QUARTERLY PHYSICAL REPORT OF OPERATION
As of December 31, 2016

Department	**Department of Science and Technology**
Agency	**Philippine Council for Industry, Energy and Emerging Technology Research and Development**
Operating Unit	
Organization Code (UACS)	**19-013**

X	**Current Year Appropriations**
	Supplemental Appropriations
	Continuing Appropriations
	Off-Budget Account

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec. 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
1	2	3	4	5	6	7=(3+4+5+6)	8	9	10	11	12=(8+9+10 +11)	13	14
Part A													
I. Operations													
MFO 1 - Industry, Energy and Emerging Technology Research and Development Policy Services	3010100000												
Performance Indicators													
1. No. of policy advisories provided		4	4	4	4	16	5	4	12	5	26	22	Provided 24 bills/policies commented, 1 updated roadmap, and 1 formulated roadmap
2. Average percentage of policy advisories rated satisfactory or better		90%	-	-	-	90%	92%	-	-		92%	2%	Overaccomplish ment was based on the actual survey conducted during the 1st quarter of the year
3. Percentage of policy advisories that have been updated, issued and disseminated within the last three (3) years		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	-	

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MFO 2: Research and Development Management Services for Industry, Energy and Emerging Technology	3020100000												
Performance Indicators													
1. Number of proposals evaluated		36	36	36	36	144	56	209	88	204	557	521	- See attached list of proposals - The number of proposals overshoot the target due to the Call for Proposals during the 2nd quarter and 4th quarter
Percentage of projects recommended for approval that subsequently received funding through the governing council/EXECOM		90%	90%	90%	90%	90%	100%	100%	100%	100%	100%	10%	Percent accomplishment includes release of DOST funds to PCIEERD monitored projects
Percentage of Project proposals acted upon within 4 months		90%	90%	90%	90%	90%	100%	100%	100%	100%	100%	10%	
2. Number of ongoing projects monitored		200	200	200	200	200	196	212	227	259	259	59	See attached list of projects

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1	2	3	4	5	6	7=(3+4+5+6)	8	9	10	11	12=(8+9+10 +11)	13	14
													Overaccomplish ment was due to the proposals received from the Call for Proposal
Percentage of projects completed within the past four years that are published in recognized journals or utilized by industry		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	-	
Percentage of monitored projects reviewed within the year		20%	20%	20%	30%	90%	33%	20%	20%	17%	90%		

Prepared by:

MS. TONY ROSE C. TUMANENG
SRS II - PCMD

Date:

In coordination with:

MR. ISIDRO V. QUERUBIN, JR
Budget Officer

Date:

Approved by:

CARLOS PRIMO C. DAVID, Ph.D.
Executive Director

Date:

OCD-07007-114

Policies Provided

1. Draft Policy on Contract Research
2. Energy Storage Technologies
3. Water Infrastructure Policy Discussion
4. Policy Dialogue on Energy Storage Technologies
5. Policy Discussion on the Hazards, Risk and Profits of Reclamation
6. Bill SB No. 2831 & HB No. 6347 entitled: "An Act Instituting the Philippine Halal Export Development and Promotion Program, Creating for the Purpose the Philippine Halal Export Development and Promotion Board, and for Other purposes"
7. Counter-draft Agreement between the Government of the Republic of Serbia and the Government of the Republic of the Philippines on Cultural and Educational Cooperation"
8. Comments on the draft JAO re Creating the TWG on the use of AutoLPG as fuel for Public Transport and for other related purposes
9. SB No. 2831 & HB No. 6347 entitled: "An Act Instituting the Philippine Halal Export Development and Promotion Program, Creating for the Purpose the Philippine Halal Export Development and Promotion Board, and for Other purposes"
10. HBN 1220, authored by Rep. Reynaldo V. Umali, entitled: "An Act Institutionalizing Energy Efficiency and Conservation, Enhancing the Efficient Use of Energy, Granting Incentives to Energy Efficiency and Conservation Projects, and for Other Purposes"
11. HBN 1527, authored by Rep. Gloria Macapagal-Arroyo, entitled: "An Act Establishing an Inter-Agency Energy Conservation Committee to Deploy Cost Effective Energy Conservation Measures and Technologies and for Other Purposes
12. HBN 1691, authored by Rep. Maximo B. Rodriguez, Jr., entitled: "An Act Providing for a Comprehensive Nuclear Regulatory Framework, Creating for the Purpose, the Philippine Nuclear Regulatory Commission, and Appropriating Funds Therefor
13. House Bill No. 292, authored by Reps. Horacio P. Suansing Jr. and Estrellita B. Suansing, entitled: "An Act Imposing Excise Tax on Sugar Sweetened Beverages by Inserting a New Section 150-A in the National Internal Revenue Code of 1997, as Amended
14. House Bill No. 182, entitled "An Act Institutionalizing Energy Efficiency and Conservation, Enhancing the Efficient Use of Energy, Granting Incentives to Energy Efficiency and Conservation Projects, and for Other Purposes"
15. House Bill No. 812, entitled: "An Act Requiring All Government and Non-Government Offices and Establishments to Adopt Policies for ,Energy Conservation and Efficient Energy Utilization Measures and for other Purposes"
16. House Bill No. 21 (The ASSET Act of 2016)
17. Draft Amendatory Bill of RA 10121 of the Philippine Disaster Risk Reduction & Management Act of 2010
18. Senate Bill No. 38 (The Philippine Innovation Act)
19. Senate Bill No. 176 (Poverty Reduction Through Social Entrepreneurship [PRESENT] Act of 2016)
20. HB No. 5278 entitled: "An Act Creating the Department of Disaster Management as Distinct and Separate from the National Defense and for other Purposes"
21. HB No. 3486: "An Act Creating the Department of Disaster Preparedness and Emergency Management, Defining its Mandates, Powers and Functions, and Appropriating Funds Therefore"

22 HBN 2388, authored by Rep. Henedina R. Abad, entitled: "An Act Institutionalizing Energy Efficiency and Conservation, Promotion of Renewable Energy for Energy Security, Providing Guidelines and Granting Incentives to Energy Efficiency and Conservation Projects, and for Other Purposes

23 HBN 3040, authored by Rep. Harry L. Roque, Jr., entitled: "An Act Prohibiting' the Manufacture, Importation, Sale, and Use of Incandescent Light Bulbs, Prescribing a Phase-Out Period, and Providing Penalties for Violations Thereof'

24 Senate Bill No.1167 entitled: "An Act Rightsizing the National Government to Improve Public Service Delivery

25 Textile S&T Roadmap

26 S&T Water Environment Roadmap

Overall Rating for Customer Satisfaction Feedback

	Outstanding	Very Satisfactory	Satisfactory	Fair	Needs Improvement
Submission	7	8	0	2	0
Evaluation	4	5	1	0	2
Monitoring	4	9	3	0	0
Total	**15**	**22**	**4**	**2**	**2**
	92%			**8%**	

PHILIPPINE COUNCIL FOR INDUSTRY, ENERGY AND EMERGING TECHNOLOGY RESEARCH AND DEVELOPMENT
LIST OF 2016 PROPOSALS

	Title	Agency
1	STORM PROXIES: Recognizing Precedents of Today's Supertyphoons in Modern and Ancient Deposits (Project Code: PRP# 2532)	Marine Science Institute, UP Diliman
2	INNO-HUB: A DOST Multi-Industry Manufacturing Innovation Hub	Industrial Technology Development Institute (ITDI) - DOST
3	Acquisition of GAS Chromatograph-Mass Spectrometer (GC-MS) Equipment	DOST-ARMM, ARMM Complex, Cotobato City
4	Technology Innovation of Fiber-Reinforced Composites for Surfboard Application [Project Code: PRP# 2541]	ITDI
5	Development of a Mobile Vibratory Screen for the Production of Lahar Particles to Control Philippine Subterranean Termintes	Department of Forest Products and Paper Science, University of the Philippines, Los Baños (UPLB), Laguna
6	Dried Fish Standardization and Packaging - (WVCIERD)	Northern Negros State College of Science and Technology Old Sagay, Sagay City, Negros Occidental
7	LEAP for Success : Promoting English Language Proficiency as a Skill Advantage for Filipino Students and Professionals	DOST-NCR
8	Development of Food Reference Materials for Nutrition Labeling for Use of Local Testing Laboratories	Food and Nutrition Research Institute (FNRI)
9	Development of Techniques to Assess Inland Wetland as Flood Detention in Philippine River Basins	Training Center for Applied Geodesy and Photogrammetry and the Department of Geodetic Engineering, University of the Philippines, Diliman, Quezon City, 1101 PHILIPPINES
10	Nationwide Radiometric Mapping of the Philippines	Philippine Nuclear Research Institute (PNRI) Don Mariano Marcos Avenue, Diliman, Quezon City
11	Synergistic effect of Forward Osmosis and Capacitive De-Ionization for Water Purification and Recovery	Malayan Colleges Laguna
12	Pilot-Scale Production of Spray-Dried Powder Dextran and High Fructose Syrup using Whole Cell (Leuconostoc mesenteroides isolates) ITDI Fermentation Technology	ITDI
13	Properties of Myocyte-Fibroblast system under Mechanical Stresses: Myocyte-Fibroblast Cluster - Bulk Properties - Local Properties	University of San Carlos, Cebu City
14	Utilization of Cavendish banana by-products and fruit wastes as a potential source of high value food products	Institute of Chemistry, UP DIliman
15	UAVDM: Unmanned Autopilot Vehicles for Disaster Mitigation	De La Salle University
16	A Vision-Based Vehicle Counter for Traffic Monitoring (VEMON)	College of Computer Studies, De La Salle University
17	ARCS SRAUS: Aerial Road Condition Surveillance and Suggestive Re-routing using Autonomous Unmanned Systems	Mapua Institute of Technology
18	Capacity Building,Community Outreach and Diffusion of DOST-PCIEERD Supported Food Technologies through ENTREPRENEURSHIP at the University of Caloocan City	University of Caloocan City
19	Development of An Automated Multi-Commodity Heat Pump Dryer-Cooler	Adventist University of the Philippines (AUP)
20	Design, Development and Evaluation/Test of an Automated Water Bath for Multi-Applications with Remote Monitoring	Adventist university of the Philippines
21	Design and Development of a Water Quality Monitoring and Control System for Aquaponics System	MANUEL S. ENVERGA UNIVERSITY FOUNDATION
22	DEVELOPMENT OF INNOVATIVE INDUSTRIAL DESIGNS OUT OF STAINLESS STEEL SHEETS	LAGUNA STATE POLYTECHNIC UNIVERSITY
23	Programmable Logic Controller (PLC) -Based Organic Farming System	LAGUNA STATE POLYTECHNIC UNIVERSITY

	Title	Agency
24	Development of a Philippine Surface Water Inventory and Forecasting Technology (Phil-SWIFT)	Training Center for Applied Geodesy and Photogrammetry and the Department of Geodetic Engineering, University of the Philippines, Diliman, Quezon City
25	Design and Development of Emergency Evacuation Plan for AGT System	Metals Industry Research and Development Center
26	Design and Development of a Track Switch Mechanism for the Automated Guideway Transit System in UP Diliman	Metals Industry Research and Development Center
27	Enhancement of ITDI Prototype Compact Vacuum Fryer	Industrial Technology Development Institute
28	Environmental and Energetic Studies of Biodiesel Production from Coconut Oil in the Philippines	UPLB Foundation, Inc. ((JPLBFI)
29	INTERA-NATECH INTER-Asian initiati've on joint NAtural and TECHnological (Natech) risk reduction at industrial estates (e-Asia)	Maritime Academy of Asia and the Pacific
30	The extent of trace metal contamination in commercial fish from Laguna Lake: Method development, spatial, temporal trends and health risk due to fish intake	Institute of Environmental Science and Meteorology,
31	Antibiotics, Endocrine Disruptors and Heavy Metals in Laguna Lake Water: Impacts on Food and Water Security	Institute of Chemistry
32	Utilization of Knifefish (Chitalaornata) for Fish Protein Concentrate and Hydrolysate Production	UP Pilot Food Plant/Food Innovation Center, UP College of Home Economics, UP Diliman, Quezon City
33	Optimization of Ready-to-Drink Sweet Potato Leaf Extract (SPLE)-Tropical Fruit Juice Blends through the UP-DOST Food Innovation Facility	UP College of Home Economics, Diliman, Quezon City
34	Development of Ready-to-Eat Corn Grit Meals	UP Diliman - College of Home Economics
35	Determination of Ultraviolet-C Inactivation of Resistant Spoilage and Pathogenic Microorganisms in Economically Important Food Commodities (Desiccated Coconut Meat and Coconut Water)	UP Diliman - College of Home Economics
36	Establishment of PTRI as the Central Institute for Textile Product Development	DOST-PTRI, Bicutan, Taguig City
37	Market Validation of the Automated Rapid Reef Assessment System (ARRAS)	National Institute of Physics, University of the Philippines Diliman
38	Village-Level Integrated Coconut Processing Hub In Quezon Province	DOST IV-A, Los Banos, Laguna and Southern Tagalog Peninsula Producers' Cooperative (SBPPC)
39	Process Upgrading for Home and Office Modular Furniture Systems Production [Project Code: PRP#2582]	MODULHAUS, INC.
40	Establishment of Coco-Nipa Ethanol Pilot Production Plant in Northern Samar	Northern Samar Coconut Industry Development Council in partnership with the Philippine Coconut Authority, the Department of Agriculture and the University of Eastern 'Philippines (UEP)
41	23rd Asia Pacific Regional Space Agency Forum (APRSAF) Space Education Working Group (SEWG) Side Event	Science Education Institute, DOST
42	Upgrading the Production Equipment of CPS Engineering Construction	CPS Engineering Construction
43	Phytoremediation Capability of Tropical Plants for Air, Water and Soil Pollutants in Urban Ecosystems- Project 1	Institute for Climate Change and Environmental Management, Central Luzon State University (ICCEM-CLSU)
44	Molecular Identification of Tropical Plants and Microbiota with Potential Bioremediation Capability in Central Luzon -Project 2	CLSU, Science City of Muhoz, Nueva Ecija
45	GIS-Based Mapping Of Air, Water And Land Pollution In Urban Ecosystems In Central Luzon -Project 3	Institute for Climate Change and Environmental Management, Central Luzon State University (ICCEM-CLSU)
46	Communication, Education, Promotion and Policy Formulation and Advocacy in the Utilization and Conservation of Tropical Plants with Phytoremediation Potential in Central Luzon -Project 4	CLSU, Science City of Mufioz, Nueva Ecija

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47	Technology Piloting of the FPRDI Flattening Equipment	Forest Products Research and Development Institute (FPRDI), College, Laguna
48	Miller's Forum: Support for the Conduct of Seminars, Conferences, Workshops and Trainings	DOST-FNRI
49	Smart Surface	Electrical and Electronics Engineering Institute, UP Diliman
50	Quality and Safety Monitoring of Chilled and Frozen Products using Intelligent Packaging with Time Temperature Indicators	Packaging Technology Division (PTD) Industrial Technology Development Institute (ITDI)
51	Project Tick-Tock Tech Talk	University of the Philippines Diliman
52	Development of Loop-Mediated Isothermal Amplification (LAMP) that Targets hilA Gene for Rapid Detection of Salmonella enterica in Meat Products	Institute of Biology, College of Science, University of the Philippines
53	Product and Technology Holistic Strategy (PATHS) for the Semiconductor and Electronics Industries of the Philippines	Semiconductor and Electronics Industries in the Philippines Foundation, Inc.
54	IP Management (From Disclosure to Strategy) of DOST-PCIEERD Projects	UNIVERSITY OF THE PHILIPPINES
55	Product Launch and Fora as Core Events for ITDI-NSTW 2016	Industrial Technology Development Institute
56	CIERDEC Capability Building Program for 2016	Cordillera Industry and Energy Research and Development Consortium (CIERDEC)
57	Project 2: Tailings - Cement Bricks Reinforced with Coco Fiber - CSU	College of Engineering and Information Technology CARAGA State University
58	Development of a functional and durable pervious concrete pavement for local roads and parking lots	Central Mindanao University
59	Project 3: Smart Road-Dust Suppression System for Mining Hauling Sites - CSU	Caraga State University (CSU)
60	Project 5: Product Development of Talisay Nut Delights - SSCT	Surigao State College of Technology
61	Project 6: Archimedean Screw Micro Hydropower System For Small Scale Industry Application - ASSCAT	Agusan del sur State College of Agriculture and Technology
62	Project 7: RETROFITTING A GRASS CUTTER FOR OIL PALM MECHANICAL HARVESTER	Agusan del Sur State College of Agriculture and Technology
63	Project 8: Development of a Small Scale Coconut Dehusher - ASSCAT	Agusan del Srn State College ofAgriculture and Technolory
64	Benham Rise Origins and Resources: Preliminary assessment from an offshore geophysical survey	National Institute of Geological Sciences
65	ROAD MAINTENANCE PRIORITIZATION MAPPING ALONG THE CAGAYAN DE ORO CITY — BUKIDNON — DAVAO CITY ROUTE CORRIDOR USING GIS AND FR APPROACH	Central Mindanao University
66	Energy Harvesting Chamber Utilizing Microbial Fuel Cells	TIP Quezon City
67	Establishment of the Basin Analysis And Seismic Interpretation (BASIn) Laboratory for seismic hazards, energy, and mineral resources assessment	National Institute of Geological Sciences
68	VARIETAL EVALUATION, SELECTION AND MASS PRODUCTION OF SELECTED CUTFLOWER CROPS FOR CLIMATE CHANGE ADAPTATION	Benguet State University
69	e-PC:Educational Pinoy Computers -A Hardware Design and Implementation of a Single Board Pocket Computer For K-12 Public Secondary Schools	Department of Information and Communications Technology (DICT)
70	Flood Hazard, Exposure and Risk Mapping in the River Basins of Central Luzon and Pangasinan not covered by LiDAR Program	Institute of Climate Change and Environmental Management, Central Luzon State University (CLSU)
71	REGENERATIVE FUEL CELL (RFC) or could be renamed to SELF-REGENERATING BATTERY (SRB)	Trece Martirez City, Cavite
72	Setting up a Concrete Petrography Laboratory for Quality Control of Construction Projects	NATIONAL INSTITUTE OF GEOLOGICAL SCIENCES COLLEGE OF SCIENCE, UNIVERSITY OF THE PHILIPPINES, DILIMAN QC

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73	Utilization of bacteriocins from food-grade lactic acid bacteria in the development of antimicrobial food packaging	National Institute of Molecular Biology and Biotechnology (BIOTECH)
74	Remote Sensing Technologies for Monitoring, Management and Inventory of Transportation Infrastructure Components in Central Luzon and Pangasinan	Institute for Climate Change and Environmental Management— Central-Luzon State University
75	HYDROGEN GAS AND OXYGEN GAS GENERATION (H2&02 GEN.) BY CATALYSIS	Trece Martirez City, Cavite
76	Philippine Research infrastructure for Internet Monitoring and Evaluation (PRIME): Performance, Status and Connectivity Monitoring Through Inexpensive Network Edge Devices	Department of Computer Science, UP Diliman
77	Assessment of Water Supply and Demand Using Water Evaluation and Planning (WEAP) System Model in Upper Pulangi Watershed Under Changing Climate	Central Mindanao University
78	Solar Powered Ambient Air Filter System	FISCAR Inc., Km6, La Trinidad, Benguet : c/o DOST-CAR, La Trinidad, Benguet
79	Implementation and Evaluation of the Android-based CRS	Mapua Institute of Technology
80	Automated Real-Time Monitoring System (ARMS) for Ambuklao, Binga, and San Roque Dams	Mapua Institute of Technology (MIT)
81	Forward Osmosis System using locally-made membrane from Nata-de-coco for the production of rehydration water and application for desalination	Malayan Colleges Laguna
82	3D City Modeling of NCR using LIDAR for the Creation of Integrated, Effective and Efficient Sustainable Mass Transport	Mapua Institute of Technology (MIT)
83	Design Upgrade and Field Rollout of Cane Crusher for Muscovado Production	Metals Industry Research and Development Center (MIRDC)
84	Cancer Cell Mechanics and Migration	University of the Philippines
85	ET-Based Irrigation Scheduling System for Agricultural Application	Mapua Institute of Technology (MIT)
86	Rehabilitation Prioritization Mapping in the Watersheds of Punlangui IV Hydroelectric Power Plant	Central Mindanao University (CMU)
87	ellBro (electronic Library and Instruction through Broadband): A Learning Management System with la Track eLearning (ITeL) Module for Senior High School	DOST-ICTO
88	Unification of LVD using Oceanographic Approach (Oceano)	University of the Philippines Training Center for Applied Geodesy and Photogrammetry (TCAGP)
89	Laser Induced Breakdown Spectroscopy for Environmental Testing and Monitoring	Photonics Research GroupNational Institute of Physics
90	Angular Goos-Hanchen Shift: An Optical Phenomena for Ultra Thin Film Thickness Measurement	National Institute of Physics
91	Integrated Sensor System for Real time observation and monitoring of dams and reservoirs	Ateneo De Manila University (ADMU)
92	Development of Nickel Farming Technology on Mined-out Areas in Palawan, Surigao, and Zambales Using Native Nickel Hyperaccumulators	Department of Forest Biological Sciences, College of Forestry and Natural Resources, University of the Philippines Los Baños (FBS-CFNR, UPLB)
93	Design of an Automated Indoor, Vertical Lettuce (L. sativa) Production System	Sulo Renewable Energy Solutions, Inc
94	Fringe-area Data Access by Transient Altitude Provision	De La Salle University
95	Used Cooking Oil (UCO) and Animal Fat Rendering for Industrial and Biofuel from Cagayan Valley Cities: Waste to Energy from Food and Municipal Waste	Cagayan State University
96	Design, Fabrication and Process Optimization of a Hydrothermal Carbonization Reactor for Food Waste Valorization	Department of Biology, School of Science and Engineering, Ateneo de Manila University
97	SOIL AND BASE PREPARATION FOR PERVIOUS CONCRETE PAVEMENT	CAMARINES SUR POLYTECHN C COLLEGES
98	Morphological Image Processing of Pothole Detection on Road Pavement Failures for Department of Public Works and Highways	Mapua Institute of Technology (MIT)
99	Optical trap-mediated interaction between cancer cells and elucidated compounds from vegetable extracts in PEMF	De La Salle University (DLSU)

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100	Rapid Assessment of Multiple Ailments During A Major Calamity (RAMDAMCA)	University of the Philippines Baguio
101	Energy from Waste and the Sun during Tragedy Operations (EWaSTO)	University of the Philippines Baguio
102	A Portable Biogas Power Generation System from Animal Farm Waste	School of EECE, Mapua Institute of Technology
103	Solar Powered Real Time Observation And Monitoring Of Dams And Reservoirs	Sorsogon State College
104	Storm Surge and Tsunami Modelling and Mapping	Institute for Environmental Conservation and Research, Ateneo de Naga University
105	Reading Aid: An Adaptive Reading Proficiency Enhancement System for Grade School Pupils	MANUEL S. ENVERGA UNIVERSITY FOUNDATION
106	Habitat Mapping of Endemic, Vulnerable, and Endangered Land and Air Wildlife in the Bicol Region	Institute for Environmental Conservation and Research, Ateneo de Naga University (INECAR)
107	Helping Children Write Stories by Collaborating with a Virtual Peer	De La Salle University
108	Leveraging and Maximizing Citizen Participation using Social Media, Community Detection and Automated Discourse Analysis	De La Salle University
109	Development of Nanobiomaterials from Seaweeds and Bamboo for Sustainable Development (SeaBam)	Mapua Institute of Technology
110	Municipal Solid Waste (MSW) to Energy via Pyrolysis	Department of Chemical Engineering College of Agro-Industrial Technology University of the Philippines, Los Banos
111	ISAT U Main Campus Energy Management System Considering Variable Renewable Energy (VREs) Integration	Iloilo Science and Technology University (ISAT U)
112	Construction and evaluation of the efficiency of portable filter system from modified and unmodified agricultural wastes for the removal of heavy metals in laboratory wastewater	Iloilo Science and Technology University (ISAT U)
113	Hybrid Power Plant - A Pilot Research Proposal	Iloilo Science and Technology University (ISAT U)
114	Design. Fabrication and Evaluation of a Water Driven S-Turbine Pump for Community Potable Water Supply and Supplemental Irrigation	Iloilo Science and Technology University (ISAT U)
115	Development of a Smart Real-time Electrical Energy Monitoring System for Fast and Intensive Energy Audit	Technological University of the Philippines Visayas
116	Characterization, inventory, monitoring and mapping of landslide occurrences in Leyte Island, Philippines by geospatial techniques for disaster risk reduction and management	Visayas State University (VSU)
117	Development of Direct-Current Circuit Trainer	Electrical Engineering Department, Faculty of Engineering, University of Santo Tomas
118	Jolt: A Stackable Multi-Functional Battery Energy Storage for Household Solar and Emergency Applications	Department of Chemical Engineering, UP Diliman
119	Development of an Off-Grid Smart Street Lighting System	Advanced Science and Technology Institute (ASTI)
120	Agricultural WEBSCAPE Project	Caraga State University
121	Agricultural Landscape Assessment and Modeling Infestation Dynamics (ALAMID)	Caraga State University
122	Geospatial Assessment and Modelling of Urban Heat Islands in Philippine Cities (GUHeat)	UP Training Center for Applied Geodesy and Photogrammetry
123	Brain Activity of Normal and Special Children for Assessment of Visual Attentiveness	University of Santo Tomas
124	Development of a Vehicle Telematics System for the Automated Guide-way Transit (AGT)	Advanced Science and Technology Institute (ASTI)
125	Rapid Airborne Mobilization in Emergency Situations (RAMONES)	University of the Philippines Baguio
126	Hydrologic Assessment for Disaster Risk and Comprehensive Land-Use Planning (HyDRaCLUP)	UP Institute of Civil Engineering National Hydraulic Research Center

