Options (Clean Water) 0.000 5.650 6.150

13 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 0.000 10.120

14 Measurement for Innovation in Science & Technology (MIST) 59.350 15.450 23.700

Total : CSIR-IITR 1041.242 973.597 1273.565

Laboratory: CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow

- 1 Bioprospection of plant resources and other natural products (BioprosPR) 88.625 79.150 94.909
- 2 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 166.429 180.510 277.371
- 3 Plant Diversity: Studying adaptation biology and understanding/exploiting medicinally important plants for useful bioactives (SIMPLE) 284.545 250.255 244.697
- 4 Introduction, domestication, improvement and cultivation of economically important plants (AGTEC) 128.621 119.806 82.483
- 5 Integrated NextGen approaches in health disease and environmental toxicity (INDEPTH) 58.876 42.699 49.133
- 6 Plant-Microbe and Soil Interactions (PMSI) 88.010 74.249 100.499
- 7 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 29.900 22.100 23.900
- 8 S&T interventions to combat malnutrition in women and children (HCP07) 9.713 27.121 39.064
- 9 Root Biology and its correlation to sustainable plant development and soil fertility (RootSF) 1350.900 993.851 1255.064

Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

-
- 10 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 6.906 2.470
 - 11 Probing the Changing Atmosphere and its Impacts in Indo-Gangetic Plains (IGP) and Himalayan Regions (AIM-IGPHim) 50.942 21.921 23.300

Total : CSIR-NBRI 2256.561 1818.568 2192.888

Total Uttar Pradesh 8476.463 54407.111 8080.651

State / U.T. : Uttarakhand

Laboratory: CSIR-Central Building Research Institute (CSIR-CBRI), Roorkee

- 1 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment (EDMISSIBLE) 438.575 281.760 171.465
- 2 Development of a technology for optimal extraction of locked-up coal from underground mines using artificial pillars (DeCoalArt) 17.425 17.616 15.495
- 3 Robotics and Micro Machines (ROuM) 26.670 17.750 12.008
- 4 Innovative Materials and Technologies for Next Generation Green buildings (INMATE-NGGB) 255.500 421.183 188.758
- 5 Clean Water: Sustainable Options (Clean Water) 0.000 4.500 3.713
- 6 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 7.350 2.328 0.000
- 7 Advanced Research in Engineering & Earth Sciences: Data intensive modelling and crowd sourcing approach (ARiEES) 10.100 15.900 14.251
- 8 Advanced Instrumentation Solutions for Health Care and Agro-based Applications (ASHA) 20.740 10.688 4.450

Total : CSIR-CBRI 776.360 771.725 410.141

Laboratory: CSIR-Indian Institute of Petroleum (CSIR-IIP), Dehradun

- 1 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 18.132 18.300 11.756
- 2 Clean Coal Technology (TapCoal) 67.685 61.406 15.692
- 3 Biocatalysts for Industrial Applications & Greener Organic Synthesis (BIAGOS) 6.153 42.675 7.072
- 4 Development of Sustainable Processes for Edible Oils with Health Benefits from Traditional and New Resources (PEOPLE HOPE) 13.941 12.127 13.164
- 5 Energy Efficient Technologies (E2++) 174.497 130.850 107.949
- 6 Biomass to Energy (BioEn) 128.253 76.940 41.416
- 7 Catalysts for Sustainable Energy (ECat) 530.410 249.571 223.139
- 8 New generation lubricants and additives (GenLube) 280.256 160.869 78.118

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

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- 9 Research Initiative for Low Emissions (RILE) 219.052 144.081 135.901
 - 10 Waste to Wealth - Waste plastics (W2W) 110.716 29.441 27.976
 - 11 Advanced Carbon Materials (AdCarbMate) 27.479 31.608 26.717

12 Catalysts for Speciality Chemicals (CSC) 174.836 75.529 85.734
13 A Multi-Scale Simulation and Modeling Approach to Designing Smart Functional Materials for use in Energy, Electrochemistry and Bio-mimetics (MSM) 56.402 11.076 10.254
14 Natural Products as Affordable Healthcare Agents (NaPAHA) 8.907 17.890 8.239
15 Sustainable Technologies for the Utilization of Rare Earths (SURE) 44.547 58.771 16.466
16 Speciality Materials based on Engineered Clays (SPECS) 43.318 12.880 14.540
17 Centre of Excellence for HRD in Hydrocarbon (TrainAll) 0.000 0.000 492.500
18 Robotics and Micro Machines (ROuM) 8.259 59.112 9.720
19 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 6.622 2.758