	Title	Agency
127	Pelletized Sugarcane Tops for Ruminant Animals	Northern Negros State College of Science and Technology
128	Sugarcane Tops as Biodegradable Packaging materials	Northern Negros State College of Science and Technology
129	Sugarcane Tops as Substrate for Export Quality Mushroom	Northern Negros State College of Science and Technology
130	Capacitating Local units and Establishing Networks (ClaN) in using Big data in CALABARZON and MIMAROPA Regions	IBS-UP los Banos
131	Integrated Near - Real Time Observation, Visualization and Analytical Tools for Effective Flood Forecasting and Early Warning through Application of LiDAR and Related Geospatial Technologies	Caraga State University
132	DETAILED WIND ENERGY RESOURCE ASSESSMENT USING HIGH RESOLUTION TERRAIN AND SURFACE DATASETS AND MESOSCALE-MICROSCALE NUMERICAL SIMULATIONS	Cagayan State University
133	Analyzing Impacts of Various Climate Change Scenarios on the Availability of Lands for Propagation of Conventional and Alternative Crop - Based Food Sources in the Philippines using Remote Sensing, GIS and Suitability Models	Caraga Center for Geo-informatics (CCGeo), Caraga State University,
134	Watershed Approach for Tropical Ecology (WATropE) using Big Data in Region IV-A and IV-B	Institute of Biological Sciences, College of Arts and Sciences University of the Philippines Los Banos
135	Project 3. Water Resource Management (WaRM) using Big Data: Region IV-A and IV-B	DCERP-CHE, UP Los Banos
136	Solar Powered Egg Incubation	Capiz State University, Agricultural Engineering Department, College of Agriculture and Forestry, Burias Campus
137	Project 1 .Non-destructive Quality and safety Assurance and Control System for Peanut Using Hyperspectral Imaging and pattern recognition Techniques	Cagayan State University
138	Ultrafast MBE-grown Terahertz Photoconductive Antenna Devices	Condensed Matter Physics Laboratory - Semiconductor Group
139	Use of LiDAR and Numerical Models to Assess Effectiveness of Existing and Proposed Flood Control Structures under Extreme/Climate Change Scenarios	Caraga Center for Geo-Informatics (CCGeo), Caraga State University
140	Geometry Proof Tutor: A Computer Software to Assist Geometric Proving through Proof Tree and Feedback Mechanisms	De La Salle University
141	Applications of Nypa fruticans (Nipa) Palms Species in Northern Samar	University of Eastern Philippines
142	Development of Porous Materials for Evaporative Cooling Systems	Mariano Marcos State University
143	Development of Lightweight Pervious Concrete-Ceramic Product for Air Filtration and Purification System	Mariano Marcos State University
144	Development of a Portable Water Desalination and Salt Production Set-up	Mariano Marcos State University
145	Design and Development of a Gasification System from Agricultural Wastes	Mariano Marcos State University
146	IMMOBILIZATION OF ZINC AND LEAD CONTAMINANTS FROM STORMWATER RUNOFF USING ENHANCED PERVIOUS CONCRETE (EPCS) POROUS MEDIA	Malayan Colleges Laguna
147	Automatic Counter of Adult Mosquitoes for Entomologic Surveillance	De La Salle University
148	Development and testing of e-padyak (electric padyak or tri-bike)	Romblon State University
149	Project 1: A Pilot study on GEOSPATIAL System to Map Surface Flooding in Zamboanga City Proper, Based on Real Time Rainfall Data	Ateneo de Zamboanga University
150	Proposed PUP College of Computer and Information Sciences Artificial Intelligence Laboratory	Polytechnic University of the Philippines
151	Embedding of Functional Materials Onto Water Hyacinth (Eichhornia crassipes) Fibres for Antimicrobial and Electromagnetic Shielding Applications	Institute of Mathematical Sciences and Physics, College of Arts and Sciences, UP Los Banos

	Title	Agency
152	Pilot testing of Hybrid Alternative Energy Source for Samar State University	Samar State University (SSU)
153	TREATABILITY STUDY ON HEAVY METAL CONTAMINATED WASTEWATER USING COMBINED PHYSICO-CHEMICAL AND ELECTROCOAGULATION METHOD	Malayan Colleges Laguna
154	Development and Establishment of Prototype, Application-specific, Genome Information Systems	UP-Philippine Genome Center
155	Monitoring of Plant Leaves Yield in a Hydrobox for Production of Sporadic Growth of Plant Species in the Philippine Agricultural Settings	Mapua Institute of Technology (MIT)
156	Face and Body Image Detection and Classification using High Definition CCIV Camera Integrated on a Traffic Light for Pedestrians	Mapua Institute of Technology (MIT)
157	Blast Fishing Alarm and Management System	Samar State University (SSU)
158	Evaluation and Utilization of Several Wood Species as Hull for Small Fishing Pasenger Boats	Mariano Marcos State University
159	Evaluation of hatchery-produced juveniles to enhance natural stocks of topshell Trochus niloticus in Honda Bay, Palawan	Western Philippines University (WPU)
160	Project 1: Screening of Selected Philippine Fermented Food containing Angiotensin I Converting Enzyme (ACE) Inhibitory Peptides (Antihypertensive Property) (2017)	Food and Nutrition Research Institute
161	Electrochemiluminescence Biosensor for Tuberculosis Detection (EBTB)	Mapua Institute of Technology
162	Performance Evaluation of a Multi-stage Gasifier using Local Biomass Feedstock in Palawan under the Sustainable Energy Priority Thrust	SURE Incorporated
163	Potable Water Equipment During Emergencies (PWEDE)	University of the Philippines Baguio
164	Engineering the Jeepney Using an OEM Vehicle Platform	National Center for Transportation Studies, UP-Diliman
165	Development of an Intelligent Solar Dryer for Seaweed Production	De La Salle University (DLSU)
166	LocalSim Phase 2	: National Center for Transportation Studies, University of the Philippines - (UP-NCTS)
167	Digital Soils Project: Spectroscopy Aided Digital Soil Mapping for Agricultural Land Use Capability and Suitability	Institute for Environmental Conservation and Research, Ateneo de Naga University
168	An loT-Based Hydroponics System for Smart Farming	Malayan Colleges Laguna
169	Development of Food Safety Generic Models for the Manufacture of Selected Food Products	Food Science Cluster College of Agriculture University of the Philippines Los Banos
170	Development of wine and juice from Lipote (Syzygium curranii) and Sapinit (Rubus rosifolius Linn.)	Food Science Cluster, UPLB
171	Multi-agent Systems for Simulating Policy Scenarios on Blue Carbon Ecosystems (BlueMASSPoliS)	University of the Philippines
172	WebGIS for Mapping, Supporting Decision-making, and Promoting Ecological Services of Blue Carbon Ecosystems (BlueWebMapS)	UP TCAGP
173	Extraction and Stabilization of Natural Colorants from Lipote (Syzygium curranii) and Sapinit (Rubus rosifolius Linn.)	Food Science Cluster, CA, UPLB
174	Mangrove Remote Sensing Using LiDAR, RADAR, Multispectal, and Hyperspectral Data (MaRS)	UP TCAGP
175	LiDAR, Hyperspectral, and Sonar Remote Sensing of Seagrass Meadows (SeaRS)	UP TCAGP
176	Geosimulation of mangroves and seagrass vegetation dynamics (GeoSiMAS)	UP TCAGP
177	Project 5. Modelling, Analysis and Simulation of Blue Carbon Cycle and Budgets (BlueCyMAS)	Marine Science Institute, University of the Philippines

	Title	Agency
178	Hydrodynamic Modelling for the Assessment of Protective Services of Mangroves and Seagrass (HMAPS-MS)	University of the Philippines - Diliman
179	Suitability Models for Guiding Mangrove RePlanting Efforts (SuitMaPs)	UP TCAGP
180	Capacity building on Geomatics for Mangrove Seagrass Conservation (CapGeoMS)	UP TCAGP
181	Project 1.1: ANALYSIS OF RAINFALL AVAILABILITY USING DOPPLER AND GROUND MEASUREMENT	Caraga State University (CSU)
182	Project 1.2: RAINFALL-RUN-OFF ANALYSIS AND IMPACT ASSESSMENT	Caraga State University (CSU)
183	Project 1.3: DESIGN AND CONSTRUCTION OF PROTOTYPE WATER IMPOUNDING STRUCTURE	Caraga State University (CSU)
184	REAL-TIME DAM RESERVOIR MONITORING AND CONTROL SYSTEM	Caraga State University (CSU)
185	IMPLEMENTATION OF PICO-HYDROELECTRIC POWER PLANT ON IRRIGATION SYSTEM	Caraga State University (CSU)
186	Biomass Gasifier Design and Development for Continuous Re - Fueling and Zero Ozone Gas Emission	Caraga State University (CSU)
187	MINE TAILINGS AS ALTERNATIVE MATERIAL FOR ROAD PAVEMENT	Caraga State University (CSU)
188	Implementation of Bike Sharing System in City Government of Butuan	Caraga State University
189	DESIGN AND DEVELOPMENT OF A WEB-BASED COLLABORATION AND INTERACTIVE LEARNING FACILITY	Caraga State University (CSU)
190	Philippine Textile Research Institute TELA (Textile Empowering Lives Anew) International Conference with International Symposium and Exhibition for Natural Dyes (ISEND) and the World Eco-Fibers and Textiles (WEFT) Forum	Philippine Textile Research Institute (PTRI)
191	Multirole Unmanned Sea Surface Vehicle Development	Ateneo de Manila University - Ateneo Innovation Center - SkyEye
192	Projct 2: A Pilot Study on the Development of an Early Warning System for Floods in the Tumaga River Zamboanga	Ateneo de Zamboanga University
193	Application of Digital Imaging Colorimetry (DIC) in Sensor Development for Pollutant Detection	Philippine Science High School-Central Luzon Campus
194	Climate Resilient Fish Condominium System	Northern Iloilo Polytechnic State College-Main Campus
195	The survival of Escherichia coli O157:H7, Salmonella spp., Listeria monocytogenes and Staphylococcus aureus during the manufacture and storage of whole muscle and comminuted meat products in the Philippines	Food Science Cluster, College of Agriculture, University of the Philippines Los Banos, Laguna
196	Detection and analysis of regulated food dyes (FD&C Red No. 32, Orange No. 2, Yellow No. 5) and oxoanionic food additives (Bromates and Iodates) using nanocomposites of metal/metal oxides (MNP/MoxNP) and polymeric materials	Institute of Chemistry, UP Diliman
197	Porject 3: Water Security in Zamboanga City: Analyzing the Current and Projecting the Futureb Situations of the City's Water Balance	Ateneo de Zamboanga University
198	Project FEW NEXUS: Food.Energy-Water Nexus Geospatial Perspectives and Analyses	Philippine Geographical Society
199	Development of Spatial Models for Comprehensive Land Use Planning (SpatiaICLUP)	UP Training Center for Applied Geodesy and Photogrammetry
200	Spatio-Temporal Analysis, Mapping, Modelling, and Prediction of Dengue Occurrences and Outbreaks (STAMP-Dengue)	UP Training Center for Applied Geodesy and Photogrammetry

	Title	Agency
201	Green Technology Knowledge-Based Awareness Level: A Baseline Approach to Establish a Green Technology Center in the Community	NIPSC LEMERY CAMPUS
202	Smarter Parking System for Smart Cities	Philippine Science High School - Central Luzon Campus
203	Comprehensive Assessment and Conservation of Blue Carbon Ecosystem and Their Services in the Coral Triangle (BlueCARES)	University of the Philippines, Diliman Quezon City
204	Nanocomposites of carbon nanoparticles and polymeric materials for the detection of mycotoxins (Zearalenone and Ochratoxin A) and toxic heavy metals (Pb and Cd)	Institute of Chemistry
205	Development of Porous Materials for Water Absorption in the Construction Industries	Mariano Marcos State University
206	Pressure Prepared Ready-to-Eat Meals for Disasters (PREPARED)	University of the Philippines Baguio
207	Optimization of oneSTore (An E-commerce Web Platform for Micro, Small and Medium Enterprises)	DOST Regional Office No. 2
208	ReALiTy for Water Security	Caraga State University
209	ReALiTy for Water Energy	Caraga State University
210	Philippine Normal University Brain-based Research and Education Neuroscience Program (PNU BRAENS PROGRAM)	Philippine Normal University
211	Digital Archiving and Stylometry (DAS)	Physics Department, De La Salle University or National Institute of Physics , UP Dlliman
212	Anachronism as Aid in Authentication (AAA)	Physics Department, De La Salle University or National Institute of Physics , UP Dlliman
213	Oleoresin Tapping of Benguet Pine (Pinus Kesiya Royle Ex Gordon) Trees Using Different Technologies in Benguet Province	WWRRC — ERDB, Loakan, Baguio City
214	Production of Interactive Technology Exhibits for DOST Outcome 3: Industry Competitiveness in Celebration of NSTW 2016 and Bicutan Science Community Celebration	PCIEERD
215	Developing Sustainable Care Techniques for Philippine - Made Fabrics	UP College of Home Economics
216	Field and Market Testing of a Cost-effective Camera Rig System Biomass	Department of Computer Science, COE, UP Diliman
217	Design and Development of Processing Machineries for Honey Products and Intermediate Products	Don Mariano Marcos Memorial State University — National Apiculture Research, Training and Development Institute (DMMMSU-NARTDI)
218	Metal Content of Agricultural Products and its Environment in Volcanic Impacted Area: Test Site 1: Lubao, Pampanga - Project 2	ITDI
219	OneLab Capability Assurance System for Metal Content Assessment in Agricultural Produce, Water and Environmental Samples - Project 1	ITDI
220	Household and Community Based Filters for Metals in Water - Project 3	ITDI
221	Microbial Source Tracking in Selected Tributaries of Laguna de Bay	Natural Sciences Research Institute
222	Jumpstarting the M.S. Chemical Engineering Program at the University of Santo Tomas	University of Santo Tomas
223	Electrical Instrumentation and Controls Evaluation/Testing of Electric Vehicles (phase E-Trikes)	TUP Manila
224	Development of an Electronic Point of Sales (ePOS) System for Processing Senior Citizen Retail Transactions	Technological Institute of the Philippines - Quezon City
225	Universal Communication Module for Remote Real-time Monitoring of Power Consumption	Trinity University of Asia - Quezon City
226	Recovery of Rare Earth Elements, Scandium and Other Valuable Elements from Phosphogypsum: Phase I	Philippine Nuclear Research Institute - DOST
227	Development of Extreme Weather Monitoring and Alert System	Advanced Science and Technology Institute (ASTI)

	Title	Agency
228	Improving the Safety of the Local Dog Food Industry through the use of Gamma Radiation Technology	PNRI (Philippine Nuclear Research Institute)
229	Real-time Online environmental Radiation Monitoring System in the Philippines	Philippine Nuclear Research Institute
230	Upgrading of the Nuclear Training Center Laboratory Facility	Philippine Nuclear Research Institute
231	Development of the Research Reactor Core Configuration Design for Subcritical	Philippine Nuclear Research Institute
232	Establishment of the AIM-Dado Banatao Incubator	Asian Institute of Management
233	Development of a Neutron Activation Analysis (NAA) Technique Using Radioisotope Neutron Sources	Philippine Nuclear Research Institute
234	Project 2. Decontamination of Mycotoxins in Peanut Seeds using Intense Pulsed Light System	Cagayan State University
235	Pilot Testing and Technology Validation of NanoZeolite Processes	Industrial Technology Development Institute (ITDI) - DOST
236	Regional Technology Transfer Day	DOST - Technology Application and Promotion Institute (TAPI)
237	Water Resource Accounting of West side of Bicol River Basin Using LIDAR Data	Ateneo de Naga University
238	Water Budget Study of Mt. Isarog Natural Park Using GIS and Remote Sensing	Ateneo de Naga University
239	Documentation using Lidar technology for Biodiversity and disappearance of forest plant species in Mt. Isarog Natural Park (MINP)	Ateneo de Naga University
240	Nanomaterial Pilot Scale Testing and Production	De La Salle University - STC
241	ICT-Based Decision Support System for Climate Change Adaptation and Disaster Risk Management in Support to Smarter City Program.	Isabela State University (ISU)
242	Ensuring Quality Performance of Rubber Products filled with local fillers for Motorcycle Tire Application	Department of Mining, Metallurgical and Materials Engineering
243	Introduction of Cleaner Production Technology in the Upgrading of the Production of Breads and Pastries of Magic Melt Foods, Inc. in Lapu-Lapu City, Cebu	MAGICMELT FOODS, INC.
244	RCUK: Water - Energy - Nutrient Nexus in the Cities of the Future	University of Surrey
245	Optimization of Freeze-Dried Durian through the Food Processing Innovation Center of Davao	Food Processing Innovation Center of Davao
246	Development of Passive Cooling Technologies in the Philippines for Combating Climate Change, Reducing Building Energy Demand and Indoor Air Pollution	University of the Philippines - Diliman
247	Conservation and Utilization of Selected Economic Indigenous Plants into Functional Food Products	Central Mindanao University (CMU)
248	Radiation-synthesized hydrogels for remediation of soil with heavy metal contamination	Philippine Nuclear Research Institute
249	Modification of Road Train Energy Storage System For Acceleration and Power Sharing Improvement Using Lithium Ion Batteries	MIRDC
250	Assessing and Improving Soil Quality in San Jose del Monte, Bulacan to Minimize Land Degradation and Enhance Crop Productivity Using Fallout Radionuclides and Isotope Techniques	Philippine Nuclear Research Institute
251	Development and Pilot Testing of Wireless-Off-Grid Power Control & Distribution System using Artificial Neural Network & Android Based Platform Devices	Samar State University
252	Market validation using quicklook tool of five and design conceptualization of five funded pcieerd sensors for agricultural and fishery ecosystems and harvests safety (safeharvests) projects in UPLB	UPLB Center for Technology Transfer and Entrepreneurship
253	Market Validation and Licensing of PCIEERD Funded Nanotechnology Projects in UPLB	University of the Philippines Los Bagels (UPLB)
254	Isolation and characterization of antibiotic producing microorganisms from Tropical Abalone (Haliotis asinina) as potential bioresource - STIRDC Project	Western Philippines University (WPU)
255	Verification of Fabrication Materials and Finite Element Analysis for Crash Worthiness of UP-NCTS Jeepney Prototype	Metals Industry Research and Development Center

	Title	Agency
256	Development and Improvement of Food Products from Breadfruit (Aetocarpus altilis fosb.) - STIRDC Project	Marinduque State College (MSC)
257	Development of Solar-Powered Irrigation System in Tanza Boac, Marinduque - STIRDC Project	Marinduque State College (MSC)
258	Benchmarking Potentials of Solar Energy for Irrigation Development in Cagayan Valley	Isabela State University
259	Establishment of Renewable Energy Laboratory and Demonstration Park	Isabela State University
260	Increasing Visibility of DOST Regional Offices by Realigning and Implementing Its Strategic Communication Plan	Science and Technology Information Institute (STII)
261	Characterization and Separation of Heavy Minerals in the Alluvial and Beach Sands in San Vicente, Northwestern Palawan: Phase I	Philippine Nuclear Research Institute - DOST
262	Characterization and rehabilitation of black sand mining area in Javier, Leyte through an integrated soil management practices	Visayas State University
263	Development of Nanomaterialbased Point of Care Tests for the Detection of Pathogenic Bacteria	Center for Research and Development, Angeles University Foundation
264	17th Science Council of Asia (SCA) Scientific Conference on: "Science, Technology and Innovation for Inclusive Development	DOST-National Research Council of the Philippines
265	R&D Program Towards Food Security: Enhancing Agricultural Productivity in Lahar-taden Areas in Central Luzon	Central Luzon State University
266	Climate Change Adaptation and Disaster Resilience Cluster PH-US Joint Cooperation	PCIEERD
267	Development of a Shelf-Stable Fermented Heirloom Rice "Binubudan"	Benguet State University
268	Development of Local or Indigenous Flavor Alternatives for Ice Cream	Benguet State University
269	Design, Fabrication and Performance Evaluation of Black Sand Collectors	Isabela State University
270	Wearable Learning Technologies for Math on SmartPhones	Ateneo De Naga University
271	Communicating Science for Public Understanding	College of Mass Communication UP Diliman
272	Department of Science and Technology Partnership with the University of the Philippines Cebu Fabrication Laboratory (UP Cebu FabLab)	University of the Philippines Cebu
273	Molecular characterization of bacterial community from Manleluag alkaline spring through next-generation sequencing of 165 rDNA	Institute of Biological Sciences College of Arts and Sciences, UPLB
274	Effects of External Pressures on Public Schools: Investigating resiliency and adaptation mechanisms	College of Mass Communication UP Diliman
275	Data and Science Journalism for Public Policy Reporting	College of Mass Communication UP Diliman
276	Project 3: Preparation and Properties of Transition Metal- and Nitrogen-Doped Titania photocatalysts by Hydrothermal Methods	Institute of Chemistry, College of Science UP Diliman
277	Project 2. Isolation and screening of alkaliphilic bacteria from Manleluag alkaline spring producing an industrially important enzyme	Institute of Biological Sciences, College of Arts and Sciences, UPLB
278	Project 1: Preparation of Imprinted poly(phenylenediamine)/poly(thiophene)-Ti02Nanoparticle Functionalized Electrodes for the photoelectrochemical sensing of organophosphorus pesticides	Institute of Chemistry, College of Science UP Diliman
279	Project 2: Synthesis of TiO2-Conducting polymer Nanospheres for the photocatalytic and photoelectrocatalytic degradation of organic pollutants	Institute of Chemistry, College of Science UP Diliman
280	Efficacy of copper-based hollow kapok fiber nanocomposite for environmental purification	Department of Mining, Metallurgical and Materials Engineering College of Engineering UP Diliman
281	Conduction in Disordered Materials in the Low-Frequency Region	Institute of Mathematical Sciences and Physics UP Los Banos
282	Creating Cost-Effective Sensors for IR Applications	National Institute of Physics, College of Science, UP Diliman
283	Wavefront Engineering Research: Suppression of Spurious diffraction orders	Elec. & Electronics Engineering Institute UP Diliman

	Title	Agency
284	Carbon Sink and Carbon Sequestration Research Project: Conservation/ Bio-Energy & Food Safety & Security Bio-Energy Resource and Production Network	Department of Environmental & Natural Resources (DENR) Region 10
285	Development of a Water Wheel for irrigation and electricity generation in NVSU	NUEVA VIZCAYA STATE UNIVERSITY (NVSU
286	Development of Material Science and Polymer Chemistry Laboratory	Caraga State University/ Ampayon Butuan City
287	Strategic Communication Approaches to Boost the Philippine Textile Research Institute Promotions	Phil. Textile Research Institute (PTRI)
288	PRODUCTION AND DEVELOPMENT OF MICROBIAL-BASED BIOCONTROL AGENTS AGAINST ASIAN SUBTERRANEAN TERMITE (Coptotermes gestroi)	Manila Central University, Research and Development Center
289	One-pot preparation of inorganic/bioplastic hybrids as green packaging and disposable materials	De La Salle University
290	Study of the monsoons and their multiscale interactions on the present and future climate in the Philippines	Ateneo de Manila University and Manila Observatory Ateneo De Manila
291	Investigation and numerical modelling of Philippine tsunamis based on historical, geomorphological and geological evidence of past earthquakes	National Institute of Geological Sciences,
292	Input-Output Analysis for Localized Disaster Risk Assessment: Theoretical Explorations and Empirical	De La Salle University
293	Sharing of Best Practices on Establishment and Operation of Food Innovation (FIC) for the Development of ASEAN Member States	Industrial Technology Development Institute
294	Development of novel materials as emitters and/or detectors for (sub)-terahertz time-domain spectroscopy carrier dynamic studies	National Institute of Physics
295	Development of Direct Current (DC) Magnetron Plasma System for Ti-Al-C Thin Film Synthesis	Department of Physics, School of Science and Engineering, Ateneo de Manila University
296	Development of Radio Frequency (RF) Plasma System for Ti-Al-N Thin Film Synthesis	DMMME, UP Diliman
297	Philippine Tidal In-stream Demonstration and Energy Systems (PhilTIDES)	Department of Mechanical Engineering, University of the Philippines
298	SwellRIDER: Design, Fabrication & Deployment of a 20kW Wave Energy Harvesting Device	Department of Mechanical Engineering
299	Gitara ni Juan 2: Development of Prototype Design and Standardization of the Luthiery Process for Quality Classical Guitars, Bandurrias, Metal Stringed Guitars, and Ukelele Using Select Philippine Woods	UP College of Music
300	DOST FIC-based Technology Business Incubator (TBI)	DOST MIMAROPA & DOST ITDI
301	Pujada Ecosystem Based Approach for Conservation and Environmental Integrity (PEACE)	DAVAO ORIENTAL STATE COLLEGE OF SCIENCE AND TECHNOLOGY (DOSCST)
302	Development of HFDR Ship Tracking Algorithm Software for Maritime Surveillance, Search and Rescue	Mapua Institute of Technologyfintramures
303	Automated Real-Time Monitoring System (ARMS) for Angat Watershed System - Phase I	anua Institute of Technolagy/intramuros. Manila
304	Community Empowerment Thru Science And Technology Upscaling For Progress (Cest Up)	Department of Science & Technology Region 8
305	Application of Iodine-129 in water resource assessment and management in Typhoon Yolanda (Haiyan) affected areas in Tacloban City, Philippines	Philippine Nuclear Research Institute
306	Utilization of Wastewater for Biomass Cultivation and its Conversion	De La Salle University
307	Development of a 21-seater Electric Jeepney (E-Jeepney)	Electric Vehicle Association of the Philippines (EVAP)
308	Enhancement of Prototype and Market Readiness of R-TAP (an advanced pressure management system for water utilities)	Hiraya Technology Solutions, Inc.
309	Establishment of GREENLAB in UA&P and Implementation of Carbon & Water Neutrality (CaWaN) Programs (Program Project Phase 1)	UA&P School of Sciences and Engineering (UA&P-SSE)
310	Pilot Scale Production of Nickel Pig Iron	Mines and Geosciences Bureau -Central Office (MGB-00)
311	Recovery of Nickel from Low Grade Philippine Laterite Ores Using Other Acid and Alkaline Leaching Systems	Mines and Geosciences Bureau -Central Office (MGB-CO)

	Title	Agency
312	Design and fabrication of an airframe for a medium-range, short take-off and landing UAV	Department of Aeronautical Engineering and Aircraft Maintenance Technology College of Engineering, FEAT! University
313	Development of a Flight Controller for a Modular UAV System	Mechanical Engineering Department De La Salle University
314	Cooperative UAV-UGV Missions and Applications with Custom Communications and Imaging Capabilities	Ateneo de Manila University
315	Technology Validation of FPRDI-Developed Charcoal Briquetting Technology	FPRDI Forestry Campus, College, Laguna
316	Deep Fish 360: Development of a Mesophotic Reef Fish Imaging System	Department of Computer Science, UP Diliman
317	Operation of Food Technology and Processing Innovation Center — Davao del Node as a Technology Hub and Common Service Facility for Senior High School Students and the Region	Department of Education Division of Davao del Norte/ Mankilam, Tagum City
318	Prototype Development and Field Testing of Mosquito-Repellent Textile	DOST-PTRI
319	Development of Low-Cost Microencapsulated Products from Duhat and Bignay for Delivery of Functional Food Components	Institute of Food Science and Technology, University of the Philippines Los Banos
320	Mapping of active offshore faults for resilient coasts	Marine Science Institute
321	DEPLOYMENT OF NANOCELLULOSIC ACTIVATED CARBON FROM VEGETABLE WASTES TO REDUCE VEHICLE GREENHOUSE GAS EMISSIONS IN BAGUIO CITY	Saint Louis University
322	Development of Papaya Leaves Puree as Alternative Management for Increasing Platelet Count	Carlos Hilado Memorial State College
323	Regional Disaster Science and Management S&T Capacity Development (Phase III)	Mariano Marcos State University
324	MULTI-OPERATIONAL SYSTEM TO ENGULFED SOCIETY (MOSES)	UP Mindanao
325	POTENTIAL FOR ENERGY DEVELOPMENT AND RESEARCH OPPORTUNITY (PEDRO)	University of the Philippines Mindanao T
326	The National Stream Health Project: Development and Application of the Philippine Biotic Index (PBI) of Stream Quality	Institute of Biology, University of the Philippines Diliman
327	Development of Best Practices for Roasting and Prolonging Shelf Life of Roasted Arabica Coffee	Benguet State University
328	Small Scale Microcontroller-Based Palay Dryer	Saint Louis University
329	Microcontroller-based Triple-Nozzle Oxalic Acid Vaporizer for Reducing Varroa Mites of Honeybees	Saint Louis University
330	ENHANCING OF COMMUNITY RESILIENCE TO HAZARDS (EnOCRH)	University of the Philippines Mindanao
331	Small Scale Semi-automated Microcontroller-Based Soil Enhancer System	Saint Louis University
332	Potentials of Heirloom Rice Bran for Applications in Rice Wine Brewing	Mountain Province State Polytechnic College
333	Cyanide remediation of mine tailings of small scale miners in Compessor, First Gate, Itogon, Benguet	FISCAR Inc.
334	Characterization of Mill Tailings of Small-Scale Mines in Benguet as possible binder in a building's insulation material	Dept of Mining Engineering, Dept of Civil Engineering and Dept of Electronics Engineering, School of Engineering and Architecture, Saint Louis University
335	AIRSHED MODELING FOR SUSTAINABLE AIR QUALITY MANAGEMENT PROGRAM IN METRO BAGUIO	UNIVERSITY OF THE CORDILLERAS
336	A Multi-Lingual SMS-Based Image Reporting and Disaster Alert System for DRRMC	University of the Cordilleras
337	Rainflow Power Generator for Households	Saint Louis University
338	Digital Rinconada: Reengineering Government through ICT in Support to the Smarter City Program	Camarines Sur Polytechnic Colleges
339	On-site identification of hyperaccumulators and metal recovery using the hydrothermal mineralization technique	ESD, Ateneo de Manila University
340	GIS-aided Flood and Drought Vulnerability Assessment of Agricultural and Coastal Resources of Selected Municipalities in Davao Region	UP Mindanao

	Title	Agency
341	Philippine Transportation Network: Big Data Analytics and Applications	De La Salle University
342	Development of a Ready to Eat Emergency Food Pineapple Nutribar	Institute of Food Science and Technology
343	Expansion of Chemical Testing Capacity for Ferrous Metals in Support to the Philippine Iron and Steel Industry	Metals Industry Research and Development Center Gen. Santos Avenue, Bicutan , Taguig City
344	MAOKCA" Powdered Nutrient Supplement Drink	LSPU-SCC Research and Development COLLEGE OF INDUSTRIAL TECHNOLOGY GENDER AND DEVELOPMENT-SCC BARANGAY CALIOS, STA CRUZ LAGUNA DOST Region IV-A
345	MULTI-PURPOSE DRYER	College of Industrial Technology Automotive Technology Department
346	Biological methane production using forest residues and other lignocellulosic wastes	: Forest Products and Paper Science Department, College of Forestry and Natural Resources, University of the Philippines Los Banos,
347	Geospatial mapping of low-lying coastal areas in Cebu Island (Central Philippines) using previously-acquired LiDAR dataset	University of San Carlos—Talamban Campus
348	Population Control of Aedes aegypti Mosquito Using Sterile Insect Technique Method - Based Management Program in Caraga Region	Surigao del Sur State University
349	Science On the Move: A Philippine Science Centrum Traveling Exhibit	Philippine Foundation for Science and Technology (PFST)
350	HARMONIZATION OF FOOD SAFETY TRAINING MODULES FOR FOOD MANUFACTURING	OST IV-A, LOS BANOS, LAGUNA
351	DEVELOPING AN EARLY WARNING SYSTEM FOR CORAL BLEACHING: IDENTIFICATION OF STRESS-RESPONSE GENES IN SEA ANEMONES BY GEOSPATIAL GENETIC MAPPING OF PUERTO PRINCESA BAY	College of Fisheries and Aquatic Sciences Western Philippines University
352	Nanostructured Polyaniline Film as Food Freshness Sensor Using Digital Image-based Colorimetry	Western Mindanao State University
353	Discovery of novel bacteria with industrial potential using i-chip technology	National Inst of Molecular Biology and Biotechnology
354	Creation of a Completely Annotated Data Bank in Chemical Engineering for Natural Language Processing	Department of Chemical Engineering,University of the Philippines Diliman
355	Development of mobile apps and e-commerce platform for cyanide-free aquarium fish	University of the Philippines Visayas
356	Random walk based neutral theory models of Philippine ecosystems	National Institute of Physics, College of Science, University of the Philippines Diliman
357	Antibiotic Development from symbionts of Abalone (Hatiotis asinina) - Project 1	Western Philippines University
358	Probiotic Development from symbionts of Abalone (Hatiotis asinina) - Project 2	Western Philippines University
359	Biotransformation of Organic Household and Plastic Wastes with Ganoderma sp. - Project 1	ANDRES BONIFACIO COLLEGE
360	The Effect of Nutrient Sources on the Rhizospheric Microorganism and Yield of Pigmented Aerobic Rice - Project 2	ANDRES BONIFACIO COLLEGE
361	Hybrid Generator Details, Advantages and Applications	Perfect Energy Concept
362	Urban Earthquake Risk Estimation of Samar using Rapid Earthquake Damage Assessment System (REDAS)	Northwest Samar State University, Calbayog City
363	Development of Pervious Geopolymer Concrete from Wet-disposed Fly ash for Road and Pavement Applications	Northwest Samar State University, Calbayog City
364	"Electric Load Disaggregation and Benchmarldng of Micro, Small, and Medium Commercial Sector Enterprise in the Philippines (apart from Manufacturing) based on Real-time Electricity Consumption and Behavioral Response Analysis to an Intelligent Energy Management System	WattSmart Philippines Corporation
365	Agricultural Damage Assessment and Adaptation Strategies of Farmers, Fisherfolk, and the Local Government Units in Typhoons Lawin and Karen Stricken Areas: Policy Implications	Center for Strategic Planning and Development Studies (CSPPS), College of Public Affairs and Development (CPAf)

	Title	Agency
366	Establishment of Tissue- culture Mushroom Laboratory and Production and Product Development of Straw Mushroom (Volvariella volcacea)	Apayao State College
367	Development of Low-cost Household Type Movable Biogas Digester	Apayao State College
368	Product Development and Commercialization of Pastry and Native Delicacy Products	Apayao State College
369	Genetic improvement of selected Philippine Amorphophallus species as bioethanol crops using Nuclear Technology and Biotechnology	Philippine Nuclear Research Institute (PNRI)
370	PNRI GRADUATE STUDENT RESEARCH GRANT PROGRAM	Philippine Nuclear Research Institute
371	Identification and characterization of emerging arthropods and diseases in important staple crops in the Philippines	ational Institute of Molecular Biology and Biotechnology (BIOTECH) University of the Philippines Los Banos
372	Utilization of Industrial By-product Currimao Steel Slag as Green Concrete - ICIEERD	Mariano Marcos State University (MMSU)
373	Development of Sewing Machine for Softbroom and other Materials/Commodities	DMMMSU- MID LA UNION CAMPUS CATBANGEN, SAN FERNANDO CITY, LA UNION
374	Advanced Ceramics Development from Ilocos Norte Clay Mineral Deposit for Various Industrial Applications	Mariano Marcos State University (MMSU)
375	Design and Development of a Portable Water Desalinator	Mariano Marcos State University (MMSU)
376	Design of a Mechanical Oyster Shucker for Removing the Oyster Meat from the Shell - (ICIEERD)	Virgen Milagrosa University Foundation, San Carlos City, Pangasinan
377	Specific Earthguake Ground-Motion to help enhance the seismic resiliency of residential and medium-to-high rise buildings in Metro Cebu and Metro Davao	Philippine Institute of Volcanology and Seismology
378	FEATURE: Feature-based Earthquake Analysis Toolset for Urban Response Estimation - Enhancing PHIVOLCS damage estimation capability using building-specific analysis aided by high resolution GiS data	Philippine Institute of Volcanology and Seism910gy (PHIVOLCS)
379	Pilot-Scale Production of Oyster (Crassostrea irredalei) Powder	IFPT-CFOS, UPV
380	PCIEERD NSRI Research Grant	Natural Sciences Research Institute
381	Rapid monitoring of lactic acid bacterial contaminants using nanotechnology and molecular approaches	BIOTECH, U.P. Los Banos
382	Hurdle technology in decreasing bacterial contamination in ethanol fermentation (using acidtolerant yeasts, yeast recycling with acid washing and bacteriocins of lactic acid bacteria)	BIOTECH, U.P. Los Banos
383	Development of PCR-RFLP method for the identification of fungal pathogens in Philippine Coffee and Cocoa	Polytechnic University of the Philippines
384	Mulfigene phylogeny and taxonomy of invasive and emerging fungal pathogens of Philippine Coffee and Cocoa	Polytechnic University of the Philippines
385	Binary Gels—Rheology of Two-component Biopolymer Hydrogels Investigated Using Optical Tweezers and Non-Linear Rheometry	Medical Biophysics Group, USC
386	Biodiesel and Hydrogen Fuel Production in Dual Stage Culture of Oleaginous Yeast and Hydrogenogenic Microalgae	Philippine National Collection of Microorganisms (PNCM)
387	Industrial Ecology-based Mathematical Modeling of Food Consumption and Waste Management Practices in Metro Manila	University of Asia & the Pacific
388	Vehicle Recycling in the Philippines:Present Conditions and Future Perspectives	University of Asia and the Pacific
389	DEVELOPMENT OF AN INNOVATIVE MULTIPLE MEAT SLICER	DMMMSU- MID LA UNION CAMPUS
390	Enhancement of the Indexing Laboratory Component of the Banana Tissue Culture Laboratory of QSU	Quirino State University
391	IT Skills Development Training	University of Asia & the Pacific-School of Sciences & Engineering, Department of Information Science & Technology (UA&P-SSE, DIST)
392	Response Surface Methodology for the Optimization of Preparation of PolyLactic Acid and composites from Agricultural Residues - Project 2	MSU-IIT

	Title	Agency
393	Assessment of Sugar Quality and Food Safety Practices of Muscovado	School of Technology, University of the Philippines Visayas
394	Technology Innovations of Muscovado Processing in a Pilot Scale	School of Technology, University of the Philippines Visayas
395	Response Surface Methodology for the Optimization of the bio-synthesis of Lactic Acid from Agricultural Residues - Project 1	MSU-IIT
396	Biodegradability and gut simulation degradability optimization studies of PLA composites and blends for future nutraceutical and medical applications - Project 3	MSU-IIT
397	Enhancing OneLab for Global Competitiveness	DOST Regional Office No. 9
398	Performance Testing and Evaluation of Prototype Train Set	Metals Industry Research and Development Center
399	Forest Cover and Land Use Changes Using Unmanned Aerial Vehicle and Multi-Temporal Satellite Imageries in Luzon, Philippines	Institute for Climate Change and Environmental Management — Central Luzon State University
400	ELECTRICITY GENERATION AND DESALINATION USING CAPACITIVE DEIONIZATION	BATANGAS STATE UNIVERSITY
401	DEVELOPMENT OF PORTABLE PURIFICATION INFUSED SEAWATER POWER CELL	BATANGAS STATE UNIVERSITY
402	Project 2: Sensor-based Monitoring and Analytics for Smart Hydroponics (SMASH)	UP-Electrical and Electronics Engineering Institute
403	Vehicle Telemetry Platform for Congestion Pricing System in Metro Manila	STRIDE Consulting, Inc.
404	Open Source Soil Sensing (OSSS) for Precision Farming	STRIDE Consulting, Inc.
405	Biotechnological Application of Sugarcane Juice Processing Wastes for Production of IndustriallyImportant High-value Products	National Institute of Molecular Biology and Biotechnology (BIOTECH)
406	Sustainability of ADMATEL for the Semiconductor and Electronics and Other Related Industries — Phase 6 (OPERATION OF ADMATEL)	ITDI
407	Philippine Institute for Integrated Circuits R&D Center Enhancing Academe Microelectronics Programs and R&D in the country	UP EEEI Microelectronics Laboratory
408	Project 1: Controlled Environment —Standalone Urban Farm	UP-Electrical and Electronics Engineering Institute
409	Project 3: Establishment of Soiless Culture Technology for Urban Food Production	CLSU
410	Project 4: Ex-Situ Conservation through Micropropagation of Native Plant Species for Forest Restoration	UP- Institute of Biology
411	Sustainable River Protection, Remediation and Rehabilitation using Ridney Trap System	MALAYAN COLLEGES LAGUNA
412	Development of Desion Prototypes for Government Agencies' Uniforms to Promote Mainstreaming of Natural Fibers and Local Weaves	DOST - Philippine Textile Research Institute
413	Multi-Mode Sensor Node Communication for Highly Scalable and Resilient Sensor Networks	EEE Institute, UP Diliman
414	FABRICATION OF ONE (1) UNIT OF MECHANICAL ENGENITIC POWER GENERATOR	a
415	Advance and Cost Effective Mining Wastewater Treatment System	Hydrophilia Technologies Inc.
416	Development and Utilization of Mechanical Water Hyacinth (Eichhornia crassipes) Stalk Presser, Dryer and slicer	College of Engineering, Laguna State Polytechnic University Main Campus, Sta. Cruz, Laguna
417	Techno-economic evaluation of the Animal Manure Briquetting	Laguna State Polytechnic University Sta. Cruz, Laguna
418	Product Diversification Utilizing Mulberry Fruits	Don Mariano Marcos Memorial State University- Sericulture Research & Development Institute
419	Portable Undergarments Dryer	DMMMSU- MID LA UNION CAMPUS
420	WASH Decanter: A Solution to Environmental Problem for Fish Canning Plant	Westem Mindanao State University
421	Development of green products and technologies from native metallophytes for livelihood and environment	FBS-CFNR,UPlB

	Title	Agency
422	Establishment of BatStateU Center for Technopreneurship and Innovation (Technology Business Incubation) — Year 2	Batangas State University
423	AUTOMATED & INTILLEGENT BUS ROUTE and PASSENGER PROFILING with ABNORMAL BEHAVIOR DETECTION and NOTIFICATION (Al-BROPPABDEN)	Gokongwei College of Engineering De La Salle University
424	Direct Ethanol Fuel Cell Performance Evaluation of Non-Precious Metal Cathode Catalysts Supported on Conductive Polymer and Graphene Nanomaterials	Research Center for the Natural and Applied Sciences, University of Santo Tomas
425	Bacteriophage-mediated Management Approach of Soft Rot Disease of High Value Vegetable Crops In the Philippines	Crop Protection Cluster, CA, UP. Los Banos
426	Development of a Commercial Prototype Automated Guide-way Transit System in UP Diliman	MIRDC
427	Development of Remote Control Module for Two Wheel Hand Tractor Automated Conversion	University of Sto. Tomas
428	Artificial Recharged Aquifers to Improve the Quality and Quantity of Groundwater	Isabela State University
429	Creating standards in water resource monitoring (instrumentation and data systems) -- Setting the Foundations for climate change adaptation	Tekton GeoMetrix
430	Bio-treated Wastewater for Agricultural Re-Use to Support Green Economy	Isabela State University
431	Rapid and non-destructive prediction of total solids, dry rubber and coagulum content, alkalinity and KOH number of centrifuged natural rubber latices (CNRLs) using UV-Vis-NIR spectroscopy and multivariate regression	University of the Philippines
432	Development of NanoBioSensor for the Detection of Cyanobacteria in Laguna Lake (NBS)	Mapua Institute of Technology
433	ENHANCING THE CAPABILITY OF PHILIPPINE ACADEMY OF MICROBIOLOGY (PAM) TO FULFILL THE REQUIREMENTS FOR INTERNATIONAL ACCREDITATION AS A CERTIFYING BODY FOR FILIPINO MICROBIOLOGISTS	Philippine Academy of Microbiology (PAM)
434	Monitoring the Sustainability of River Systems, Aquaculture Areas, and Water Treatment Facilities Using Locally Developed Electronic and Chemical Sensor Technologies	School of Science and Engineering. Ateneo de Manila University
435	Development and Application of Isotope and Elemental Provenance- Based Methodologies for Authenticity Testing of Vinegar, Soy Sauce, and other Major Condiments in the Philippines.	Philippine Nuclear Research Institute Commonwealth Avenue Diliman, Quezon City
436	Detection of Adulteration in Philippine Honey using Carbon-13 Isotope Analysis	Philippine Nuclear Research Institute (PNRI)
437	Development and Application of Nuclear and Isotopic-based Techniques for the Authentication and Provenance Determination of Organic Food and Food Products in the Philippine Market	Philippine Nuclear Research Institute (PNRI)
438	Rare Earth and Strategic Elements	MSU-Iligan Institute of Technology
439	Development of a Passive Neutron Spectrometry System	Philippine Nuclear Research Institute (PNRI)
440	Expansion of DOST Regional Metrology Laboratory Services and Operations for Industry Competitiveness and for Better Quality of Life	DOST Region III
441	PROPOSED BIKE SHARING SYSTEM IN BOCAUE AND STA. MARIA BULACAN	a
442	COLD POWERED STERLING ENGINE	a
443	Development of Good Quality Laboratory for Research (Project 5)	College of Veterinary Medicine, UPLB
444	Utilization of Coconut (Cocos nucifera)Toddy and Pineapple (Ananas comosus) Juice in the Production of Cider-type Vinegar and their Use as Acidulants in Beverages	Institute of Food Science and Technology, Food Science Cluster, UPLB
445	Assessment of the R&D Capacity, Performance, and Development Requirements of the S&T System	National Academy of Science and Technology, Phils.
446	Wind Turbine Technology Development	Central Philippine University