Total : CSIR-IIP 1912.843 1199.748 1329.111

Total Uttarakhand 2689.203 56378.584 1739.252

State / U.T. : West Bengal

Laboratory: CSIR-Central Glass & Ceramic Research Institute (CSIR-CGCRI), Kolkata

1 Multifunctional electrodes and Electrolytes for Future Technologies (MUTLIFUN) 27.719 9.544 21.569

2 Membrane & Adsorbent Technology Platform for Effective Separation of Gases and Liquids (MATES) 22.388 11.510 10.018

3 Intelligent Coatings (IntelCoat) 24.955 10.542 14.150

4 Energy Efficient Technologies (E2++) 11.741 16.427 9.608

5 Speciality Materials based on Engineered Clays (SPECS) 15.775 6.794 7.230

6 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment (EDMISSIBLE) 49.495 39.368 31.447

7 Development of Novel CSIR Technologies for Manufacturing Tailored and Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM) 561.173 235.233 156.442

8 Advanced ceramics materials and components for energy and structural application (CERMESA) 973.144 779.863 688.735

9 Innovative Technologies for Health Assessment and Damage Mitigation of Structures (I-HEAL) 38.956 23.724 19.474

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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

10 Robotics and Micro Machines (ROuM) 67.449 14.494 17.621

11 Leadership in Specialty Glass and Optical Fiber Technologies (GLASSFIB) 1079.843 790.937 726.526

12 Clean Water: Sustainable Options (Clean Water) 0.000 11.425 11.505

13 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure (KNOWGATE) 0.000 7.719 2.707

14 Very High Power Microwave Tubes : Design and Development Capabilities (MTDDC) 54.541 53.401 85.381

Total : CSIR-CGCRI 2927.179 2010.981 1802.412

Laboratory: CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur

1 Multifunctional electrodes and Electrolytes for Future Technologies (MUTLIFUN) 8.500 4.513 11.636

2 Clean Coal Technology (TapCoal) 67.039 51.653 45.318

3 Novel Energy Effective Metallic Materials for Automotive and General Engineering Application (LWM) 33.461 11.008 14.496

4 Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment (EDMISSIBLE) 9.158 6.866 4.407

5 Development of Novel CSIR Technologies for Manufacturing Tailored and Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable Cost (BIOCERAM) 10.572 22.930 15.978

6 Development of a technology for optimal extraction of locked-up coal from underground mines using artificial pillars (DeCoalArt) 24.041 29.884 33.082

7 Innovative Technologies for Health Assessment and Damage Mitigation of Structures (I-HEAL) 19.626 20.285 9.533

8 Robotics and Micro Machines (ROuM) 890.044 869.151 872.040

9 Autonomous Underwater Robotics (UnWaR) 347.641 675.279 799.057

10 Intelligent devices and smart actuators (InDeSa) 229.021 172.569 169.136

11 Development of underground coal gasification technology in India (CoalGasUrja) 14.980 15.324 1.688

12 Development of suitable design methodology for extraction of coal at 2.748 2.269 3.862

greater depths (>300 m) for Indian geomining conditions (DeepCoal)
 13 Clean Water: Sustainable Options (Clean Water) 0.000 9.178 32.124
 14 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure 0.000 0.000 7.677
 (KNOWGATE)
 15 Very High Power Microwave Tubes : Design and Development Capabilities 14.736 12.352 17.696
 (MTDDC)
 16 Advanced Instrumentation Solutions for Health Care and Agro-based
 Applications (ASHA) 19.525 8.266 0.000
 17 Development of Advanced Materials for Next-Generation Energy-Efficient
 Devices (D-NEED) 6.500 20.734 27.564
 18 Measurement for Innovation in Science & Technology (MIST) 13.005 3.597 6.274
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Rs. Lakh