	Title	Agency
447	Developing an Aerial Based Geoarchaeological Survey Approach (R&D and Beta Test) (Project #1)	Archaeological Studies Program of the University of the Philippines Diliman
448	Developing an Aerial Based Geoarchaeological Survey Approach (Implementation and Outreach) (Project #2)	Archaeological Studies Program of the University of the Philippines Diliman
449	UP CEBU CYBERSECURITY RESEARCH AND EXTENSION CENTER	UNIVERSITY OF THE PHILIPPINES CEBU - CSU
450	Integrated Phyto-Remediation and Immobilization of Metals with Energy Recovery (i-PRIMER)	De La Salle University Manila
451	Development of a Local Automatic Identification System (AIS) for Ship Tracking and Monitoring	De La Salle University
452	Alternative technology for processing of black sand mineral: chlorination of titanium.	MSU-Iligan Institute of Techno ogy (MSU-IIT)/Iligan City
453	The Use of Radon Technique in Mapping Geological Faults in the Philippines	Philippine Nuclear Research Institute
454	Vulnerability assessment of agricultural crops to flood and drought in the Upper Pulangui River Basin (UPURB), Bukidnon, Philippines	Central Mindanao University
455	UAV as Diagnostic tool for Transportation and Agriculture	Central Mindanao University
456	Hands-On Minds-On Microscale Chemistry" (HOMOMICH) Workshops	Philippine Foundation for Science & Technology
457	Formulation Optimization, Packaging Design and Market Testing of SeaMoy	Marine Science Institute, UPDiliman
458	Down streaming Flood Disaster Risk Reduction management Information System for the Local Government Units in Regions 9 and 10	Mindanao State University-Iligan Institute of Technology (MSU-IIT)
459	Integrated Simulation Modeling for Decision Making in the Risk Reduction of Flood and Storm Surge in Mandulog River Basin	Mindanao State University-Iligan Institute of Technology (MSU-Iff)
460	DEVELOPMENT OF HEALTHY, CONVENIENT AND NATURALLY-FORTIFIED RICE ICE-CREAM PRODUCTS WITH FUNCTIONAL FOOD INGREDIENTS TOWARDS COMMERCIALIZATION	Department of Food Science and Technology, College of Home Science and Industry, Central Luzon State University
461	Airborne LIDAR Data Acquisition for 128 River Basins in the Philippines	Training Center for Applied Geodesy and Photogrammetry, University of the Philippines, Diliman Q.C.
462	Ground Surveys and River Geometry Acquisition for 128 Rivers in the Philippines	Training Center for Applied Geodesy and Photogrammetry, University of the Philippines, Diliman Q.C.
463	LiDAR-based Information and Geospatial Technology Assistance to Stakeholders (LIGTAS)	Training Center for Applied Geodesy and Photogrammetry and the Department of Geodetic
464	Forest LiDAR Mapping	UP TCAGP
465	Organic-Inorganic nanocomposite coatings for enhanced and efficient polyolefin separator in Nickel-based battery systems	Institute of Chemistry, University of the Philippines Diliman
466	Clean and Renewable Water Cycle Energy Hydro Electric Plan	a
467	Project Modelling Agricultural LaNds and Irrigation Network using LiDAR (MANNA)	Training Center for Applied Geodesy and Photogrammetry and the Department of Geodetic Engineering, University of the Philippines, Diliman, Quezon City
468	Selected Light Intensities in the Storage Characteristics of Tropical Fruits and Vegetables	Mariano Marcos State University (MMSU)
469	Isolation, Characterization, Identification and Genetic Manipulation of Potential Isolates for Self forming Concrete	Mariano Marcos State University (MMSU)
470	TOWARDS A PHILIPPINE OCEAN OBSERVING SYSTEM (T-POOS)	:Institute of Environmental Science and Meteorology, University of the Philippines Diliman
471	Precious Metal-free Advanced Material Catalysts for Carbon dioxide (CO2) Conversion to Solar Fuels via Artificial Photosynthesis: A Combined Computational and Experimental Approach	Institute of Mathematical Sciences and Physics, University of the Philippines Los Banos
472	Bio-coal and bio-crude from plastic waste and biomass by Torrefaction	College of Engineering, University of the Philippines, Diliman Quezon City
473	Synthesis and Characterization of Zinc Silicate Using Rice Hull Ash, Corn Cob Ash and Sugar Cane Bagasse Ash from Agricultural Wastes for Anti-Corrosion Application in Paints	Ateneo de Davao University

	Title	Agency
474	Development of Durian Peel Biosorbent for Water and Air Pollutants	Ateneo de Davao University
475	CONCIERGE: Domain-Constrained Question Answering (QA) System with Transfer Learning	EEEI University of the Philippines-Diliman
476	Green Synthesis of Transition Metal Oxide Nanoparticles Using Agricultural Waste Extracts for Applications in the Banana Industry (Dye Degradation and Anti-Microbial Action)	Ateneo de Davao University
477	Support to the Commercialization of 500 DOST-Generated Technologies (Phase 2): Strengthening the Intellectual Property and Technology Portfolios of the DOST	TAPI
478	VICCUS-A: Ionic liquid-Mediated Extraction of Cellulose from Paper Mulberr	Institute of Chemistry, U. P. Diliman
479	Adequate Thermal Processes for Traditional/Ethnic Philippine Food Products to Assure Food Quality and Safety	Food Processing Division - Industrial Technology Development Institute
480	Advancing the Future through Innovative Technology on Rice Fortification	Food and Nutrition Research Institute (FNRI)
481	Application and formulation studies of standardized oils from pili nuts and pulp; coconut; cashew nuts and shells; mango and calamansi seeds, with skin health benefits in personal care and cosmetic products - Project 2	Industrial Technology Development Institute (ITDI) - DOST
482	Assessment and Utilization of Black Sand for Agro-Industrial Applications	Mariano Marcos State University (MMSU)
483	Assessment and Utilization of Black Sand for Agro-Industrial Applications	Mariano Marcos State University (MMSU)
484	Capacity Building, Community Outreach,and,Diffusion,of DOST-PCIEERD Supported Food Technologies through ENTREPRENEURSHIP at the University of Caloocan Cit	University of Caloocan City
485	Characterization and Development of Spray Dried Goat's Milk	Mindanao University of Science and Technology
486	Characterization and Recovery Philippine Nickel Laterites	Mines and Geosciences Bureau -Central Office (MGB-CO)
487	Coconut-Derived Graphene to Prepare Biopolymer-based Nanocomposite for Water Treatment - Project 9 Applications	Department of Chemistry College of Science De La Salle University
488	DCMOOERS: Development of a Computer Model for Optimizing Off-Grid Electrification of Remote Sites	De La Salle University
489	Development of an Electrostatic Precipitator for Jeepney Exhaust (ESP-J)	Institute of Chemistry, National Science Complex, University of the Philippines Diliman
490	Development of Automated Soya Milk Processing Line	Adventist University of the Philippines (AUP)
491	Development of Disaster Food: Ready-to-Eat Meal (DOSTPCIEERD-PUP-REM)	Polytechnic University of the Philippines
492	Development of Heirloom Rice-based Snacks: A Value Addition Process	Mountain Province State Polytechnic College
493	Development of Technical Guidelines for Philippine Processed Food Manufacturers in Compliance with the Requirements of the importing Countries	Industrial Technology Development Institute
494	Dual Charge Electric Motor Trike	Don Mariano Marcos Memorial State University
495	Dye-Sensitized Solar Cell using Composite Materials	Industrial Technology Development Institute (ITDI) - DOST
496	Ecosystem modelling to regain biological productivity in NE Panay	OceanBio Lab, Division of Bilogical Sciences, CAS, UP Visayas
497	Electric Vehicle Motor Controller and Battery Management System with Network Connectivity, Regenerative Braking, and Adaptive Energy Management	De La Salle University Manila
498	Enhancing Project Management Capabilities through ICT	DOST-PCIEERD
499	Evaluation of Selected Light Intensities in the Storage Characteristics of Fruits and Vegetables	Mariano Marcos State University
500	Field Testing of Multi-Nutrient Extruded Rice Kernel (MNERK)	Food and Nutrition Research Institute
501	FLuorescence-based characterization of Water contamination (FLOAT)	Physics Department De La Salle University

	Title	Agency
502	Impact on Health and Environment: Particulate Matter Assessment in Southwest Batangas	University of the Philippines Manila
503	Innovative Vinegar Based-Food Products from Pineapple (Ananas comosus) for Calauan, Laguna Pineapple Growers	Institute of Food Science and Technology, Food Science Cluster College of Agriculture University of the Philippines Los Banos
504	International Training Workshop on Psychological Intervention After Disaster	UP Department of Psychology
505	ISAFEAASPSC: Impedance Spectroscopy Analysis for Efficient and Air-Stable Perovskite Solar Cells	University of Santo Tomas
506	Isolation and evaluation of nutritional, physico-chemical and functional properties of proteins from selected Philippine indigenous pulses (grain legumes)	UP College of Home Economics, Diliman
507	Isolation, Characterization, Identification and Genetic Manipulation of Potential Isolates for Self forming Concrete	Mariano Marcos State University
508	ITDI Food Technologies for Disaster Relief	Industrial Technology Development Institute
509	Microorganisms for the Production of Bioflavours and Bioaroma	National Institute of Molecular Biology and Biotechnology (BIOTECH)
510	Novel Processing of Pili Nut Resin Characterization and Utilization of its By-Product	Cavite State University
511	Okara(Soybean pulp) Research and Development Program	Adventist university of the Philippines
512	OPTIMIZATION AND/OR STANDARDIZATION OF PROCESSES OF ITDI-TRAINING MATERIALS USING DOST-FABRICATED FOOD PROCESSING EQUIPMENT	Industrial Technology Development Institute (ITDI)
513	Optimization of Freeze-Dried Durian through the Food Processing Innovation Center of Davao	Philippine Women's College of Davao
514	Optimization of Pilot Scale Testing and Commercial Production of Cereal -Based Gluten-Free Noodles	Food and Nutrition Research Institute
515	Optimization of Process Parameters for Vacuum Distillation and Standardization of Philippine Citrus Oils	INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE
516	Optimization of Processes for Mixed Vegetables using the DOST - Fabricated Vacuum Fryer	Industrial Technology Development Institute (ITDI)
517	Optimization of processes for upscale production of high-value beverages and food colorant	Food Science Cluster, UPLB
518	Optimization of Ready-To-Drink Turmeric Ginger Infused Citrus Juice Blends through the UPD DOST NCR Food Innovation Facility	UP College of Home Economics, Diliman
519	Optimizing the skin health benefits of oils from pili nuts and pulp; coconut; cashew nuts and shells; mango and calamansi seeds - Project 1	Industrial Technology Development Institute (ITDI)
520	Process Optimization for the Production Green Mussels (Perna viridis)	Visayas State University
521	Product Development and Optimization of Spray-dried Calamansi (Citrofortunella x microcarpa) with Nipa Syrup, Malunggay and Lemon Grass	DOST-MIMAROPA
522	PRODUCT/PROCESS OPTIMIZATION USING FIC TECHNOLOGIES	Industrial Technology Development Institute (ITDI)
523	Production and Commercialization of Dragon Fruit (Hylocereus undatus) Powder Using Spray Drying Technology and Utilization of its By-Products into Value Added Food Product	Industrial Technology Development Institute (ITDI)
524	Production of Cellulase - free Xylanase as Substitute to Degumming Treatment for Philippine Textile Products	Industrial Technology Development Institute (ITDI)
525	Production of Freeze-Dried Collagen From Chicken Egg Shells	Industrial Technology Development Institute (ITDI)
526	Production of Keto - Carotenoid Orange - Red Pigment from Rhodotorula rubra	National Institute of Molecular Biology and Biotechnology (BIOTECH)
527	Production, Characterization and Applications of Yellow and Orange Pigments Produced by Monascus purpureus M1018	National Institute of Molecular Biology and Biotechnology (BIOTECH)
528	Production, Standardization and Utilization of Manila Elemi Oil and Oleoresin- Project 3	Industrial Technology Development Institute
529	Project 10: Critical Assessment of Metal and Carbon-based Nanomaterials Toxicities in Cell Biological Systems	Research Center for Natural and Applied Sciences , University of Santo Tomas

	Title	Agency
530	Project 11: Virtue Ethics as an Ethical Compass towards a Sustainable Nanotechnology in the Philippines	Research Center for the Natural and Applied Sciences, University of SantoTomas
531	Project 12: Bridging Academic Gap and Practical Applications: Exploring Social Science Research and Nanotechnology in the Philippines	Research Center for Culture Education and Social Issues, University of Santo Tomas
532	Project 1: Fabrication of recyclable magnetic nanophotocatalyst for effective sequestration and detoxification of cyanide-containing mining wastewater - CSU	Caraga State University
533	Project 1: Synthesis and characterization of metal nanomaterials: Ag, Au & ZnO nanoparticles before, during and after in vitro and in vivo studies in various biological systems	Research Center for the Natural and Applied Sciences, University of Santo Tomas
534	Project 2: Preparation and Characterization of Carbon-based Nanomaterials and their Interaction with Biological Systems	Research Center for the Natural and Applied Sciences, University of Santo Tomas
535	Project 3: Microbial Assay of Selected Metal Nanoparticles and Carbon Nanotubes and Graphene	Research Center for the Natural and Applied Sciences, University of Santo Tomas
536	Project 4: Automation of the Solar Dryer with Biomass Back-up	Caraga State University
537	Project 4: Effects of Nanomaterials on the Growth, Development and microRNA Expression of Vigna radiata (L.) R. Wilczek (Mung Bean)	Research Center for the Natural and Applied Sciences, University of Santo Tomas
538	Project 5: Molecular and cytotoxicity assessment of metal and carbon-based nanomaterials in cultured shrimp	Research Center for the Natural and Applied Sciences, University of Santo Tomas
539	Project 6: Determining the impacts of metal and carbon-based nanomaterials on the survival, growth and development of common freshwater microcrustacean zooplankton in Philippine lakes	Research Center for the Natural and Applied Sciences, University of Santo Tomas
540	Project 7: Prospects on Utilizing Nanomaterials in the Culture of Microalgae	Research Center for the Natural and Applied Sciences, University of Santo Tomas
541	Project 8: Toxicity Study of Ag, Au & ZnO Nanoparticles and Carbon Nanotubes and Graphene on Amphibian Larvae	Research Center for the Natural and Applied Sciences, University of Santo Tomas
542	Project 9: Acute and subchronic toxicity studies of nanostructures used for therapeutics and drug delivery systems in rodents	Research Center for the Natural and Applied Sciences, University of Santo Tomas
543	Pulp-to-Print: Development of Print-Ready Cellulose Composites from Underutilized Sources	Institute of Chemistry, U. P. Diliman
544	Recovery, Utilization, and Production of Valuable Proteins from By-products and Wastes of Fresh Dry Coconut Oil Processing	Industrial Technology Development Institute
545	Rubber seed oil and methyl ester by super critical fluid extraction (SCFE) for production of alkyd resins as surface coating binder	Industrial Technology Development Institute
546	SINANTOLAN (Sandoricum koetjape) VARIANTS	LAGUNA STATE POLYTECHNIC UNIVERSITY
547	Sparkathon IAG Hackshop (Industry, Academe, Gov't)	Brainsparks
548	Spray dried, citrinin-reduced food-grade Monascus colors developed by ITDI Molecularly Imprinted Polymer Technology. (revised title) from the original title: Production of Spray Dried Monascus pigment by Solid Substrate Fermentation	Industrial Technology Development Institute
549	Standardization and Utilization of Oval Sea Grapes "Lato" (Caulerpa racemosa) Powder	ZAMBOANGA STATE COLLEGE OF MARINE SCIENCES AND TECHNOLOGY
550	Technological Interventions to the Local Equipment Fabricators to Enhance the Commercialization and Transfer of DOST-developed Food Processing Equipment	Metals Industry Research and Development Center (MIRDC)
551	Technology Transfer - Project 2	Food and Nutrition Research Institute (FNRI)
552	TOPAPCPIWBFT: Treatment of Pharmaceuticals and Personal Care Products (PPCPS) in Wastewater by Fenton Technologies	DEPARTMENT OF CHEMICAL ENGINEERING, UNIVERSITY OF THE PHILIPPINES
553	Topochemical Transformations of Philippine Clays for Treatment of Environmental Pollutants In Aqueous Systems	University of the Philippines, Diliman

	Title	Agency
554	Utilization of Selected Plants as Sources of Essential Oils and Proteins For Nutraceutical and Cosmeceutical Products (ESSOPRO)	Central Mindanao University
555	Utilization of the By-Products of Mango Processing- Project 1	INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE
556	VICCUS-B: Design and fabrication of a plasma device for in-line functionalization of cellulosic materials	Institute of Chemistry, U. P. Diliman
557	VICCUS-C: Development and Fabrication of an Additive Manufacturing System for Cellulose Composites	Institute of Chemistry, U. P. Diliman

2016 Ongoing Projects

	Project Title	Implementing Agency
1	ANEEME: Synthesizing and Sharing Animation Building Blocks for Rapid creation of 3D Motion Scenes	Electrical and Electronics Engineering Institute, UP Diliman
2	EPDC Operation and Capability Enhancement	Advanced Science and Technology Institute (ASTI)
3	Establishment of a Center of Innovation and Technopreneurship @ Mindanao State University-Iligan Institute of Technology (CIT@ MSU-IIT)	Mindanao State University- Iligan Institute of Technology (MSU-IIT)
4	Establishment of an Advanced Device and Materials Testing Laboratory (ADMATEL) - Phase 5 (OPERATION OF ADMATEL)	ITDI
5	Establishment of BatStateU Center for Technopreneurship and Innovation (Technology Business Incubation)	Batangas State University
6	Contactless Apprehension of Traffic Violators on 24-Hour Basis and All-Vehicle Detection System (CATCH-ALL)	De La Salle University, Manila
7	Innovation Hub: Diliman	UP Diliman
8	Package Development of Bakery Product and Field Testing of Ready-to-Eat (RTE) Smoked Fish Rice Meal and Sweet Potato as Disaster/Relief Foods	Industrial Technology Development Institute (ITDI)
9	Dried Cassava Grates Processing and System Optimization	Visayas State University (VSU)
10	Showcasing of ESCO Business Model in Government Offices through Retrofitting of Energy Efficient Technologies	Technological University of the Philippines, Manila
11	Proposed PUP College of Engineering Sensors and Mechatronics Laboratory	Polytechnic University of the Philippines
12	Enhancing the Natural Science Research Center Laboratories of Central Mindanao University	Central Mindanao University (CMU)
13	Integrated Scenario-based Assessments of Impacts and Hazards (ISAIAH)	National Institute of Geological Sciences, University of the Philippines Diliman
14	Establishment of Common Service Facility for Artisanal Small-Scale Gold Mining in Northern Mindanao	MSU-IIT
15	The Pilot Plant for the Production of Organo Mineral Products for Effective Waste Water Treatment and Septic System Management	Adamson University
16	Investing in the Future through Basic Researches Today: Institutional Grant for Invigorating Basic Research	National Research Council of the Philippines
17	Standards and Testing Automated Modular Platform (STAMP)	National Institute of Physics, University of the Philippines Diliman
18	Disaggregated Electricity Consumption Baseline Measurement of Micro, Small, and Medium Enterprises in the Philippines and Behavioral Response Analysis to an Intelligent Energy Management Platform using Real-Time Electricity Monitoring with Integrated Analytics and Recommendations Engine	WattSmart Philippines Corp.
19	Geophysical Exploration Instruments with Micro-seismic Imaging and Tomography for Energy Exploration in the	Tekton GeoMetrix Inc.

	Project Title	Implementing Agency
	Philippines - Project 1	
20	Development of Generic Packaging Materials and Technology for Selected Food Products of Food Innovation Centers (FICs) and MSMEs in the Regions	Industrial Technology Development Institute (ITDI)
21	Development of Wireless Sensory Network System for Structural Integrity Monitoring of Bridges (SMART BRIDGE)	Mapua Institute of Technology
22	Integrated Risk Management of Non-Engineered Vernacular Houses for Effective Disaster Risk Reduction	University of the Philippines - College of Architecture
23	Market Validation of VISSER in 1st District of Zamboanga del Sur	University of the Philippines Diliman
24	Piloting and Market Validation of the UP Technologies on Rapid Electric Vehicle Charging or CharM (Charging in Minutes) in Cauayan City, Isabela for Progressive SMARTER City	Isabela State University, Cauayan City Campus
25	Detection and Identification of Legitimate Public Utility Vehicles (PUVs) Along various road netWorks (DILAW)	Department of Computer Science, UP-Diliman
26	PagBAGO (Behavior-Adviser Guide and Operations towards Modeling Resilient Behavior during Disaster	Ateneo De Manila University
27	Strengthening SLSU's Capability in GIS Technologies in Support of Southern Leyte's Competitiveness and Development	Southern Leyte State University
28	Development of a Cost-Effective Colorimetric Packaged/Frozen Fish Freshness Sensor Using Food-Compatible Materials	National Institute of Physics, UP-Diliman
29	Design and Optimization of Austenitic Manganese Steel Liners for Philippine Aggregates and Mineral Processing - Project 3	Metals Industry Research and Development Center
30	Sonochemical Synthesis of Cobalt Oxide and Copper Oxide Nanostructures as Electrodes in Photoelectrochemical Water-Splitting Applications	Mapua Institute of Technology
31	Miller's Forum: Support for the Conduct of Seminars, Conferences, Workshops and Trainings	DOST-FNRI
32	Regional scales of variability in precipitation (RSVP)	Institute of Environmental Science and Meteorology
33	Design and Development of UP Bike Share System	UP EEEI
34	Product Development of AquoSense - a portable water quality sensor system	Ateneo de Manila University
35	Climate Change Adaptation and Disaster Resilience Cluster PH-US Joint Cooperation	PCIEERD
36	Automated Real-Time Monitoring System (ARMS) for Ambuklao, Binga, and San Roque Dams	Mapua Institute of Technology (MIT)
37	Exploratory Characterization of Scandium and Rare Earth Elements in Zambales, Palawan, and Surigao del Sur Nickeliferous Laterite Deposits	National Institute of Geological Sciences, UP Diliman
38	Synergistic effect of Forward Osmosis and Capacitive De-Ionization for Water Purification and Recovery	Malayan Colleges Laguna
39	Development of a Raman Microscopy and Spectroscopy (RMS) Setup	National Institute of Physics, College of Science, UP-Diliman

	Project Title	Implementing Agency
40	Development of an Atmospheric Plasma Jet System for Plasma Characterization and Materials Processing	University of the Philippines Baguio
41	Field Testing of Eco-Friendly Septic System (Eco-Sep) for the Tourism Sector in Siargao Island, Surigao del Norte (Project FRESH)	DOST-Caraga
42	Development of Intermediate Food Products from Tulya and Dilis Bagoong and Other Products from Region 2	Cagayan State University (CSU) - DOST Region 2 Food Innovation Center
43	Cost-Efficient and High-Quality Accelerograph for Disaster Preparedness in Buildings - Project 2	Tekton GeoMetrix Inc
44	Capacity Building,Community Outreach and Diffusion of DOST-PCIEERD Supported Food Technologies through ENTREPRENEURSHIP at the University of Caloocan City	University of Caloocan City
45	Development of Food Reference Materials for Nutrition Labeling for Use of Local Testing Laboratories	Food and Nutrition Research Institute (FNRI)
46	InteliSENSE: A Progress Monitoring Tool for Children with Special Needs	De La Salle University - Manila (DLSU)
47	e-Asia: Development of Information Gathering and Utilization Systems using small Unmanned Airborne Vehicles (UAVs) for Disaster Risk Assessment, Monitoring and Response	PHIVOLCS
48	Product and Technology Holistic Strategy (PATHS) for the Semiconductor and Electronics Industries of the Philippines	Semiconductor and Electronics Industries in the Philippines Foundation, Inc.
49	Characterization of Mercury Fractionation and Distribution on Artisanal Gold Mine Tailings in Key Areas of Mindanao and its Implication for Mercury Detoxification	Central Mindanao University
50	Geophysical characterization of the western Philippine subduction zones - Project 3	National Institute of Physics. University of the Philippines Diliman
51	Typhoon Formation, Structure and Intensity Change in Western NP and Wave Observation and Modeling - Project 1	PAGASA
52	Establishment of the Mindanao University of Science and Technology Digital Incubation Hub	Mindanao University of Science and Technology
53	Coastal tectonics of central Philippine islands and its implications for seismic hazards - Project 2	National Institute of Geological Sciences, University of the Philippines, Diliman
54	Investigating the tectonic evolution of northern and central Philippine arcs through geochemistry and geophysics - Project 1	National Institute of Geological Sciences, University of the Philippines, Diliman
55	Heavy Rain Monitoring and Forecasting in the Mountainous Area and Early Warning Landslides - Project 2	University of the Philippines - Los Baños
56	Observations and Dynamical Down-scaling of Seasonal and Sub-seasonal Forecast - Project 3	PAGASA
57	Upgrading the PNRI Neutron Laboratory for Neutron Physics and Dosimetry Research [Project Code:PRP#2489]	PNRI
58	Polyhydroxyalkanoate (PHA) Production from Agricultural	UPLB

	Project Title	Implementing Agency
	Wastes	
59	Technical Feasibility of Putting up a Pilot Plant for the Value Adding of Philippine Iron Resources	Metals Industry Research and Development Center (MIRDC)
60	Development of Physarum Polycephalum Powered Actuators for a Microfluidic Mixer Project 1: Development of a Microgear Actuator Powered by Physarum Polycephalum for LOC Device	MSU-Iligan Institute of Technology
61	Development of Physarum Polycephalum Powered Actuators for a Microfluidic Mixer Project 2: Development of a Hybrid Physarum Polycephalum Controlled Micro-valve	MSU-Iligan Institute of Technology
62	IP Management (From Disclosure to Strategy) of DOST-PCIEERD Projects	University of the Philippines
63	Optimization of Ready-to-Drink Sweet Potato Leaf Extract (SPLE)-Tropical Fruit Juice Blends through the UP-DOST Food Innovation Facility	UP College of Home Economics, Diliman, Quezon City
64	Project 2: Tailings - Cement Bricks Reinforced with Coco Fiber - CSU	College of Engineering and Information Technology, CARAGA State University
65	Project 5: Product Development of Talisay Nut Delights - SSCT	Surigao State College of Technology
66	Project 6: Archimedean Screw Micro Hydropower System For Small Scale Industry Application - ASSCAT	Agusan del sur State College of Agriculture and Technology
67	Market Validation of the Automated Rapid Reef Assessment System (ARRAS)	National Institute of Physics, University of the Philippines Diliman
68	Technology Business Incubator (TBI) at DLSU-STC Campus	De La Salle University
69	Cartography of Old Informs the New (COIN)	National Institute of Physics, UP Diliman
70	Setting up a Concrete Petrography Laboratory for Quality Control of Construction Projects	National Institute of Geological Sciences, University of the Philippines, Diliman
71	Upgrading and Enhancing the Capacity of the Packaging Technology Division in Packaging Research and Innovation	Industrial Technology Development Institute (ITDI)
72	A Vision-Based Vehicle Counter for Traffic Monitoring (VEMON)	College of Computer Studies, De La Salle University
73	Conduction in Disordered Materials in the Low-Frequency Region	Institute of Mathematical Sciences and Physics, UP Los Baños
74	"F-E-W for U" System: A CCA-DRRM Solution to Food-Energy-Water Nexus Interactions	Environmental and Climate Change Research Institute, De La Salle Araneta University
75	Production of Nanocellulose from Indigenous Natural Fibers and Agricultural Wastes	Department of Chemistry, School of Science and Engineering, Ateneo de Manila University
76	Development of a rapidly deployable novel Rain Acoustic Sensor Network	Ateneo de Manila University
77	Smart Surface	Electrical and Electronics Engineering Institute, UP Diliman

	Project Title	Implementing Agency
78	Market Validation and Licensing of PCIEERD Funded Nanotechnology Projects in UPLB	University of the Philippines Los Baños (UPLB)
79	Establishment of the AIM-Dado Banatao Incubator	Asian Institute of Management
80	DREAM Project 2. LIDAR and SAR Data Calibration and Validation	Training Center for Applied Geodesy and Photogrammetry, UP Diliman
81	DREAM Project 1. LIDAR and SAR Data Acquisition	Training Center for Applied Geodesy and Photogrammetry, UP Diliman
82	DREAM Project 3. Extracting Digital Elevation Models and Salient Features for Flood Modelling	Training Center for Applied Geodesy and Photogrammetry, UP Diliman
83	DREAM Project 4. Integrating High Resolution Digital Elevation Models (DEMs) into GIS-based Flood Modelling	Training Center for Applied Geodesy and Photogrammetry, UP Diliman
84	DREAM Project 5. Training for LIDAR Data Acquisition and Flood Modeling	Training Center for Applied Geodesy and Photogrammetry, UP Diliman
85	MiC Project 1. Interlaboratory Comparisons of Additives and Contaminants in Foods	Industrial Technology Development Institute
86	Strengthening of DOST Regional Metrology Laboratory Services	DOST Regions
87	Biodiversity Assessment of Terrestrial and Aquatic Ecosystems in Selected Mining Environs in Mindanao-Sub-PRogram 2: Assessment of Terrestrial Ecosystems Biodiversity in Selected Mining Environs in Mindanao- Project 1	Caraga State University (CSU)
88	Biodiversity Assessment of Terrestrial and Aquatic Ecosystems in Selected Mining Environs in Mindanao-Sub-PRogram 2: Assessment of Aquatic Biodiversity in Selected Mining Environs in Mindanao- Project 2	Caraga State University, University in Southern Mindanao
89	Biodiversity Assessment of Terrestrial and Aquatic Ecosystems in Selected Mining Environs in Mindanao-Sub-Program 2: Contamination Pathway and Pollution Management of Mining in Mindanao - Project 4	Caraga State University, University in Southern Mindanao
90	Design and Development of Aerial Mapping and Imaging Systems and Standards	Ateneo Innovation Center
91	Establishment and Operation of Philippine Electronics Product Development Hub	Advanced Science and Technology Institute
92	Smart Wire Project 1 - Energy Efficient Data Acquisition and Conditioning for the SmartWire Sensor Node Project	Electrical and Electronics Engineering Institute, UP Diliman
93	Smart Wire Project 3 - Energy Ultra-Low Power Computation and Communication for the SmartWire Sensor Node Project	Electrical and Electronics Engineering Institute, UP Diliman
94	Smart Wire Project 2 - Integrated Energy Harvesting, Storage and Regulation for the SmartWire Sensor Node	Electrical and Electronics Engineering Institute, UP Diliman
95	Metal Bio-Indicator Plant Species of the Philippines	De La Salle University
96	Project 5. Development of Prototype Trainset Year 1 and 2	Metals Industry Research and Development Center

	Project Title	Implementing Agency
97	Project 2. Revitalization of MIRDC's Testing Facility in Support of the Automotive Components and Parts Manufacturing Sector - Year 1 and 2	Metals Industry Research and Development Center
98	Joint Research Program: Dual Planar Magnetron for TiO2 Base Photocatalytic Wastewater Treatment System	National Institute of Physics, UP Diliman
99	Establishment of Centralized Facility of Ultra High Temperature/High Temperature Short time Pasteurizer for Milk, Coconut Water and Other Juices	Batangas State Unversity
100	Sugarcane Genomics Project 3: Development of New Sugarcane Varieties Using Marker-Assisted Selection	Philippine Sugar Research Institute and Sugar Regulatory Administration
101	Sugarcane Genomics Project 1 - Genomics-Assisted Discovery of Genes and Molecular Markers for Important Targeted Traits in Sugarcane	Institute of Plant Breeding, UP Los Baños
102	Sugarcane Genomics Project 2: Application of Molecular Breeding Techniques in Sugarcane Improvement	Sugar Regulatory Administration and Philippine Sugar Research Institute
103	Establishment and Operation of the Philippine Institute for Integrated Circuits	Electrical and Electronics Engineering Institute, UP Diliman
104	System to identify, Quantify and Map the Storm Surge Threat to Philippine Coasts	Philippine Atmospheric Geophysical and Astronomical Services Administration
105	The Gold and Copper Chase: Life Cycle Analysis of Sustainable Small Scale Production System [MinERS Project G]	UP Diliman
106	Nanofiber Membrane Adsorption for Third Level Waste Water Treatment Method for Small Scale Mining Operations [MinERS Project E]	UP Diliman
107	Roll-out of DOST-Developed Food Processing Equipment to the Regions	Industrial Technology Development Institute (ITDI)
108	Non-Hazardous Methods of Gold Extraction for Philippine Small-Scale Mining Applications [MinERS Project A]	Department of Mining, Metallurgical & Materials Engineering, UP Diliman
109	Revit Project 2. Establishment of Handloom Weaving Livelihood at the DOST Innovation Centers	Philippine Textile Research Institute
110	Rubber Project 1. Upgrading and Accreditation of Laboratories to include Rubber Analyses in Strategic Areas in Mindanao Phase I. Integration of Rubber Testing Services in RSTL Region 9	DOST Region 9
111	Revit Project 1. Establishment of Innovation Center for Yarns and Textiles	Philippine Textile Research Institute
112	Rubber Project 2. Optimization and Improvement of Process in the Production of Technically Specified Rubber and Demonstration of Improved Facilities in Zamboanga Peninsula	Forest Products Research and Development Institute
113	ITS 1. Advanced Traffic & Pollution Monitoring and Analysis System Based on GPS Trajectory Data, Air Quality Data and Engine Status Data collected from Taxis in Metro Manila (ATPMS) - Year 1 & 2	Department of Information Systems and Computer, Ateneo de Manila University

	Project Title	Implementing Agency
114	Drought and Crop Assessment and Forecasting (DCAF)	Institute of Environmental Science and Meteorology, UP Diliman
115	Implementing a Satellite-based Monitoring and Assessment of Rehabilitation in Typhoon-effected Regions (SMARTER VISAYAS)	Advanced Science and Technology Institute (ASTI)
116	Rubber Project 3. Enhancing and Increasing Local Content in Rubber for Motorcycle Tire Application	Industrial Technology and Development Institute
117	Project 12. Development of 12 hp Single Cylinder Diesel Engine-Year 1 and 2	Metals Industry Research and Development Center
118	Smart Wire Project 4 - Resilient Data Transport	Electrical and Electronics Engineering Institute, UP Diliman
119	Synthesis of Flexible Nanohybrid Supercapacitor Based on Conducting Polymers and Metal Oxides	Institute of Chemistry, UP Diliman
120	Bio-oil/Oil Production from Agricultural Waste (Rice and Corn Straws) and Waste Plastic via Pyrolisis	UPLB
121	Establishment of Production Centers for Ceramic Water Filter in Regions CAR, II, and VIII	DOST Regional Offices CAR, II and VIII (DOST I as lead region)
122	ITS 3. An Integrated and Optimal Scheduling of a Public Transport System in Metro Manila (PUBFix) - Year 1 and 2	De La Salle University
123	Smart Textile Project 2. Durable and Regenerable Biocidal Hydantoin-Grafted Polyester and Ligno cellulosic Fiber Containing Textiles	Philippine Textile Research Institute
124	Smart Textile Project 1. Photocatalytic Multi-Functional Natural Fiber-blended Technical Textiles and Materials	Philippine Textile Research Institute
125	Project e-Bayanihan: A Nationwide Web – Mobile Based System for Participatory Disaster Management	Ateneo de Manila University
126	Project 1.B.11 LIDAR Data Processing and Validation in Mindanao: Regions 10, 12, and ARMM	Central Mindanao University
127	Project 1.A.1. LIDAR Data Acquisition for the Hazard Mapping of the Philippines	Department of Geodetic Engineering, UP Diliman
128	Project 2.B.12 LiDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Selected Sites in Region 10 and ARMM	Mindanao State University - Iligan Institute of Technology (MSU-IIT)
129	Production,Characterization and Application of Red Pigment Produced by Monascus purpureus M1018	National Institute of Molecular Biology and Biotechnology (BIOTECH), UP Los Baños
130	Project 1.B.1 LIDAR Data Processing and Validation in Luzon: CAR and Selected Sites in Region 1	University of the Philippines Baguio
131	Design, Fabrication, and Evaluation of Monitoring and Sampling Devices for Particulate Matter	Institute of Chemistry, UP Diliman
132	Project 1.B.12 LIDAR Data Processing and Validation in Mindanao: Selected Sites in Northern Mindanao (Region 10) and 11	Mindanao State University - Iligan Institute of Technology (MSU-IIT)
133	Project 1.A.6 Training on LIDAR Data Acquisition, Processing, Validation and Flood Modeling	Department of Geodetic Engineering, UP Diliman

	Project Title	Implementing Agency
134	Computing and Archiving Research Environment (CoARE)	Advanced Science and Technology Institute
135	Project 1.B.14 LIDAR Data Processing and Validation in Mindanao: CARAGA Region (Region 13)	Caraga State University
136	Project 2.B.8 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Central Visayas (Region 7)	University of San Carlos
137	Project 2.B.14 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resources Assessment in Mindanao: CARAGA Region (Region 13)	Caraga State University
138	Project 1.B.3 LIDAR Data Processing and Validation in Luzon: Region 3 and Pangasinan (Region 1)	Institute for Climate Change and Environmental Management, Central Luzon State University
139	Project 2.B.3 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Luzon: Region 3 and Pangasinan	Institute for Climate Change and Environmental Management, Central Luzon State University
140	ITS 2. Development of a Customized Local Traffic Simulator - Year 1 & 2 (LOCALSIM)	National Center for Transportation Studies, UP Diliman
141	Field-testing of the Integrated Copper and Gold Pilot Plant in the Regions - Benguet	Department of Mining Metallurgy and Materials Engineering UP Diliman
142	Project 1.B.8 LIDAR Data Processing and Validation in Visayas: Central Visayas (Region 7)	University of San Carlos
143	Molecularly Imprinted Polymers (MIPs) for the Targeted Purification of Natural Compound	Ateneo de Manila University, Quezon City
144	Focused Competencies Assessment Program (FCAP)	Computer Security Group, UP Diliman
145	Program for Critical Learning and Problem Solving (CTAPS)	UP Diliman
146	Program for Improving Service Orientation Skills (SOS)	UP Diliman
147	Program for Computer Literacy (ComLit)	UP Diliman
148	Project 1.A.2. LIDAR Data Calibration, and Bathymetry Component (DVBC)	Department of Geodetic Engineering, UP Diliman
149	Project 1.A.3: LIDAR Calibration, Point Cloud Classification, and Image Orthorectification (DPPC)	Department of Geodetic Engineering, UP Diliman
150	Project 1.A.4. Integrating High Resolution Digital Elevation Models (DEMs) into GIS-based Flood Modeling	Department of Geodetic Engineering, UP Diliman
151	Tidal Current Energy Integrated Resource Assessment and Spatial Planning Tool	Department of Geodetic Engineering, UP Diliman
152	Project 1.B.4 LIDAR Data Processing and Validation in Luzon: MIMAROPA and Laguna (Region 4)	College of Human Ecology, University of the Philippines Los Baños
153	Project 1.B.13 LIDAR Data Processing and Validation in Mindanao: Davao Region / Southern Mindanao (Region 11)	College of Science and Mathematics (CSM), University of the Philippines Mindanao
154	CRAVAT Project 2. Teardrop Upgrade	National Inst. of Physics, University of the Philippines

	Project Title	Implementing Agency
		Diliman
155	CRAVAT Project 3. Integration of ARRAS and CRAVAT Tools	National Inst. of Physics, University of the Philippines Diliman
156	CRAVAT Project 1. FISHDROP 360: Development Tools for Improved Monitoring of Reef Fish Communities	National Inst. of Physics, University of the Philippines Diliman
157	Project 2.B.4 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Luzon: MIMAROPA and Laguna (Region 4)	College of Public Affairs and Development, University of the Philippines Los Banos
158	Project 1.B.10 LIDAR Data Processing and Validation in Mindanao: Zamboanga Peninsula (Region 9)	Ateneo de Zamboanga University
159	Project 2.B.2 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Luzon: Region 2 and Abulog River Basin in Region 1	College of Forestry and Environmental Management, Isabela State University
160	Project 2.B.6 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Luzon: Bicol (Region 5)	Ateneo De Naga University
161	Project 1.B.6 LIDAR Data Processing and Validation in Luzon: Bicol (Region 5)	Ateneo De Naga University
162	Project 2.B.11 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resources Assessment in Northern Mindanao (Region 10)	Central Mindanao University
163	Project 2.B.10 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resources Assessment in Zamboanga Peninsula (Region 9)	Ateneo de Zamboanga University
164	Technology Upgrading of Zimmons Industry (SETUP)	DOST Region XI
165	Project 2.B.7 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Western Visayas (Region 6)	UP Cebu
166	Project 2.B.5 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Luzon: CABARZON (Region 4A except Laguna)	Mapua Institute of Technology
167	Project 1.B.5 LIDAR Data Processing and Validation in Luzon: CABARZON (Region 4A except Laguna)	Mapua Institute of Technology
168	Project 1.B.7 LIDAR Data Processing and Validation in Visayas: Western Visayas (Region 6)	UP Cebu
169	Project 1.B.9 LIDAR Data Processing and Validation in Visayas: Eastern Visayas (Region 8)	Visayas State University
170	Project 2.B.9 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Eastern Visayas (Region 8)	Institute of Tropical Ecology, Visayas State University
171	Deployment of Early Warning Systems in Disaster-prone Areas (DEWS)	Advanced Science and Technology Institute
172	Project 2.B.1 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Northern	Caraga State University

	Project Title	Implementing Agency
	Luzon (Region 1)	
173	Project 2.B.13 LIDAR Data Processing, Modeling and Validation by HEIs for the Detailed Resource Assessment in Davao Region / Southern Mindanao (Region 11), South Cotabato and Sarangani	College of Science and Mathematics, University of the Philippines Mindanao
174	Project 1.A.5 Data Archiving and Distribution	Department of Geodetic Engineering, UP Diliman
175	Project 1.B.2 LIDAR Data Processing and Validation in Luzon: Northeastern Luzon	College of Engineering, Isabela State University
176	Project 2.A.1 Agricultural Resources Extraction from LIDAR Surveys	Department of Geodetic Engineering, UP Diliman
177	Project 2.A.2 Aquatic Resources Extraction from LIDAR Surveys	Department of Geodetic Engineering, UP Diliman
178	Project 2.A.3 Forest Resource Extraction from LIDAR Surveys (FRExLS)	Department of Geodetic Engineering, UP Diliman
179	Project 2.A.4 Development of the Philippine Hydrologic Dataset (PHD) for Watersheds from LIDAR Surveys	Department of Geodetic Engineering, UP Diliman
180	Project 2.A.5 Philippine Renewable Energy Resources Mapping from LIDAR Surveys	Department of Geodetic Engineering, UP Diliman
181	Establishment of a Gear Making and Assembly Facility	Metals Industry Research and Development Center (MIRDC)
182	Rubber Project 4. Integration of Testing Services for Rubber and Rubber Products	ITDI-Standards and Testing Division
183	Field-testing of the Integrated Copper and Gold Pilot Plant in the Regions - Caraga	Department of Mining Metallurgy and Materials Engineering, UP Diliman
184	Setting-up of a One-Stop Laboratory Services for Global Competitiveness (OneLab)	Industrial Technology Development Institute
185	Development of Temporary Shelter System for Disaster Stricken Areas	UP Building Research Service
186	Design and Development of a Passive Solar Meat Dryer for the Production of Pork-Based Ethnic Delicacy in the Highlands - (CIERDEC)	Benguet State University
187	Development of Ink Using Carbon from Straight Pyrolysis of Glycerol as Electrodes in Printed Electronics	School of Science and Engineering, Ateneo de Manila University
188	Development of a Low-Energy Ion Source System for the Synthesis of Diamond-like Carbon Films	University of the Philippines
189	Fabrication of a Solid-State Rechargeable Li-ion Battery Using Li7La3Zr2O12 as Solid Electrolyte for Energy Storage Applications	UP Diliman
190	Gitara ni Juan: Development of Prototype Design and Standardization of the Guitar-making Process for Quality Classical Guitars Using selected Philippine Woods	College of Music, UP Diliman

	Project Title	Implementing Agency
191	PHL-MICROSAT Project 5. Remote Sensing Product Development	Institute of Environmental Science and Meteorology, UP Diliman
192	Enterprise Center for Technopreneurship: Outreach	Enterprise Center for Technopreneurship, UP Diliman
193	Technology Upgrading of Trader's Design Furniture Shop - Phase II (SETUP)	Trader's Design Furniture Shop
194	SAFEHarvestS Project 6 - Molecularly Imprinted Polymer Modified-Carbon Paste Electrodes (MIP-CPEs) as Multi-analyte Sensor for the Detection of Organophosphorus Pesticides Chlorpyrifos and Fenitrothion and Triazine Herbicide Atrazine	Institute of Chemistry, UP Diliman
195	e-Asia JRP: Development of Functional Nanocarbon-Based Catalysts for Biomass Conversion Processes	Chemical Engineering Department, De La Salle University
196	Establishment of a Natural Products Business Incubation Facility in West Visayas State University	West Visayas Univesirty
197	SAFEHarvestS Project 1 - Development of Portable Surface Plasmon Resonance MIP-based Sensor for Detection of Histamine in Shrimps	Institute of Chemistry, UP Diliman
198	SAFEHarvestS Project 2 - Development of Sensitive Prototype Sensor for Monitoring Insecticide Residues in Fruits and Vegetables to Address Current MRLs	National Crop Protection Center, UP Los Baños
199	SAFEHarvestS Project 3 - Development of Potentiometric-MIP Test Kit for the Detection of Clenbuterol in Meat	Institute of Chemistry, UP Diliman
200	SAFEHarvestS Project 5 - The Development of Portable Detection Systems for Nitroimidazoles in Hog Urine and Piggery Run-off Water	Institute of Chemistry, UP Diliman
201	Development of a Grid-Tied Inverter for Philippine Electronics Companies	Electronics Industries Association of the Philippines, Inc.
202	Nanostructured Electrocatalyst Composites for Direct Ethanol Fuel Cell: Preparation, Characterization and Performance Evaluation	Research Center for the Natural and Applied Sciences, University of Santo Tomas
203	Pre-positioning & Allocation of Relief Supplies GIS-Based Support System for Disaster Preparedness & Response	Ateneo de Manila University
204	Greening the Resorts: Design and Development of a Low-cost Solar Water Heater - (STIRDC)	Palawan State University
205	Field-testing of the Integrated Copper and Gold Pilot Plant in the Regions - Bicol	Department of Mining Metallurgy and Materials Engineering, UP Diliman
206	Philippine Earth Data Resource and Observation (PEDRO) Center	Advanced Science and Technology Institute
207	Radiation-induced grafting of nonwoven fabrics for waste water treatment to meet Class C effluent heavy metal standards.	Philippine Nuclear Research Institute
208	PHL-MICROSAT Project 1. Microsatellite BUS Development for Philippine Microsat	Electrical and Electronics Engineering Institute, UP Diliman
209	PHL-MICROSAT Project 2. Ground Receiving Station for Philippine Microsatellite Project	Advanced Science and Technology Institute (ASTI)

	Project Title	Implementing Agency
210	UPLB Project 1- Bench-scale production of Filters for the Removal of Arsenic from Contaminated Water Using Modified Biopolymer- Silica Nanocomposite Materials	Institute of Chemistry, UP Los Banos
211	UPLB Project 2-Bench-scale Production of Nanosensors for the Detection and Analysis of Arsenic in Contaminated Water	Institute of Chemistry, UP Los Banos
212	UPLB Project 3: Bench-scale Production of Hand-held Nanosensors for Methane Using Zinc Oxide Film	Institute of Mathematical Sciences and Physics, UP Los Banos
213	UPLB Project 4: Bench-Scaling of the Production of Cellulosic Nanocrystals from Kawayang-tinik (Bambusa blumeana) and Its Utilization for Renewable Nanomaterials	College of Forestry and Natural Resources, UP Los Banos
214	UPLB Project 5: Production of Nanosilica from Rice Hulls and Rice Hull Ash and Bench Scale Verification of the Production of Biodegradable Packaging Using Cassava Starch-RHA Nanosilica	UP Los Banos
215	Development and Deployment of Adaptive, Interactive, SMS-Based Modules for English	Ateneo de Manila University
216	Stealth Assessment of Student Conscientiousness, Cognitive-affective States, and Learning using and Educational Game for Physics	Ateneo de Manila University
217	Improvement of Locally Designed Micro-Hydro Turbines and Establishment of MHP Test Rig	University of Rizal System
218	Roll Out of Complementary Food Production to Priority Regions (Batch 2)	Food and Nutrition Research Institute
219	Structural System and Construction Methodologies Resilient to Earthquake and Strong Winds - Project 3	UP Diliman
220	Development of a Compact Wastewater Treatment System Enhanced with Bioaugmentation Technology for Quick Service Restaurant (QSRs)	Industrial Technology Development Institute
221	The Architecture of Filipino Resilience: The Adaptation of Traditional Wisdom from Selected Philippine Vernacular Architecture into Modern Building Systems - Project 2	UP Diliman
222	Planning Guidelines for Post-Disaster Response and Rehabilitation of Communities and Localities via Supply Chain and Delivery Management, and Risk-Sensitive Environmental Planning. - Project 1	UP Diliman
223	Upgrading of Production Through Acquisition of CNC Machine for Ertess Plastic Industries [Project Code: PRP#2386]	DOST-III PSTC - Bulacan
224	Fabrication of Supercapacitors Using Indigenous Textiles as Electrode Materials	Research Center for the Natural and Applied Sciences, University of Santo Tomas
225	SVPCF 02. Prototyping of a Diesel-Electric Parallel-Series Hybrid Vehicle for Public Transportation	National Engineering Center, UP Diliman
226	Human Hands as Input Device for an Immersive Virtual Reality Experience	Electrical and Electronics Engineering Institute, UP Diliman