Title of the Project 2013-14 2014-15 2015-16

Total : CSIR-CMERI 1710.597 1935.858 2071.568
 Laboratory: CSIR-Indian Institute of Chemical Biology (CSIR-IICB), Kolkata
 1 Factors Governing competent gamete production and reproductive
 dysfunction (PROGRAM) 69.393 62.706 87.700
 2 Emerging and re-emerging challenges in infectious diseases: Systems
 based drug design for infectious diseases (SPlenDID) 11.650 13.200 19.996
 3 Genomics of Medicinal Plants and Agronomically Important Traits (PlaGen) 8.750 11.025 9.934
 4 Medicinal Chemistry for stem cell biology and regenerative medicine
 (MEDCHEM) 19.108 8.811 14.000
 5 Integrated NextGen approaches in health disease and environmental
 toxicity (INDEPTH) 76.093 60.090 74.721
 6 Understanding supra molecular ensembles and machines (UNSEEN) 164.104 126.742 178.345
 7 Host Interactome analysis: Understanding the Role of Host molecules in
 Parasitic Infection (HOPE) 441.521 380.274 326.422
 8 Neurodegenerative diseases: Causes and Corrections (miND) 363.609 283.725 339.299
 9 Therapeutics of Chronic Obstructive Pulmonary Disease (COPD) and
 Related Respiratory Disorders (TREAT) 178.437 123.609 167.557
 10 Plant-Microbe and Soil Interactions (PMSI) 25.911 16.095 22.219
 11 Epigenetics in Health and Disease (EpiHeD) 10.125 11.850 14.249
 12 Man as a Superorganism: Understanding the Human Microbiome (HUM) 144.194 104.561 133.312
 13 Centre for BIOtherapeutic Molecule DISCOVERY (BIODISCOVERY) 108.657 83.207 93.000
 14 Genomics and Informatics Solutions for Integrating Biology (GENESIS) 73.076 27.517 27.930
 15 Genome Dynamics in cellular organization, differentiation and enantiostasis
 (GenCODE) 26.220 28.819 44.500
 16 Bio-energetic Disorders: A multi-model approach to monitoring and
 management (BenD) 1110.347 444.424 534.536
 17 Organic reactions in generating innovative and natural scaffolds (ORIGIN) 15.754 18.764 25.746
 18 Development of Novel CSIR Technologies for Manufacturing Tailored and
 Patient-Specific Bioceramic Implants and Biomedical Devices at Affordable
 Cost (BIOCERAM) 57.967 127.000 61.526
 19 CSIR Knowledge Gateway and Open Source Private Cloud Infrastructure
 (KNOWGATE) 0.000 6.905 2.843

Total : CSIR-IICB 2904.915 1939.324 2177.837

Total West Bengal 7542.691 62264.747 6051.817

Grand Total all States 77424.417 62264.747 75501.710

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ANNEXURE-II

List of Significant Achievements attained

1. An Earthquake Warning System (EqWS) comprising seismic warning systems with LAN connectivity for generation of alarm signal on major earthquake developed which is being used by the Delhi Metro;
2. An Integrated Global bus Avionics Processing System, popularly called Mission Computer developed;
3. Developed an electronic system, named 'Ksheer-Scanner', which is capable of detecting adulterants such as urea, salt, detergent, liquid soap, boric acid, caustic soda, and hydrogen peroxide in milk. Also a handheld milk adulteration tester for domestic usage for detection of adulteration in milk launched;
4. A mercury-free plasma (MFP) UV-lamp developed for water disinfection systems which would provide water free of environmentally

and health hazardous mercury;

5. 4 kg class and <300mm class fully Autonomous Fixed Wing Micro Air Vehicle developed;
6. Micro electromechanical (MEMS) Pressure systems Sensors developed;
7. Autonomous Under Vehicle (AUV) technology developed;
8. Bore Sighting System developed;
9. Recycling of Zinc from Alkaline Battery Waste technology developed;
10. Development of Head UP Displays for various aircrafts;
11. Development of Postural Stability Assessment System;
12. Creation of a unique, modular, agile intensified and continuing pilot plant facility for fine and specialty chemicals (called Indus MAGIC). More than 40 patents/disclosures have been filed and 150 journal publications and two books published;
13. Low cost and compact membrane technologies for desalination and water purification systems developed;
14. Low grain arsenic rice variety of safe human consumption developed;
15. Multipurpose gear oils developed;
16. Development of Shape Memory Alloys, Allumini metal matrix composites and different kind of foams (carbon & Metal);
17. Development of Fiber Laser Systems;
18. Development of novel non-vascular stent designs and prototypes;
19. Collagen based wound healing technology developed;
20. Number of biological and chemical leads identified for treatment of diseases like Cancer, TB, Diabetes, Malaria, ulcer etc.;
21. Car Driving Simulator for Driver Diagnostics developed ;
22. Health Monitoring technology for various types of structures developed;
23. A Composite National Facility for Materials, Mechanism and Sensors established;
24. Development of Underground Coal Gasification Technology;
25. Indigenous Magnesium production Technology developed;
26. New Varieties of medicinal and aromatic plants developed;
27. A Centre for High Altitude Biology established;
28. New type of functional food products developed;
29. A state-of-the-art Lipid Research Facility established;
30. Multi-Scale Modeling platform for applications like carbon-fluix, estimation, weather simulation, Natural Hazards, Cyber Security etc. developed;
31. Protection of Traditional Knowledge like Ayurveda, Unani, Siddha and Yoga of the country through Traditional Knowledge Digital Library.