	Project Title	Implementing Agency
227	SVPCF 01. Advanced Traffic Pollution Monitoring and Analysis System Based on Data Collected from Air Quality Sensors, Engine Status Sensors and GPS Trackers Installed on Selected PUVs in Metro Manila (ATMAS)	Ateneo de Manila University
228	Development of Competence of the DOST Food Innovation Centers (FICs) and Recognition of Most Innovative Products	Industrial Technology and Development Institute
229	PHL-MICROSAT Project 3. Development of a Data Processing, Archiving and Distribution Sub-System for the Ground Receiving Station of the Philippines Scientific Earth Observation Micro-Satellite	Department of Geodetic Engineering, UP Dillman
230	PHL-MICROSAT Project 4. Calibration and Validation of Remote Sensing Instruments for PHL.MICROSAT	Department of Geodetic Engineering, UP Diliman
231	Marine Weather Forecasting using High Frequency Doppler Radar	Philippine Atmospheric Geophysical and Astronomical Services Administration
232	Development of Interactive Software and Teaching Guides for Grades 7-10 Mathematics	Ateneo de Manila University
233	Versatile Instrumentation System for Science Education and Research:: Adapting, Testing, and Deployment (VISSER::ATD)	National Institute of Physics, UP Diliman
234	BAYANIHANETS Project 3- Development of Routing Metrics for High Throughput and Congestion Free Routing over Wireless Community Mesh Networks	Department of Information Technology, College of Engineering, Central Luzon State University
235	UPLB Project 7- Hemicellulose Extraction, Process Development and Toxicological Evaluation of a Hemicellulose-chitosan/tripolyphosphate (polyphosphate) Nanocomposite Coating for the Postharvest-life Extension of Papaya (Carica papaya L.) Fruits	UP Los Baños
236	Optimization, Bench-scale Preparation and Toxicological Evaluation of Pectin-Gelatin/Nanocellulose Biocomposite Coatings from Mango Peel and Nata de Coco for the Postharvest-Life Extension of Mango (Mangifera indica L. cv Carabao) and Bell Pepper (Capsicum annuum L.) Fruits	Institute of Chemistry, CAS, UPLB
237	BAYANIHANETS Project 1 - Development of a Multipath Transport Protocol for Cooperative Community Networks	Electrical and Electronics Engineering Institute, UP Diliman
238	BAYANIHANETS Project 2 - ARC: An Application Framework for Robust Communications Transport over Community Networks	Department of Computer Science, UP Diliman
239	Rubber Project 5: Empirical Modelling of Rubber Compounds Using Active Design of Experiment	University of the Philippines-Diliman
240	Landing Program (Sciene and Technology Entrepreneurship Program) - Phase - 3	Asian Institute of Management
241	Black Sand Mineral Characterization	National Institute of Geological Sciences, UP Diliman
242	ISIP:SAFE - Project 1. Developing an Automated Reading Tutor for Elementary Students of Filipino	Electrical and Electronics Engineering Institute (EEEI), UP Diliman

	Project Title	Implementing Agency
243	ISIP:SAFE - Project 2. Developing Closed Captioning Systems for Philippine Languages	Electrical and Electronics Engineering Institute (EEEI), UP Diliman
244	ISIP:SAFE - Project 3. Development of a Filipino Language Writing Tool	De La Salle University
245	MECO-TECO: Synthesis and Characterization of Novel Metal Nanoparticle-doped Electroactive Polymer Materials and Their Possible Application for Gas Sensing	University of Santo Tomas
246	Technology Commercialization of Nipa Sweeteners Developed by ITDI (former title: Development of Community Based Palm Sugar from "NIPA" sap (Nypa Fruiticans Wurmb))	Southern Luzon State University Infanta Campus, Infanta, Quezon
247	National Space Promotion, Advancement and Capability Expansion (SPACE) Development Program	Regulus SpaceTech
248	Pilot Scale Production of Nanoencapsulated Plant Growth Regulators for the Production of High Value Crops	National Institute of Molecular Biology and Biotechnology (BIOTECH), UP Los Banos
249	Field-testing of the Integrated Gold-Copper Mineral Processing Pilot Plant in the Regions - Compostela Valley	DOST Regional Office NoXI
250	Regional Disaster Science and Management S&T Capacity Development (Phase II)	Isabela State University
251	Tempospatial Distribution and Transboundary Transport of Atmospheric Fine Particles across Bashi Channel, Taiwan Strait , and South China Sea - (Code: 2423)	Institute of Environmental Science & Meteorology, UP Diliman
252	Boosting Delivery of ITDI-DOST Training Services through Development and Use of E-learning Packets	Regional Cooperation and Training Section Industrial Technology Development Institute (ITDI)
253	Large Scale Production of Laccase from Trametes sp. for Food and Beverage Applications	National Institute of Molecular Biology and Biotechnology (BIOTECH), UP Los Banos
254	Microbial Production of Xylitol from the Hydrolysis Products of Selected Agricultural Wastes	National Institute of Molecular Biology and Biotechnology (BIOTECH), UP Los Banos
255	Bringing DOST R&D Technologies to the Market	UP Enterprise for Technopreneurship
256	Innovation Hub: Intramuros	IdeaSpace Foundation
257	SETUP: Adoption and Commercialization of Iron Premix and Iron Fortified Rice	Long Live Pharma
258	Deployment of a Low-Cost Modular Type Rainwater Collection System using Locally Available Materials	Industrial Development Institute (ITDI)
259	Support to the Commercialization of 500 DOST-Generated Technologies (CYs 2015-2017): Creation of an IP Database Management System and Provision of Initial Support to the Fairness Opinion Board for 12 DOST-Generated Technologies - Phase 1	Technology Application and Promotion Institute

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
1	2	3	4	5	6	7=(3+4+5+6)	8	9	10	11	12=(8+9+10+11)	13	
Part B													
Major Programs/Projects													
Competitive Industries													
Electronics Industry													
Electronics Product Development Center Upgrade and Operation	3020100000	-EMS test capability - Accreditation to ISO 17025 - Establish inventory system	-EMS test capability - Accreditation to ISO 17025 - Establish inventory system	-EMS test capability -2nd Rapid PCB Prototyping Line - Design Terminals in the Regions	-EMS test capability -2nd Rapid PCB Prototyping Line - Design Terminals in the Regions		- New visitors and inquiries from prospective clients validated the need for the EMS capability in EPDC - Scheduled benchmarking on ISO 17025 Accreditation on other DOST Laboratories - On-going inventory of available materials and components	- As part of marketing startegy, participated in several events: Stakeholders Consultation - New visitors and inquiries from prospective clients for PCB Prototyping, 3D Printing, PCB Design and EMC services	- Facility is now open to cater request for testing services. Currently, catared services in EMC Testing and PCB Prototyping in 3 Electronics Companies and 1 from academe. - Started scheduling the benchmarking on ISO 17025 Accreditation on other DOST Laboratories.	- Three (3) facilities (EMC, PCB and Product Product prototyping lab) being maintained - One (1) customer/ client served			
Establishment of an Advanced Device and Materials Testing Laboratory (ADMATEL) - Phase 5 (OPERATION OF ADMATEL)	3020100000	- Increased revenue generated - Increased number of clients - Materials for the expanded marketing of ADMATEL services across other Industries and Academe (presentation, exhibit, etc.) - Materials for knowledge-based training on failure analysis and materials characterization to the Semiconductor and Electronics Industries - Long term sustainability plan for ADMATEL	- Increased revenue generated - Increased number of clients - Materials for the expanded marketing of ADMATEL services across other Industries and Academe (presentation, exhibit, etc.) - Materials for knowledge-based training on failure analysis and materials characterization to the Semiconductor and Electronics Industries - Long term sustainability plan for ADMATEL	- Increased revenue generated - Increased number of clients - Materials for the expanded marketing of ADMATEL services across other Industries and Academe (presentation, exhibit, etc.) - Materials for knowledge-based training on failure analysis and materials characterization to the Semiconductor and Electronics Industries - Long term sustainability plan for ADMATEL	- Increased revenue generated - Increased number of clients - Materials for the expanded marketing of ADMATEL services across other Industries and Academe (presentation, exhibit, etc.) - Materials for knowledge-based training on failure analysis and materials characterization to the Semiconductor and Electronics Industries - Long term sustainability plan for ADMATEL		- Revenue generated = P1,968,820 - Sixteen (16) new clients out of the 49 repeating clients served, 100% customer satisfaction - Presentation of ADMATEL at CFAR Regular Membership Meeting, Electronics Kapihan, Meeting with AIAP, UP Graduate Students of MSE, UST Chemical Society Seminar, and MSE Summit 2016 - Proceedings of demonstration and seminar to Siliman Univeristy, Fellowship Baptist College, St. John Technological College of the Philippines, National University, and University of Perpetual	- Revenue generated = P3.622M (as of 17May2016) - Fifty nine clients (22 of which are new) - 507 samples tested (as of 15 May 2016)	- The Total Revenue generated from January to September 2016 is ₱ 7.467M which already exceeds the generated revenue last year of ₱ 5.017M (49% increase). - ADMATEL served 113 clients from the semiconductor & electronics (26% share), other industries like plastic, food, coating, energy, telecommunications etc. (43% share), Government (12%) and Academe (19%). Out of this figure, 59 are new clients. (Regions covered: NCR, CAR, Regions 3, 4A, 5, 7, 8, 11)				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
							Help Dalta Systems - Lab operating in compliance with ISO 17025 QMS and an average of one-day turnaround time for preliminary reports - A Proposed Budgetary Requirement for ADMATEL Operations from 2017 (submitted to ITDI) - Request for additional five (5) plantilla positions - MOA with 15 PCIEERD R&D Grantees						
Establishment and Operation of the Philippine Institute for Integrated Circuits	3020100000	- Faculty immersion - Training modules and trainess	- Faculty immersion - Training modules and trainess	- Faculty immersion - Training modules and trainess			- Preparation for PIIC Faculty Immersion has already started and is in progress - New modules are currently planned to take advantage of the capabilities of ADMATEL and EPDC both for learning and promotion.	- Faculty Immersion - One (1) from industry - 13 from academe - 24 training modules - 569 training seats	- Trainings and Faculty Immersion - Delivered 113 modules - 3,073 seats offered - 1,003 people trained - 23 faculy immersion particcipants - With 55 engineers, the industry grew $2M - Ten (10) Universities & Colleges adopted the courses designed by the PIIC				Completed August 31, 2016
Manufacturing													
Empirical Modelling of Rubber Compounds Using Active Design of Experiment	3020100000	- Response surface model (RSM) test matrix and experimental data results	- Prediction of empirical models versus experimental results	- Experimental data results of the screening tests	- Response surface model (RSM) test matrix and experimental data results		- Attended trainings on the use of lab roll mill and rubber process analyzer - Selected specific textbook formulations of moulded bearing pad, tire retreading compound, hose and footwear sole to study based on the availability of its ingredients in the local industry - Specified alternate chemicals/	- Completed screening test matrix using fractional factorial design of experiment and identified types of ingredients present in the finalized list of formulations - 17 formulations of the moulded bearing pad compounds were made with 9 ingredients varied simultaneously during the screening tests.	Prepared screening test matrices for hose and footwear				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
							materials for ingredients in the formulations that are not locally available - Finalized list of formulations that will undergo screening test -Calculated main and interaction effects; scattered diagrams; ranking of factors; list of significant						
Integration of Testing Services for Rubber and Rubber Products	3020100000	- Renovation of labobratory facility - Training on the Operation of Equipment -Procurement of the equipment	- Renovation of labobratory facility - Training on the Operation of Equipment -Procurement of the equipment	- Training on the Operation of Equipment -Procurement of the Flammability Testing Apparatus -Extensive promotions of the services offered by the laboratory	- Training on the Operation of Equipment -Procurement of the Flammability Testing Apparatus -Extensive promotions of the services offered by the laboratory		- Renovation/upgrade of new Rubber Testing lab/rooms and hallway was cancelled due to DPWH's findings on the structural integrity of STD building - Attended the training for Ozone Testing Chamber -Acquired UTM with High Column - Attended PIRUBBER TWG Strategic Planning Workshop and the 22nd meeting of ACCSQ-RBPWG	- Renovation/upgrade of testing labs was given green light by consultant structural engineer; renovation was also completed in this quarter -Acquired Brittle Point Apparatus and Volume Resistivity - Attended the training for Brittle Point Apparatus and Volume Resistivity - Promoted testing services of the laboratory to the members of the Philippine Rubber Industries Association, Inc.	- Actual Testing of rubber samples were conducted during the training on the operation of Electrometer High Resistance Meter and Brittleness Temperature Tester - Conducted four (4) trainings: Kiethley Digital Electrometer High Resistance Meter; Basic Operation, Application and Routine Maintenance of Yasuda No121-RA Brittleness Temperature Tester; Operation and Maintenance of Brittleness Temperature; and Shimadzu Autograph Machine Model: AGS-X - Ongoing preparation of promotional materials - Ozone Resistance and Volume or Surface Resistivity were included in the DOST Unified Laboratory Information Management System (ULIMS) of ONELAB				
Smart Textile Biopolymers R&D Program													
Proj. 1. Photocatalytic Multi-Functional Natural Fiber-blended Technical Textiles and Materials	3020100000	- Project was extended for six (6) months -Confirmation of photocatalytics self-cleaning action of nanofinished textiles -Confirmation of antimicrobial efficacy against *S. aureaus*, *K. pneumoniae*, and *A.*	- Project was extended for six (6) months -Confirmation of photocatalytics self-cleaning action of nanofinished textiles -Confirmation of antimicrobial efficacy against *S. aureaus*, *K. pneumoniae*, and *A.*	-Confirmation of photocatalytics self-cleaning action of nanofinished textiles -Confirmation of antimicrobial efficacy against S. aureaus, K. pneumoniae, and A. niger- Assessment of weathering and laundering durability			- Nanoparticle ratio was optimized for pineapple and abaca - Treated pineapple and abaca fabrics demonstrated increased stain degredation in comparison to control when exposed to light - Outsourced antimicrobial and	- Parameters were verified using newly repaired weather-o-meter; results demonstrated the same results as when fabric was exposed to natural sunlight. - UPF ratings of cotton and polyester were verified using new UV-					Completed on August 3, 2016

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
		niger- Assessment of weathering and laundering durability - Evaluation of effect on dyed textiles - Evaluation of other fabric physical properties - Test for hypoallergenicity	niger- Assessment of weathering and laundering durability - Evaluation of effect on dyed textiles - Evaluation of other fabric physical properties - Test for hypoallergenicity - Drafting of technical papers and IP	- Evaluation of effect on dyed textiles - Evaluation of other fabric physical properties - Test for hypoallergenicity - Drafting of technical papers and IP			fungicidal tests - Coordinated with College of Veterinary Medicine, UPLB for hypoallergenicity testing of the fabrics	Vis spectrophotometer with integrating sphere; results demonstrated similar results to that of the Perkin Elmer UV-Vis spectrophotometer					
Proj. 2. Durable and Regenerable Biocidal Hydantoin-Grafted Polyester and Ligno cellulosic Fiber Containing Textiles	3020100000	- Project was extended for six (6) months. - Confirmation of biocidal efficacy against *S. aureaus*, and *E. coli*- Assessment of durability, regenerable property, and light stability - Evaluation of other fabric physical properties, including hypoallergenicity - Pilot-scale verification	- Project was extended for six (6) months. - Confirmation of biocidal efficacy against *S. aureaus*, and *E. coli* - Assessment of durability, regenerable property, and light stability - Evaluation of other fabric physical properties, including hypoallergenicity - Pilot-scale verification - Drating of technical papers and IP - techno-economic pre-feasibility study	- Confirmation of biocidal efficacy against *S. aureaus*, and *E. coli*- Assessment of durability, regenerable property, and light stability - Evaluation of other fabric physical properties, including hypoallergenicity - Pilot-scale verification - Drating of technical papers and IP - techno-economic pre-feasibility study			- Optimized grafting for pineapple, abaca, polyester-abaca, and cotton-pineapple - Antibacterial analysis of pure cotton demosntrated 100% reduction of bacterial colony. - Laundering durabilty of grafted cotton-pineapple, and cotton-abaca for 30 cycles was demonstrated.	- Abaca and pineapple woven fabrics showed excellent biocidal properties - Laundering durabilty of grafted cotton-pineapple, and cotton-abaca for 50 cycles was demonstrated. -Coordinated with ITDI-STD for acute dermal irritation/corrosion in vivo test.					Completed on August 3, 2016
Mining and Minerals													
Establishment of Common Service Facility for Artisanal Small-Scale Gold Mining in Mindanao	3020100000		- Meetings and discussion with LGUs - Purchase request of equipment - Calculation of area requirement of the pilot plant	- Bidding approval and awarding - Construction of the building	- Installation of equipment - Efficiency assessment of equipment		Started March 01, 2016	Ongoing bidding for the construction of the building and purchasing of equipment		Identified the possible miners from Brgy. Maimt & Brgy. Rogongon of Iligan City			Failed bidding in the construc-tion of facility and in the procure-ment of equipment

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Field-testing of the Integrated Gold-Copper Mineral Processing Pilot Plant in the Regions - Compostela Valley	3020100000	Social and community preparation	Social and community preparation	Mobilization and construction of the facility	- Start-Up and Initial Operation - Performance and Acceptance Testing		- Conducted information dissemination activities In the provincila and barangay Local Government Units - Finalized the Memorandum of Understanding (MOU) with the project stakeholders	Functional gold-copper plant from crushing up to flotation circuit except for the extractive metallurgy part	- Operations group trainees identified - Process flow designed - Plant lay-out finished - Conducted borehole test - Deed of Assignment for Partner's signature and EIA team is established	- Drafted and finalized MOA bet. DOST XI and CVSC for the conduct of value chain analysis (VCA) - Conducted data gathering for VCA through Key Informant Interview, Focus Group Discussion, and Field Observation - Conducted benchmarking activity of the project staf to the newly constructed mineral processing plant in Benguet, DOST CAR, & UP Diliman			
Black Sand Mineral Characterization	3020100000	- Fieldwork and sample collections - Laboratory analysis	- Fieldwork and sample collections - Laboratory analysis				Conducted sampling in La Union, Ilocos Norte, and Ilocos Sur with on-going data analysis on the economic valuation of black sand	Conducted sampling in Negros Oriental, Negros Occidental, and Surigao del Norte. Completed analysis of the remaining sample					Completed on July 9, 2016
Support to Industry Competitiveness													
ANEEME: Synthesizing and Sharing Animation Building Blocks for Rapid creation of 3D Motion Scenes	3020100000	- Vocabulary of actors, actions, and objects - Language model and module	- Models and animations for actors, actions, and objects	- Experimental results in creating arbitrary animations - Animation editor	App for instant animation technology		Created language model	- Created a scene creator app entitled "Genesys" - Demonstration of "Genesys" at UP Knowledge Festival last April 19	- Finished collecting necessary animation and models for algorithm. Preliminary results for 1st experiment are done - Finished rigging and skinning algorithms - Paper accepted for SIGGRAPH Asia 2016 ("Automatic Skeleton Generation using Hierarchical Mesh Segmentation")				
Innovation Hub: Intramuros	3020100000	- Intramuros Ecosystem Building Plan - Student Incubation Program Framework - Press Launch on Announcemenet of Hub Program at APEC with Partners	- Soft opening event of incubation Center with Press' and Partners - Startup Conference in Intramuros	- Sustainable Business Model of Innovation Hub	- Start-up Business (Tenants) Business Development		- Still working on the issues on the location of the innovation hub since the originally planned location (Palacio del Gobernador - Intramuros) will not materialize - The project will change its objectives based on PCIEERD's suggestion to consider putting up a virtual hub instead of a physical hub						

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Establishment of BatStateU Center for Technopreneurship and Innovation (Technology Business Incubation)	3020100000	- Makerspace/ Ideation Laboratory - TBI office and support facility	- Makerspace/ Ideation Laboratory - TBI office and support facility	- Technovation 2016 - Technopreneurship Summit 2016 - Four (4) Ventures funded for 2016	- Technovation 2016 - Technopreneurship Summit 2016 - Four (4) Ventures funded for 2016		Temporary Office at Student Center Building for BatStateU_CTI	On-going construction of STEER Hub	- Identified 10 teams for incubation & 4 teams for acceleration - Launched the Incubation Programs such as Technovations; Challenge lab and Delta Program				
Establishment of a Center of Innovation and Technopreneurhsip @ Mindanao State University - Iligan Institute of Technology (CIT@ MSU-IIT)	3020100000	Construction of the CIT@MSU-IIT Annex	- Capacity Building - Best Practices (Local TBIs) - Innovation Workshop - Launch of CIT@MSU-IIT Initiative	Capacity building - Investments	- Alpha batch graduation / demo day - Innovation Workshop		Construction of the building for the TBI completed	- Launched the website for the TBI - Conducted awareness seminar and promotional activities - Launched the Start Up Weekend Mindanao to invite start ups to avail of the services of the TBI	Received 52 applicants as potential incubatees. The TBI team will choose the final 7 this November				
Market Validation of VISSER in 1st District of Zamboanga del Sur	3020100000		- Fifty (50) manuals for VISSER Basic - Deployment of 50 sets of VISSER Basic - Trainings of teachers of the secondary schools by VISSER team	- Market validation report of VISSER			Implementation will start on May 2016	On-going talks with potential manufacturers/ adaptors such as Brainsparks, Ionics-EMS, Alexan etc. for the fabrication of VISSER units	On-going talks with potential manufacturers/ adaptors such as Brainsparks, Ionics-EMS, Alexan etc. for the fabrication of VISSER units	- Conducted initial training of teachers - Interested potential manufacturers are Alexan & Brainsparks			
Piloting and Market Validation of the UP Technologies on Rapid Electric Vehicle Charging or CharM (Charging in Minutes) in Cauayan City, Isabela for Progressive SMARTER City	3020100000		Field visits and site validation	Installation of CharM in Cauayan City Isabela	Purchase of e-trikes by LGU (10 units for LGU Cauayan City and 1 unit for ISU Cauayan Campus)		Start of implementation will start on May 2016	- On-going construction of housing - Will coordinate with Star 8 re: fabrication of e-trikes	Initial workshop for the marketing and technical team	- Conducted initital market analysis and inception meeting among investors & fabricators in the region with the Regional Director - Identified fabricators of e-trike in the region - Completed the refurbishment & electrical installation of the CHARM house			

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
STAMP (Standards and Testing Automated Modular Platform)	3020100000		Initial design of STAMP for approval	- Non-functional mock-up prototype - Final network design for implementation	- Electronics and interfaces - Chemical, physical, biological and electronic modules		Start of implementation will start on April 2016	- On-going discussions for the STAMP website - A cell counter software is under development for counting colonies under a petri dish. - On-going design of cell counting and pH determination software					
Development of Nanosensors and Nanostructured Materials from Agricultural By-products for Enhancement of Food and Agricultural Productivity and for Environmental Sensing and Remediation													
Project 1- Bench-scale production of Filters for the Removal of Arsenic from Contaminated Water Using Modified Biopolymer-Silica Nanocomposite Materials	3020100000	- Actual performance and maximum adsorptive capacity of the iron modified nanosilica beads as filters - Total arsenic in water samples using inductively coupled plasma (ICP)					- Determined As (III) and As (V) concentration of water samples from pump houses within vicinity of UPLB, Bulacan and Batangas. - Optimized As(III) and As (V) analysis using differential pulse anodic stripping voltammetry						Completed on March 31, 2016
Project 2-Bench-scale Production of Nanosensors for the Detection and Analysis of Arsenic in Contaminated Water	3020100000	Data on supraparamagnetic iron oxide (SPIO) immobilized engineered periplasmic binding protein (EPBP) using arsenic contaminated water samples and on field water samples	Data on supraparamagnetic iron oxide (SPIO) immobilized engineered periplasmic binding protein (EPBP) using arsenic contaminated water samples and on field water samples				- Produced in bench-scale and characterized the engineered bacterial periplasmic protein (EBBP) - Quenching of fluorescence intensity in the presence of arsenic is more pronounced compared to other metals - Binding of the wild-type and mutant PBP to the CMD-SPION and characterization of the CMD-SPION - Attachment of the chromophore to the EPBP. - Evaluation of the performance of diazo-PBP (DbPBP) in the presence of arsenic. - Crosslinking of PBP using glutaraldehyde and partial construction	- Produced flouresecent nanobiosensor-bacterial periplasmic binding protein w/ diazo chromophore; concentration dependent- increase in protein leads to increase in fluorescense. Selective to As but also shows fluorescense w/ Cu, Fe and Pb - Produced electrochemical nanobiosensor- carbon paste electrode; cyclic voltammogram showed peaks at -0.5 and -0.1 V w/c may be due to As					Completed on June 30, 2016

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
							of an electrochemical sensor.						
UPLB Project 3. Bench-scale Production of Hand-held Nanosensors for Methane Using Zinc Oxide Film	3020100000	- ZnO thin film using optimized materials and methodology - Characteristics of thin film using XRD - Fabrication and assembly of the arduino - based sensing circuit	Additional same-site visits and additional sites not previously considered to supplement field testing of handheld instrument				- Fabricated ZnO films using the optimized conditions for the Successive Ionic Layer Adsorption and Reaction (SILAR) method - XRD results confirmed the presence of Zn in Produced films. IV electrical characterization was also done - Fabricated and assembled the arduino - based sensing circuit - prototype casing/housing of the handheld instrument already Fabricated and design is undergoing improvement and enhancement.	- Developed prototype methane gas nanosensor - Conducted field testing of fabricated device					Completed on June 30, 2016
Project 4: Bench-Scaling of the Production of Cellulosic Nanocrystals from Kawayang-tinik (Bambusa blumeana) and Its Utilization for Renewable Nanomaterials	3020100000	CNC-reinforced, environment - friendly /renewable nanocomposite materials					- Produced CNC using "Friction Grinder Supermass Colloider" - Characterized CNC using FTIR and AFM - Incorporated CNC (at various concentrations) in starch film leading to improved mechanical and optical properties. Incorporation also resulted to low water permeability of starch film. Optimum concentration of CNC is 3%.	Preliminary tests on production of modified CNC - composite films as wood barrier					

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Project 5: Production of Nanosilica from Rice Hulls and Rice Hull Ash and Bench Scale Verification of the Production of Biodegradable Packaging Using Cassava Starch-RHA Nanosilica	3020100000	- 2.5kg/batch of 97% - 99% pure nanosilica using sol-gel mthod - 7kg/batch of 95% pure nanosilica from industrial grade using hydrothermal method - Improved properties of the packaging film					- ~4.6 kg white rice hull ash can be produced per batch - Bench scale production of nanosilica using hydrothermal method; Produced nanosilica using this method that is 6-13 nm in size - Characterized nanosilica using AFM, BET and DSC Analysis - Extrusion of thermoplastic starch formulations with and without nanosilica and using unmodified and modified starch - Produced thermoplastics with good tensile properties and little to no disintegration in water						Completed on March 31, 2016
National Space Promotion, Advancement and Capability Expansion (SPACE) Development Program	3020100000	- National Space Research and Development Agenda	- Satellite Development Roadmap - National Space Complex, Astronomical Observatory, and Launch Facility Feasibilily Study	- Satellite Development Roadmap - National Space Complex, Astronomical Observatory, and Lavnch Facility Feasibilily Study	- Draft Operational Framework for the National Space Agency		- Conducted consultations with BOI-DTI, AFP, Coast Guard and PAF-RDC relative to the creation of a national space agency - Conducted consultation meetings on national space reseach and development agenda - Participated in various international activities to promote the Philippine's space development initiatives	- Desktop review of existing protocols - Conducted the 1st Satellite Data Sharing Protocol and the 2nd Satellite Developet Roadmap Meetings - Met with policy staff of Sen. Sonny Angara on national space agency legislation	- Crafted a Satellite Development Roadmap - A number of House Bills & Senate Bill were filed by Congressmen & Senators with regard to the establishment of Philippine Space Development & Agency				Completed on August 31, 2016

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Interdisciplinary Signal Processing for Pinoys (ISIP): Software Applications for Education													
Project 1. Developing an Automated Reading Tutor for Elementary Students of Filipino	3020100000	- Transcriptions of 50 to 100 hours worth of speech data - Acoustic models for each sound present in the Filipino language - Word Error Rate (WER)	- Acoustic models for each sound present in the Filipino language - Word Error Rate (WER)	- Miscue Detection Rate (MDR) - False Alarm Rate (FAR)	- Miscue Detection Rate (MDR) - False Alarm Rate (FAR)		- Set up speech recognisers that use feature-based adaptation with adult-speech trained models - Completed integration of initial images and code for the game maps, user access, and comprehension exercises in the Automated Reading Tutor (ART) - Established rules for reading miscue annotation - Annotated reading miscues for collected speech data in Quezon City - Collected speech data from 50 Grade 2 and Grade 3 students, from two (2) elementary schools in Mandaue City, Cebu - Provide a transcript of the text to be read per speech file generated - Conducted speech recognition experiments with "per sentence" language models and lexicons/dictionaries - Continued creating images for the game maps, user, access, and comprehension exercises in the Automated Reading Tutor (ART)	- Generated additional parallel set of reading material and exercises for the automated reading tutor (ART) - Recorded male and female adult speakers reading instructions and materials that will be used in the ART - Collected speech data from 100 Grade 2 and 3 students, from four (4) elementary schools in Quezon City - Transcribed speech data from recording activities - Constructed the speech recognizer's pronunciation dictionary/lexicon - Generated the speech recognizer's language model - Trained the speech recognizer's acoustic model - Drafted images for the log-In page, story, game map and ART exercises - Completed database structure and content to meet the basic requirements of the ART - Codes for the GUI					

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Project 2. Developing Closed Captioning Systems for Philippine Languages	3020100000	- Baseline Automatic Speech Recognition (ASR) for Cebuano, Hiligaynon, Kapampangan and Waray - Filipino closed-captioning system with grammar rules checker	- Baseline Automatic Speech Recognition (ASR) for Cebuano, Hiligaynon, Kapampangan and Waray - Filipino closed-captioning system with grammar rules checker	- Cleaned, processed training data with dictionary and phoneme set	- Set of text files in proper format as needed by the grammar rules checker		- Completed context-dependent ASR for Cebuano, Hiligaynon, Kapampangan and Waray - Improved performance of Filipino ASR system - Working grammar rules checker system	- Data for development and testing are complete - Improved Filipino ASR with auto-segmentation feature - Set of text files in proper format as needed by the grammar rules cheker - Context-dependent MR for Cebuano, Hiligaynon, Kapampangan and Waray is complete - Improved performance of Filipino ASR system. Working grammar rules checker system					
Project 3. Development of a Filipino Language Writing Tool	3020100000	- 20M words of Monolingual Corpus - 10,000 sentences of Parallel Corpus	- 20M words of Monolingual Corpus - 10,000 sentences of Parallel Corpus	Style and grammar checker	Style and grammar checker		- Revised Parallel Corpus is 828 - Developed two (2) prototypes and performed initial testing	- Open source software (Crawler 4J) was used to collect the monolingual corpora, specifically from the news articles. - To date, the total number of Monolingual corpus collected is 10,544,992. - The team was able to gather and encode 2,814 sentence pairs (Tagalog-Tagalog). - Secondary researches were done on the different system architectures for the enrichment of the project	The system's current accuracy is 90.85%. There has been a 0.11% increase from its previous rate of 90.74%.				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Boosting Delivery of ITDI-DOST Training Services through Development and Use of E-learning Packets	3020100000	- Instructional AVPs for mango, calamansi, and charcoal - Uploading of the instructional AVPs	- Instructional AVPs for taho, liquid dishwashing, hand sanitizer, and soap making - Uploading of the instructional AVPs	- Instructional AVPs for herbal and fish processing, and chili sauce - Uploading of the instructional AVPs	Monitor/Evaluate and Revise AVPs		Drafted scripts of the six (6) selected technologies and submitted to concerned experts for review	- All 6 technologies already have a draft AVP but it is still being evaluated, edited and updated. -AVPs will be uploaded after development	Uploaded the AVPs to ITDI Youtube Channel & Facebook account (5 technology AVPs)				Request of Extension (4 months) additional 2 AVPs
Development of Ink Using Carbon from Straight Pyrolysis of Glycerol as Electrodes in Printed Electronics	3020100000	Method for ink formulation and further characterization of carbon properties	Exploratory tests on potential applications of the carbon ink formulation	Exploratory tests on potential applications of the carbon ink formulation	Exploratory tests on potential applications of the carbon ink formulation		- Developed prototype electrode using carbon from pyrolyzed glycerol. Measured electrical property (e.g. resistivity- 5.3 x 104 Ω m). - Develop inkjet-printed Ag nanoparticle interdigitated electrodes (IDE) - Increased yield of carbon from pyrolysis of glycerol by increasing acid concentration in the oligomerization process.	- Ongoing work on carbon ink formulations for other demonstration devices and development of ink-jet printing protocols.	Formulation and inkjet-printing of pyrolytic-graphitic carbon composite inks for application on resistive water activity sensors	- Developed 3 prototype printed electronic devices 1. Interdigitated circuit using printed silver ink 2. Carbon electrode 3 GlyC-graphene composite water activity sensor array - Produced 2 potentially patentable technologies 1. GlyC-based ink formulation 2. Carbon-based water-activity sensor			
Development of Interactive Software and Teaching Guides for Grades 7-10 Mathematics	3020100000	- Interactive software and modules - Data on learning outcomes and on usability	Data on learning outcomes and on usability	- Revised modules and software	- Revised modules and software		Conceptualized software for the various strands in Grade 7 mathematics. The team wrote descriptions for software and review of available software. Such software may be modified for the more advanced topics in Grades 8-10.	- Reviewed the Department of Education (DepEd) Grade 7-10 mathematics curriculum, teaching guides and list of competencies and determined the grade level and topics that would be taught with the use of interactive software. - A sample teaching guide was created and agreed by the team	- Modifications in Geogebra software - On-going refinement of teaching guides based on the outcomes of the apps - Identified the apps and software that will be tested in the schools, to coincide with the syllabus in the respective grade level				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
								members. This will serve as the template to be followed by everyone. Sample guide questions were also formulated.					
Human Hands as Input Device for an Immersive Virtual Reality Experience	3020100000	- Experimental results on hands as input device for virtual reality (VR)	- Game design	- Full - pledged endless sandbox game	- Game test and evaluation		- Initial Game Design and Prototype - Realistic 3D Reconstruction Technique using Photogrammetry - Exploring partnership with Samsung R&D for the content for VR - User-testing Nov 18, 2015 & Jan 27, 2016 @UP Diliman College of Fine Arts	Continuous in development and improvement of Game Design and Prototype	- Storyboard - Scene, Environment (parts) - Interactive hands in VR (with various actions mapped to controller)				
Gitara ni Juan: Development of Prototype Design and Standardization of the Guitar-making Process for Quality Classical Guitars Using selected Philippine Woods	3020100000	Prototype guitars using the same construction process and design employed during the control guitar making	Twelve (12) prototype guitars and a compendium for guitar-making process				Twelve (12) prototypes were already assembled	A total of 16 guitars were made a compendium for guitar-making was developed and is being finalized					Completed on May 30, 2016
Large Scale Production of Laccase from Trametes sp. for Food and Beverage Applications	3020100000	- Laccase with high enzyme activities from Trametes versicolor - Application studies on the locally produced laccase for baking, oil, fruit juice and wine preparations.	- Application of ultrafillered laccase In the preparation of bread dough.	- Optimization of the downstream process of laccase produced in bench (100 L) and large scale (1000 L) volumes - Organoleptic evaluation, allergenicity test and efficacy studies on the products of laccase application in food processes	- Optimization of the downstream process of laccase produced in bench (100 L) and large scale (1000 L) volumes - Organoleptic evaluation, allergenicity test and efficacy studies on the products of laccase application in food processes		- Screened five (5) collected Trametes-like fungal cultures for laccase production using guaiacol plate assay liquid culture production and enzyme activity assay - Conducted experiments on the comparison of different medbm formulations for encase production	- Produced of lactase by selected cultures using the 2.6L bioreactor containing 1.0L working volume - Initiated studies on the downstream processing of laccase bywentrifugation and ammonium Sulfate precipitation					

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Microbial Production of Xylitol from the Hydrolysis Products of Selected Agricultural Wastes	3020100000	- List and collection of isolates with the capability to produce high yields of xylitol using corn and sugarcane wastes as substrate - Have evaluated a good substrate for xylitol production	- Evaluation of a good substrate for xylitol production	- Preparation of locally produced xylitol - Characteristics of the locally produced xylitol as safe for human comsumption	Products containing the locally produced xylitol have been formulated		- Conducted experiments on the growth profile of the Candida tropicalis culture using glucose and xylose substrates	Initiated experiments on the following: - pre-treatment of ground sugarcane bagasse and corn cobs using high temperature-acid combination - use of steam explosion for additional pre-treatment of ground sugarcane bagasse - enzymatic treatment of ground sugarcane bagasse using cellulase and hemicellulase					
Molecularly Imprinted Polymers (MIPs) for the Targeted Purification of Natural Compound	3020100000	- Preparation of terminal and publishable report	MIP procedure for agnuside purification and column prototype				- Isolated and purified agnuside from Lagundi. - Developed MIP for agnuside; continuous optimization of process - Conducted preliminary experiments on MIP procedure for agnuside purification	- Developed MIP purification protocol for agnuside, using solid phase extraction - Determined % imprinted agnuside and % imprinted agnuside per density data					Completed on June 30, 2016
Versatile Instrumentation System for Science Education and Research :: Adapting, Testing, and Deployment (VISSER::ATD)	3020100000	In-class pilot tests in different high schools In Luzon, Visayas, and Mindanao	Master list of secondary and tertiary schools that are interested in purchasing the VISSER handheld, set-ups, and modules				- Developed additional laboratory modules for the different fields in-line with the current K-12 curriculum - In-class pilot testing scheduled in schools until the end of school year 2015-2016	Developed additional laboratory modules for the different fields in-line with the current K-12 curriculum					Completed on May 5, 2016

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Food Security													
Package Development of Bakery Product and Field Testing of Ready-to-Eat (RTE) Smoked Fish Rice Meal and Sweet Potato as Disaster/Relief Foods	3020100000	- Identify sources of smoked fish & establish product specifications - Establish pre-treatment, size, thickness of sweet potato	- Produce 2,000 pouches of RTE smoked fish rice meal using PTD's facility. - Conduct production trials for 2000 pouches of RTE smoked fish rice meal using toll packer's facility. - Bakery product improvement	- Commercial production of 6000 pouches of RTE smoked fish rice meal using toll packer's facility - Test RTE meal samples for commercial sterility & product package performance - Establish sweet potato process schedule using PTD's facility. - Bakery product package development	- Production, distribution and monitoring of product samples to DSWD Cebu warehouse, and establishment of shelf life - Production of RTE boiled sweet potato, conduct commercial sterility test, and establish shelf life. - Continue package development		- Identified 4 sources of smoked milkfish - Conducted initial analysis of smoked fish (pH, water activity, moisture content) - Started establishment on the pre-treatment, size, and thickness of sweet potato.	- Reformulated smoked fish rice meal after initial sensory evaluation/consumer survey. -Established smoked fish rice meal process schedule -Produced 2,250 pouches of RTE smoked fish rice meal using PTD's facility. -Continued establishment of sweet potato pre-treatment and process schedule	- Conducted histamine content determination and microbiological test on smoked fish - Designed corrugated box for smoked fish rice meal and tested for aerial distribution - Established pre-treatment, size, and thickness of sweet potato. - Evaluated monay from 5 different sources				
Development of Competence of the DOST Food Innovation Centers (FICs) and Recognition of Most Innovative Products	3020100000	- Train Food Product Development Teams (FPDT) of DOST FICs on design and development of food prototypes using the DOST developed food processing equipment	- Fully operational FICs and provide sufficient time for product development for a more meaningful competition	- Fully operational FICs and provide sufficient time for product development for a more meaningful competition	- Fully operational FICs and provide sufficient time for product development for a more meaningful competition		- Organized training and workshop of Food Product Development Teams of Regional Food Innovation Center - Developed food product using the DOST designed and fabricated equipment	- ITDI Main FIC developed 231 prototypes out of 13,606 product concepts using water retort, vacuum fryer, and spray dryer - Launched products in AFP and DOST Symposium at Camp Crame; 6th PCIEERD Anniversary; DOST and DTI Technology Industry Update; DOST National Science and Technology Week - Monitored product development activities of FICs in Regions 6,8, and 10 - Identified top 5 products of FICs and judges for the Most Innovative Products competition	- Regional FICs developed 299 prototypes out of 545 product concepts - Monitored product development activities of FICs in Regions 11 and NCR - Conducted preliminary screening to determine 15 finalists for most innovative products				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Establishment of Centralized Facility of Ultra High Temperature/High Temperature Short time Pasteurizer for Milk, Coconut Water and Other Juices	3020100000	- Completion of the clean room facility - Performance testing of the pasteurizer in full capacity - Physico-chemical analyses, microbiological testing, sensory evaluation, and shelflife testing of pasteurized products - Finalization of IEC materials and Operations Manual - Cost analysis of the facility	-	-	-		- Completed preliminary runs. Results of analysis indicate effectivity of pasteurization in both cow's milk and coconut milk. - Establishment of working conditions and specifications for both cow's milk and coconut milk were preliminarily done. - Patent Application filed on January 2016						Completed on March 2016
Sustainable Energy													
Improvement of Locally Designed Micro-Hydro Turbines and Establishment of MHP Test Rig	3020100000	Determination/Assessment of local micro hydro turbine producer/ manufacturer and their product technical documentation of Pelton and Cross flow turbine	Improvement of initial design and finalization of design and drawing	Fabricated prototype based on designed micro hydro turbine	Performance test run using MHP test rig		- Completed the design of the test rig facility for micro hydro - Visited existing hydro power at Brgy. Cayabu Tanay Rizal	Awarded the contract to supply necessary equipment needed for the project	- On-going construction of framing for MHP test rig facility and electrical connection for 3 phase power supply is currently being underway				
Showcasing of ESCO Business Model in Government Offices through Retrofitting of Energy Efficient Technologies	3020100000	Data collection and processing of Energy Conservation Opportunities (ECOs) results	Business model platform on energy efficiency projects for government offices				- Conducted seminar - workshop attended by 22 participants from Technological University of the Philippines (TUP) - Draft MOA between TUP Manila & DBM - SPIB was crafted						Terminated on August 23, 2016
BAYANIHANETS: Building Robust and Sustainable Cooperative Community Networks													
Project 1 - Development of a Multipath Transport Protocol for Cooperative Community Networks	3020100000	- Operational emulation testbed - Protocol implementation and validation results from emulation	Identify pilot site and complete initial network design	Operational pilot site	Operational pilot site		- Assembled testbed and already in active use for experiment - Adopted a different strategy for lower- than-best-effort (LBE) bandwidth sharing based on Linux Traffic Control (tc) on the	- Completed MP-LBE simulation modules, runs, and results - Linux protocol code successfully written and tested					

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
							wireless access points - LBE bandwidth sharing using mechanisms on the wireless access point have already been validated as well						
Project 2 - ARC: An Application Framework for Robust Communications Transport over Community Networks	3020100000	Validation results	Test prototypes using application framework	Proof of Concept (POC) for emergency I communications mesh network	Draft design document for LGU community information network		- Architecture for proposed components for A1 - Validated application framework model for Voice messaging and file sending - Data from logs and running prototype	Validation of application framework model via prototyping and via analysis/ simulation	- Developed blocks for App Inventor with IBR DTN, Relaying, and Group Recovery components - Created applications using the developed IBR DTN components - Added components that would enable data to be able switch groups in order for data to be relayed in a multihop fashion				
Project 3- Development of Routing Metrics for High Throughput and Congestion Free Routing over Wireless Community Mesh Networks	3020100000	- Simulation code - Performance Analysis	- Simulation code - Performance Analysis	Testbed design and implementation	Testbed design and implementation		Implemented the routing metrics in NS2; performed simulations for Channel Busyness	- Established the design and determined the theoretical basis for Channel Busyness (100%) and Channel Capacity (90%) metrics. - Implemented the routing metrics in NS2; performed simulations for Busyness (100%) and Channel Capacity (5%) metrics. - Implemented the routing metrics in NS2; performed analysis for Busyness (90%) and Channel Capacity (5%) metrics	- Tested functionality of routing algorithm that uses the routing metrics - Performed coding and integrating cross layer and CLAW metric in actual devices (e.g. raspeberry pi) - Observed wifi deployment in the prospected locations				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
e-Asia JRP: Development of Functional Nanocarbon-Based Catalysts for Biomass Conversion Processes	3020100000	Functionalized and characterized carbon based catalyst Biofuel synthesized from: 1. direct transesterification of micro-algal biomass 2. non-edible seeds 3. micro-algal oil, kakawate seed oil, and kenaf seed oil	Functionalized and characterized carbon based catalyst Biofuel synthesized from: 1. direct transesterification of micro-algal biomass 2. non-edible seeds 3. micro-algal oil, kakawate seed oil, and kenaf seed oil	Functionalized and characterized carbon based catalyst Biofuel synthesized from: 1. direct transesterification of micro-algal biomass 2. non-edible seeds 3. micro-algal oil, kakawate seed oil, and kenaf seed oil	Functionalized and characterized carbon based catalyst Biofuel synthesized from: 1. direct transesterification of micro-algal biomass 2. non-edible seeds 3. micro-algal oil, kakawate seed oil, and kenaf seed oil		- Pyrolized coconut shell (preliminary run); GCMS analysis • Characterization of functional CNTs (TOFSIM, FTIR, SEM, TGA) - Biofuel synthesized by direct transesterification of micro-algal biomass (preliminary run) - Biofuel synthesized from kenaf seeds - Cooking oil samples from DLSU canteen; preliminary analysis - Marine and freshwater algae samples - Solvent extraction of biodiesel from algae (preliminary run)	- Characterization of sulfonated CNT (SEM-EDX, FTIR) - Marine algae collected from Boracay - Biofuel synthesized by direct transesterification of micro-algal biomass - Supercritical system setup with a new CO2 delivery pump - Biofuel synthesized using micro-algal, kenaf seed, and kakawate seed oil - Biochemically-extracted algal oil - GC analysis of FAME profiling	Biofuel synthesis by direct transesterification of microalgae, kenaf, and kakawate seeds was conducted resulting to 3 37, 13.79, and 15.20 % biomass conversion, respectively. FAME profiling revealed 60-80% yield at 1.2wt% catalyst loading at 200deg C.	- In microwave assisted pyrolysis, charcoal are produced in 20 minutes which is an improved process compared to conventional 24-hour production of charcoal - Non-edible seeds from kenaf and kakawate seeds contain extractable oil that can be used as biodiesel feedstock - Experimental set-ups installed in the laboratory of DLSU: A. Supercritical System Set-up B. MAP MEPCVD Process for CNT Production			
Smart Wire Program													
Smart Wire Project 1 - Energy Efficient Data Acquisition and Conditioning for the SmartWire Sensor Node Project	3020100000	- Design of PCB - Fabricate a 4-channel variable timing DAQ chip	- Fabricate PCB board for version 2 - Fabricate a 4-channel variable timing DAQ chip	- 0.5V 2-channel DAQ with dual ADC, variable timing/self-timed, resolution: 6 bits or better - 0.5V 4-channel DAQ with quad ADC, variable timing, resolution: 6-bits or better	- 0.5V 2-channel DAQ with dual ADC, variable timing/self-timed, resolution: 6 bits or better - 0.5V 4-channel DAQ with quad ADC, variable timing, resolution: 6-bits or better		- 20% complete on the fabrication of a 4 - channel variable timing DAQ chip - 10% complete on the 0.5V 4 - channel DAQ, with QAD ADC, variable timing, resolution: 6 bits or better	- 60% complete on the fabrication of a 4 - channel variable timing DAQ chip - 20% complete on the 0.5V 4 - channel DAQ, with QAD ADC, variable timing, resolution: 6 bits or better	- 90% complete on the fabrication of a 4 - channel variable timing DAQ chip - 30% complete on the 0.5V 4 - channel DAQ, with QAD ADC, variable timing, resolution: 6 bits or better	- Completed the fabrication of a 4 - channel variable timing DAQ chip - Completed the 0.5V 4 - channel DAQ, with QAD ADC, variable timing, resolution: 6 bits or better			

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Smart Wire Project 2 - Integrated Energy Harvesting, Storage and Regulation for the SmartWire Sensor Node	3020100000	- A 10mW on-chip powerline energy harvesting/regulation system, supplying 0.5V with a minimum current 4mA - Design of PCB version 3 - Fabricate a powerline and RF energy harvesting chip	- Fabricate PCB board for version 2 - Fabricate PCB version 3 - Fabricate a powerline and RF energy harvesting chip	- A 10mW on-chip RF energy harvesting/ regulation system, supplying 0.5V with a maximum current of 4mA - A multi-mode on-chip energy harvester supplying a combined output of 0.5V at 4mA maximum current	- A 10mW on-chip RF energy harvesting/ regulation system, supplying 0.5V with a maximum current of 4mA - A multi-mode on-chip energy harvester supplying a combined output of 0.5V at 4mA maximum current		- 30% complete on the fabrication for version 2 - 10% complete on the multi mode on-chip energy harvester (Powerline + RF) supplying a combined output of 0.5V at 4mA maximum current	- 40% complete on the fabrication for version 2 - 20% complete on the multi mode on-chip energy harvester (Powerline + RF) supplying a combined output of 0.5V at 4mA maximum current	- 60% complete on the fabrication for version 2 - 30% complete on the multi mode on-chip energy harvester (Powerline + RF) supplying a combined output of 0.5V at 4mA maximum current	- Completed the fabrication for version 2 - Completed the on the multi mode on-chip energy harvester (Powerline + RF) supplying a combined output of 0.5V at 4mA maximum current			
Smart Wire Project 3 - Energy Ultra-Low Power Computation and Communication for the SmartWire Sensor Node Project	3020100000	- Circuit board design version 3 - A 0.5V integrated node management and protocol processor - Fabricate a powerline and radio-frequency communication chip	- Fabricate circuit board 2 - Fabricate a powerline and radio-frequency communication chip	- A 0.5V integrated node management and protocol processor - A 0.5V integrated node management and protocol processor with powerline and RF PHY interface	- A 0.5V integrated node management and protocol processor - A 0.5V integrated node management and protocol processor with powerline and RF PHY interface		- 30% complete on the fabrication for version 2 - 5% complete on the A 0.5V integrated node management and protocol processor (packet assembly/ disassembly, synchronization, MAC MODEM, error correction etc.), with powerene and RF PRY interface (PSK at 450kHz and 30 Reps data rate for PLC and 2.4 Gliz 00K at 100 kbps for RE)	- 40% complete on the fabrication for version 2 - 10% complete on the A 0.5V integrated node management and protocol processor (packet assembly/ disassembly, synchronization, MAC MODEM, error correction etc.), with powerene and RF PRY interface (PSK at 450kHz and 30 Reps data rate for PLC and 2.4 Gliz 00K at 100 kbps for RE)	- 60% complete on the fabrication for version 2 - 15% complete on the 0.5V integrated node management and protocol processor (packet assembly/ disassembly, synchronization, MAC MODEM, error correction etc.), with powerene and RF PRY interface (PSK at 450kHz and 30 Reps data rate for PLC and 2.4 Gliz 00K at 100 kbps for RE)	- Completed the fabrication for version 2 - Completed the 0.5V integrated node management and protocol processor (packet assembly/ disassembly, synchronization, MAC MODEM, error correction etc.), with powerene and RF PRY interface (PSK at 450kHz and 30 Reps data rate for PLC and 2 4 Gliz 00K at 100 kbps for RE)			
Bio-Oil Production from Agricultural Waste (formerly Biojet Fuel Production from Coconut Oil)	3020100000			- Laboratory scale pyrolyzer modified from hydroprocessing reactor - Physical and chemical properties of agricultural waste (corn stover)	Parametric studies on production of pyrolytic bio-oil from corn stover			Project resume on July 15, 2016	- Modified design of laboratory scale hydroprocessing reactor - Collection of feedstock (corn stover)				
Development of a Grid-Tied Inverter for Philippine Electronics Companies	3020100000	Modularized design and testing of inverter system					- Standalone inverter power level, 1,200W (local load) - Grid-insertion power level 600W (limit)						

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Development of a Low-Energy Ion Source System for the Synthesis of Diamond–like Carbon Films	3020100000	Suspended	Suspended	Suspended	Activities to be determined by 3rd quarter of the year		- Integrated chamber, ion source & support system - Completed the chamber & electrode system design & drawings						
Fabrication of Supercapacitors Using Indigenous Textiles as Electrode Materials	3020100000	Textiles decorated with optimized ratios of individual: conducting polymer (CP) composites with specific capacitance range of 50-100 F/g, areal capacitance 5-40 mF/cm2, and carbon/metal oxide (C/MO) composites with specific capacitance range of 50-100 F/g, areal capacitance 10-40 mF/cm2		Prototype of symmetrical supercapacitor full cells using electrode materials from optimal textile composites			- Capacitive properties of textile/conducting polymer (T/CP) composites degrade at hich scan rates - Functionalized carbon nanotube (CNT) exhibited uniform coating but lower resistance and areal capacitance		- Completed assembly of composites using: - PANi with handloomed and powerloomed textile - PPy with handloomed and powerloomed textile - Assembled symmetrical supercapacitor full cells using electrode materials from optimal textile composites				
Fabrication of a Solid-State Rechargeable Li-ion Battery Using Li7La3Zr2O12 as Solid Electrolyte for Energy Storage Applications	3020100000	High-conductivity LLZ with σ≥10exp-4 S/cm	Full cell assembly (cathode/solid electrolyte/anode)	Li-ion battery coin cell with high capacity at >1C rate (about 140 mAh/g)	Li-ion battery coin cell with good cyclability (50-100 cycles)		- LLZ with ionic conductivity = 8.15x10-5 S/cm (dehydrated sample) - Ga-doped LLZ with 2x10-4 S/cm conductivity at room temperature - Coin cell fabricated using liquid electrolyte with LiFePO4 and Li metal as cathode and anode, respectively (successfully lighting an LED)	Full cell Li battery assembly (LFP, pure LLZ, and Li as cathode, solid electrolyte, and anode, respectively), with the following charging capacity: for deposition of cathode via slurry: 1.8 mAh/g, for slurry with pressing: 15mAh/g	- Successfully synthesized a Li7La3Zr2O12-based solid electrolyte (SE) which showed a targeted conductivity value of >2x10-4 S/cm among other studied samples with compositions of Li7−3xGaxLa3Zr2O12 (x=0, 0.1, 0.2, 0.3) - Successfully fabricated a cathode/SE/anode coin cell battery using carbon-coated nanograined LiFePO4 as the cathode and Lithium as an anode - Achieved a specific capacity of about 140 mAh/g - Retained good coloumbic efficiency even after 50 cycles of charge and discharge			

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Flexible Nanohybrid Supercapacitor Based on Conducting Polymers and Metal Oxides	3020100000	2nd Extension will start on May 2016	- Hybrid supercapacitor from chemically - prepared electrodes - Characterized hybrid supercapacitor	- Hybrid supercapacitor from chemically - prepared electrodes - Characterized hybrid supercapacitor			- Fabricated supercapacitor device from electro-chemically deposited ePPy-MnO2 thin film electrodes and PVA/H3PO4 solid electrolyte; however it has lower device capacitance (compared to individual electrodes) due to higher resistance value. - Characterized and determined the structural, morphological and electrochemical properties of both the assembled electrodes and the fabricated device.	-Ongoing work on the fabrication and characterization of the supercapacitor device to reach target capacitance of 2 F/g.					Completed June 30, 2016
MECO-TECO: Synthesis and Characterization of Novel Metal Nanoparticle-doped Electroactive Polymer Materials and Their Possible Application for Gas Sensing	3020100000	- Chemicals and materials needed mostly for the first year of research ready for use - Characterized synthesized ACAT	Synthesized EPI based on conjugated segments of electroactive ACAT as diamine and BSAA as a dianhydride	- Synthesized EPI based on conjugated segments of electroactive ACAT as diamine and BSAA as a dianhydride - Evaluation of sensor's performance	Evaluation of sensor's performance		- Synthesized ACAT (conducted in CYCU, characterized in UST) - Synthesized and characterized EPI and EPI-Au	- Preliminary results of optimization of EPI and EPI-AuNPs sensor - Gas sensing profile of EPI and EPI-AuNP against H2S gas	- Synthesized EPI/AuNPs fiber mats - Developed a new methodology in growing graphite and PANi to improve homogeneity				
Nanostructured Electrocatalyst Composites for Direct Ethanol Fuel Cell: Preparation, Characterization and Performance Evaluation	3020100000	> 20 mW/cm2 power density	> 20 mW/cm2 power density	> 20 mW/cm2 power density			- Synthesized anode catalysts materials - Fuel cell stack design using computer-aided design	- Conducted fuel cell performance characteristics and optimization of Pt-based catalysts - Synthesized cathode catalysts materials	- Conducted fuel cell performance characteristics and optimization of Pt-based and Pd-based catalysts - DEFC prototype using low cost materials				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Tidal Current Energy Integrated Resource Assessment and Spatial Planning Tool	3020100000	- Web GIS-based Marine Spatial Planning (MSP) Tool for Ocean Renewable Energy - Energy Yield Estimate in GWh/Yr	- Web GIS-based Marine Spatial Planning (MSP) Tool for Ocean Renewable Energy - Energy Yield Estimate in GWh/Yr	- Web GIS-based Marine Spatial Planning (MSP) Tool for Ocean Renewable Energy - Energy Yield Estimate in GWh/Yr	- Web GIS-based Marine Spatial Planning (MSP) Tool for Ocean Renewable Energy - Energy Yield Estimate in GWh/Yr		- Web GIS-based Marine Spatial Planning (MSP) Tool for Ocean is deployed on PhilSHORE's server using kernel-based virtual machine (kvm) and only accessible within UP Diliman's network - On-going revisions on the design, pages, and functions of the webGIS -based Marine Spatial Planning (MSP) Tool for Ocean	- Hydrodynamic models have been Developed for Luzon, Palawan, Mindanao and portion of Visayas which were calibrated against tide level data from International Hydrography Organization tidal station. - Developed PhilShore Tool a web based GIS application that will enable the stakeholders or in general users to access the results of models	- Developed modeling workflow using Delf3D hydrodynamic modeling - Developed flowchart for three (3) processes of Environmental Impact Assessment (EIA) with the Environmental Management Bureau (EMB) - Almost complete Web - GIS based marine spatial planning tool			
Sustainable Mass Transport													
Contactless Apprehension of Traffic Violators on 24-Hour Basis and All-Vehicle Detection System (CATCH-ALL)	3020100000	Artificial Intelligence software	- Artificial Intelligence software - Accurate, reliable and robust result in real time.	- Artificial Intelligence software - Accurate, reliable and robust result in real time.	- Artificial Intelligence software - Accurate, reliable and robust result in real time.		- Color coding and swerving are being done under the development of the system - Ongoing plate character recognition software	- Ongoing development of the Traffic Violation Information System (Travis), which also contains the number of offense and type of penalty (web based). I also provides the statistical information on the violation and frequency	- Vehicle detection and tracking using Optical Flow, Blob Analysis and Kalman Filter, Fuzzy logic and GMSK - Ongoing development of the Traffic Violation Information System (Travis), which also contains the number of offense and type of penalty (web based). I also provides the statistical information on the violation and frequency				
ITS 2. Development of a Customized Local Traffic Simulator - Year 1 & 2 (LOCALSIM)	3020100000	Calibrate traffic simulation model	Calibrate traffic simulation model - Integrate ITS database platform	Simulation model of pilot corridor in EDSA, and entire EDSA including adjacent network			- Enhanced the car - following and lane - changing models to consider congested condition - Improved traffic model parameter specification	Traffic model parameter specification is improved to consider distributions rather than singular Value	- Completed 3-phase lane changing process for the both discretionalry and mandatory lanes. - Added collision-free forced merging, and establishment of right of way to resolve gridlock				

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
ITS 3. An Integrated and Optimal Scheduling of a Public Transport System in Metro Manila (PUBFix) - Year 1 and 2	3020100000	- Web service and service set-up - Design and development of onboard monitoring devices inside the bus - Development of optics and camera system for 4D recordings	- Web service and service set-up - Design and development of onboard monitoring devices inside the bus - Onboard testing and calibration using the monitoring devices inside the bus	- Dissemination of technology			- Network has already been developed - Initial draft discussions, on the automatic passenger counting		- Congestion pricing modelling for CBD, Ayala and BGC given the price changes is being calibrated initially - Proposed road train routes in EMME were also identified, however results might still be presented by March 2016.				
Environment, Climate Change & Disaster Risk Reduction													
Design, Fabrication, and Evaluation of Monitoring and Sampling Devices for Particulate Matter	3020100000	- Integrate all parts and circuitry - Finalize prototype (alpha)	- Documented performance characteristics for either device - High correlation with bench-top aerosol mass monitor	- Documented performance characteristics for either device - High correlation with bench-top aerosol mass monitor			- The project was able to achieve basic device functionality for both monitoring and sampling devices.	Ongoing critical calibration activities for the Sampler	Completed assembly of the prototype Light Scattering Device for Air Particulate Monitoring				Completed on June 30, 2016
Deployment of a Low-Cost Modular Type Rainwater Collection System using Locally Available Materials	3020100000	- Presentation of prototype - Assessment of the prototype - Mass production	- Deployment of the rainwater collector - Information, Education and Communication Campaign - Assessment/ acceptance of the product by end-users				- MOA signing with LGUs (Taguig, Manila and Quezon City) for at least 15 barangays - On-going preparations for installation - Installed one (1) unit rainwater harvesting system @ Sta. Cruz, Manila	- On-going preparations for installation for ten (10) barangays in Quezon City - Installed two (2) units rainwater harvesting system @ Bagumbayan and Lower Bicutan	Installed 12 units in QC; 3 units in Nueva Viscaya; 1 unit in Mt. Province; Sitio Cuadra Mabalacat Pampanga; Nueva Ecija; Barangay San Francisco, Biñan Laguna; Barangay Bagbag, Quezon City; Barangay Sangandaan, Quezon City; Barangay Tandang Sora, Quezon City				
Development of a Compact Wastewater Treatment System Enhanced with Bioaugmentation Technology for Quick Service Restaurant (QSRs)	3020100000	Fabricate compact wastewater treatment system on a pilot - scale setup	Select and evaluate the developed immobilization system	Waste treatment performance of the designed set-up	Waste treatment performance of the designed set-up		Fabricated compact wwt system (Lab scale) For fabrication of a pilot scale set up with identified beneficiary	Assessed wastewater treatment facilities on three (3) store branches of a Quick Service Restaurant (QSR) (i.e. Sucat, Betterliving and Roxas Strip-Libertad) within Metro Manila	- Constructed wastewater treatment system (modified version of the proposed design for QSR) for a food industrial plant - Analysis of wastewater sample from the store of the new QSR cooperator				

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		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Radiation-induced grafting of nonwoven fabrics for waste water treatment to meet Class C effluent heavy metal standards	3020100000	A grafted nonwoven fabric with at least 150% degree of grafting and functional group density of at least 2.5 mmole per gram adsorbent.	Data for the heavy metal ion capacity of the synthesized materials in packed column	Data for the heavy metal ion capacity of the synthesized materials in packed column	Data for the heavy metal ion capacity of the synthesized materials in packed column		- Performed 100% total grafting variable combinations in the optimization process - Developed a grafted non-woven fabric with at least 150% degree of grafting and functionalized group density of at least 2.5 mmole/gram adsorbent	- Developed a packed column which can be regenerated and reused for at least five (5) times - Initial data for cost-benefit analysis of the grafted non-woven fabric were generated	- Synthesized adsorbents successfully applied for removing Chromium (Cr), Lead (Pb), Cadmium (Cd), Arsenic (As) and Mercury (Hg) from aqueous solutions - Successfully removed bound Cd ions from IDA - functionalized adsorbents using organic acids				
Geophysical Exploration Instruments with Micro-seismic Imaging and Tomography for Energy Exploration in the Philippines	3020100000	Commencement: April 15, 2016	- Designing, prototyping, and testing of Qex - Manufacture of 60 units of Qex - Selection of participating sites	- Designing and prototyping of Qex - Manufacture of 60 units of Qex - Selection of participating sites - Deployment and installation - Software for hypocenter location	- Designing and prototyping of Qex - Deployment and installation - Software for hypocenter location and tomography		Start of implementation will start on April 2016	Working on the electronics of amplifier so that it matches the geophone and the connecting digitizer	- Manufactured 16 Qex units which is still being tested				
Development of Wireless Sensory Network System for Structural Integrity Monitoring of Bridges (SMART BRIDGE)	3020100000	Commencement: April 19, 2016	A scalable sensor network that will allow remote structural assessment of bridges in real time	- A scalable sensor network that will allow remote structural assessment of bridges in real time - Pilot-test evaluation report on the performance of wireless sensor network	- Pilot-test evaluation report on the performance of wireless sensor network		Start of implementation will start on March 2016	- Prototype development of sensors and MEMS accelerometer - Survey of the selected bridge and acquire plans and data related to the selected bridge	- Testing, calibration and enhancement of the developed sensors and MEMS accelerometer - Designed and developed the power supply with solar panel - SHM System Development - Create structural models of the bridge using the as-built plans	- Designed, developed, tested and reproduced weather and theft proof MEMS based accelerometer device and wireless system - Designed and developed standards in locating and installing developed MEMS through as built models of the bridge - Completed web design of the Smart Bridge			

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Development of Integrated Risk Management Framework for Non-Engineered Vernacular Houses In South-east Asia For Effective Disaster Risk Reduction	3020100000		Working Designs for House Prototypes for coastal, inland, and upland for Full-Scale Wind Testing	Analysis of working designs for structural optimization via Solid Thinking Hyperworks Suite	Construction of prototype housing based on the Build Back Better Program Research located in flagship site in Leyte			On-going MOA Processing	- Completed Technical Drawings/Designs for the prototype housing - Preparation of Bidding Documents - Processing of MOA with former Senator Angara for the construction of the prototype housing in Baler	- Site survey and reconnaissance of possible sites in Baler - Finalized Architectural and MEPS drawings of the Self-build housing prototype that will be constructed at Baler			
The Architecture of Filipino Resilience: The Adaptation of Traditional Wisdom from Selected Philippine Vernacular Architecture into Modern Building Systems	3020100000			Construction of Housing Prototype	Construction of Housing Prototype		Expected output were delivered and during its Oral Presentation last 06 March 2016, external evaluators and some PMT members recommended to construct a housing prototype and conduct IEC campaign for the promotion of BBB outputs	Request for project extension	- Completed Architectural and MEPS Drawings for KB2.1 and KB2.2 -Finalization of Cost and Structural Drawings for KB2.1 and 2.2	- Architectural guidelines for disaster-resilient site planning and building design - Appropriate Filipino architectural archetypes especially for single-family homes and evacuation centers that are designed for optimum structural performance against risks such as typhoons and earthquakes - Finalized Architectural and MEPS drawings of the Self-build housing prototypes that will be constructed at DOST			

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Development of Temporary Shelter System for Disaster Stricken Areas	3020100000	Prototype of temporary shelter	Prototype of temporary shelter				- Fabricated scale model and other components and connectors of the prototype - Conducted performance testing on the temporary shelter components	- Fabricated scale model and other components and connectors of the prototype. Conducted performance testing on the temporary shelter components. - Consulted several experts, stakeholders and professionals to improve the design of the temporary shelter. - Designed, fabricated, installed and showcased the actual Temporary shelter with installation manual					Completed on April 2016
Marine Weather Forecasting using High Frequency Doppler Radar	3020100000	- Select sites for the two (2) High Frequency Doppler Radar (HFDR) units dedicated in Palawan - Data archive (raw and analyze data) of wave height and direction, wind direction and speed - Marine data analytics (algorithm)	Extended with additional funding from 13 April 2016 to 31 December 2016 to facilitate the construction, installation, testing and commissioning of additional two (2) HFDR units in Palawan				- Testing and commissioning of NETC and Masinloc, Zambales - Conducted SeaSonde Basic Training last March 30-31, 2016 at PAGASA and on-site training at Zambales last 01 April 2016 with 60 participants from AFP, PAGASA, DOST, and UP-EEEI/MSI	- Site Negotiation and MOA processing with the owners of the selected sites in Palawan. - Facilitated the delivery of the additional units HFDR units at WESCOM Palawan - Troubleshooting and re-installation of the damaged Transmitter antennae and Airconditioning unit at NETC, Zambales	Palawan: 1. Completed Civil Works for Quezon Site 2. Awaiting MOA with AFP to be signed by DND Secretary as pre-requisite for the civil works in Rizal (Tarampitao Point) Zambales: 1. On-going operational and performance testing of the damaged Masinloc transmitter antennae and re-installation of Airconditioning fan. 2. For NETC, repaired the VSAT broadband damaged by Typhoon Glenda	- Installed and commissioned HFDR system in Zambales. - Ongoing reliability testing and analysis of transmitted raw data - Completed installation of HFDR system in Palawan			

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Dec 2016	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
Regional Disaster Science and Management S&T Capacity Development (Phase II)	3020100000	- Regional and provincial inventory of hazard maps and in-placed multi hazards early warning systems - Multi-hazard exposure database	- Hazard assessment and vulnerability and capacity preliminary study - Distribution of survey forms and inventory of DRR/CCA and in-place multi-hazard early warning systems in Region I Earthquake Risk Assessment using surveyed data Training	- Hazard assessment and vulnerability and capacity preliminary study - REDAS Stakeholders Forum on 31 August 2016	- Train SUCs and LGUs - Conduct stakeholder's forum - DRR - CCA web-based database for Region I provinces		- Conducted training in Region 1 held at Batac, Ilocos Norte with 51 participants - Prepared/presented proposal on Mainstreaming of Climate Change Adaptation (CCA) and Disaster Risk Management(DRM) in Higher Education Curriculum of the Isabela State University - DOST Regional office started to collect and check multi hazards early warning systems	- Survey and inventory of DRR/CCA and in-place multi-hazard early warning systems of each municipalities in Region I is almost complete - Conducted training on Earthquake Risk Assessment using surveyed data at DMMMSU, Bacnotan, La Union with a total of 40 participants coming from SUCs, OCD, PDRRMOs, DPWH and NEDA of Region I	- Conducted REDAS Stakeholders Forum at Lingayen, Pangasinan - Preparation of the provincial web-based database in Region I - Preparation of needed documents for the REDAS Software Training for the Province of Ilcos Norte	- Trained SUCs technical personnel of Region I - Trained LGU personnel of the province of Ilocos Norte - Conducted REDAS stakeholders forum with LGUs, OCD, DPWH and NEDA of Region I - Established DRR-CCA web based database in each province of Region I			
Integrated Scenario-based Assessment of Impacts and Hazards	3020100000	- Creation of WebSAFE Mobile Application - Risk maps of the 15 provinces					Completed building footprints of Cavite		- Completed the following: - Building delineation for Taguig and Pateros - Building footprint mapping in Cavite and Camiguin - Developed WebSAFE Mobile Application, now for beta testing - Participated in PDRA Meetings				
PagBAGO (Behavior-Adviser Guide and Operation towards Modeling Resilient Behavior during Disasters	3020100000			- Signed letters of commitment - Identification of agents, behaviors and processes	- Behavior models (mathematical and software modeling equations) - Web interface to enter behavior data and equations in an open source agent based simulation			- Commencement: 24 May 2016 - Training in CASOS (June 12-18, 2016) - Continuing work with IM-TWG on Common Operational Datasets (CODS) and Functional Operational Datasets (FODS) with NDRRMC - Continuing training with OCD on ICT	- Conducted meetings with pilot sites (Bauang and Santa, Ilocos) - Started the layout of the web interface and empire based disaster scenarios	Conducted initial surveys to identify disaster agents			