PCIEERD CAPACITY DEVELOPMENT CALL FOR PROPOSAL (CFP) 2021

The Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) of the Department of Science and Technology (DOST) is ready to accept capability development proposals for 2021 to have a full complement of country's human resource and R&D needs and requirements. This Call for Proposals is for specific priority areas identified in the Harmonized National R&D Agenda (HNRDA) 2017-2022 in the areas of industry, energy, emerging technology and other special concerns.

A. SECTORAL COVERAGE:

Industry:

- Electronic & Semi-Conductor Industries
- Mining and Minerals
- Metals and Engineering
- Food Processing
- Process

Energy:

- Energy Efficiency
- Transportation

Emerging Technology

- Materials Science and Nanotechnology
- Genomics / Biotechnology
- Information & Communications Technology
- Space Technology Applications
- Photonics
- Artificial Intelligence
- Data Science
- Creative Industries

Special Concerns

- Climate Change Adaptation
- Disaster Risk Reduction & Management
- Environment
- Human Security

B. CALL OBJECTIVES

- 1. To develop and enhance Filipino Research and Development (R&D) capabilities of academic/research institutions and Department of Science and Technology (DOST) agencies through degree programs, conduct of research activities, and expert mobility in the industry, energy and emerging technology sectors in order to meet the present and future human resource requirements.
- 2. To encourage Filipino researchers to be more productive researchers by providing support for disseminating their research outputs in the industry, energy and emerging technology sectors in local and international conferences, for a and similar events.
- 3. To upgrade and/or develop the research capabilities of the academic and research institutions and relevant DOST-attached agencies, through the development and/or upgrading of its research laboratories and facilities.

C. COMPONENTS

1) HUMAN RESOURCE DEVELOPMENT PROGRAM (HRDP)

a. Visiting Expert Program

The program is open to institutions needing faculty/experts from another institution who possesses the required expertise not available in the host/requesting institution. The program may also be extended to foreign visiting experts under meritorious cases where the expertise is not available locally. The program can be conducted for a maximum of one (1) semester or equivalent to six (6) months.

b. Research Attachment

This component is open to MS and PhD students or degree holders, or existing project staff or researcher of an ongoing PCIEERD or DOST-funded project, in the science and engineering sectors, who need to conduct their research in a host institution, including foreign universities and research institutions to avail of the host institution's facilities and research expertise. The foreign host institution may be identified by PCIEERD or the grantee, and in the latter case, should be acceptable to PCIEERD. The research work must be aligned with the PCIEERD sectoral priority areas / HNRDA. The duration of the research attachment / fellowship must be for a minimum of two (2) weeks and a maximum of 1 year.

c. Laboratory and Equipment Research Grant

This component is open to BS and graduate students who will conduct research projects directed towards developing emerging technologies and exploring innovations in the PCIEERD sectoral priority areas such as, but not limited to, materials research, electronics and applied physics. The grant is an outright research subsidy which will finance expenses for testing and analysis fees specifically in the use of any of the equipment in the identified DOST- and DOST-funded facilities, centers and laboratories. The duration of the research is for a maximum of two (2) years.

- d. Presentation of Scientific Outputs in Conferences, Symposia, Fora, Seminars
 This component covers support to researchers, faculty, and other S&T personnel of
 academic and research institutions for presentation of research results in refereed
 scientific/technical conferences, fora, seminars, and workshops. The program is aimed at
 seeking recognition for Filipino researchers, soliciting peer review and developing
 professional growth in support of the HNRDA and the PCIEERD sectoral priority areas.
 The paper to be presented must be within PCIEERD priority areas or HNRDA. Priority is
 given to young and budding researchers.
- e. Publication of Scientific/Research Papers in Scientific/Technical Journals
 This component covers support to researchers, faculty, and other S&T personnel of
 academic and research institutions for the publication of research results in refereed
 scientific/technical journals and related publications. This component is aimed at seeking
 recognition for Filipino researchers, soliciting peer review and developing professional
 growth in support of the HNRDA and the PCIEERD sectoral priority areas. The paper to
 be published must be within PCIEERD priority areas or HNRDA. Priority is given to young
 and budding researchers.
- f. Conduct of Seminars, Conferences, Workshops

This grant will cover technical conferences, seminars, trainings, scientific presentations aimed at developing professional growth and acquiring specialized skills and new knowledge in PCIEERD's identified R&D priority areas of concern. This aims to provide assistance to academic institutions as well as scientific and professional organizations in the conduct of seminars, conferences, workshops, fora and trainings which aim to contribute in the development and enhancement of R&D capabilities in the industry, energy and emerging technology sectors.

2) INFRASTRUCTURE DEVELOPMENT PROGRAM (IDP)

The IDP shall cover provision of support for upgrading of research laboratories and facilities of academic and research institutions in areas within the PCIEERD sectoral priority areas or the Harmonized National R&D Agenda (HNRDA) and where there is inadequacy of research expertise and/or facilities.

The IDP shall include upgrading and/or setting up of research laboratories, purchase of laboratory equipment (including highly specialized software)/facilities and small research grants aimed at developing research capabilities.

Preference is given to PCIEERD Consortium member institutions located in Regions IV-B, V, IX and X. However, this should not preclude other Consortium members to submit an application

D. ELIGIBILITY REQUIREMENTS

Any Filipino, public or private entity with proven competence may apply for GIA support of DOST-PCIEERD and its grant-giving units, provided that projects fall under the specific research areas with overall goal to benefit Filipinos. Preference will be given to public and private universities and colleges, Research and Development Institutes (RDIs), R&D Consortia, non-profit laboratories, other public or private non- profit S&T institutions located in the Philippines. Non-profit S&T organizations are those, which: (1) are operated primarily for scientific, educational, service, or similar purposes in the public interest; (2) are not organized primarily for profit; and (3) use its net proceeds to maintain, improve, and/or expand its operations. Non-profit organizations engaged in lobbying activities are not eligible to apply.

Cost Sharing - the Applicant should provide at information on the counterpart funding to be provided in implementing the project. Only eligible and allowable costs may be used for counterpart fund and/or in-kind contribution (ex. utility costs, office space rental, etc.), as determined by DOST-PCIEERD. The proposal must describe how the applicant will provide the counterpart fund/in-kind contribution and the role that DOST-PCIEERD funding will play in the overall project.

E. PROPOSAL AND SUBMISSION INFORMATION

Proposals must be submitted in the E-proposal portal at <u>http://dpmis.dost.gov.ph</u> **from December 1 to 31, 2020**. Proposals received after the submission deadline will be considered late and returned to the sender without further consideration unless the applicant can clearly demonstrate that lateness was due to mishandling on the part of DOST-PCIEERD.

Content of e-Proposal

- 1. Letter of Intent and Endorsement Together with the proposal, DOST-PCIEERD requires submission of a formal letter of intent from the applicant and an endorsement from the authorized head of organization.
- 2. The authorized head of the organization will also be the principal signatory of their organization for the research agreement award. The letter of Intent and Endorsement Letter should be addressed to:

DR. ENRICO C. PARINGIT

Executive Director
Philippine Council for Industry, Energy and Emerging Technology
Research and Development (PCIEERD)
Department of Science and Technology (DOST)
5th Level, Science Heritage Building, DOST Compound
Gen. Santos Ave., Bicutan, Taguig City

- 3. Proposal Format Applicants shall follow the DOST GIA Proposal Format below which will be accomplished in the e-Proposal portal at dpmis.dost.gov.ph.
 - a) Project Title The title should reflect the specific capability development activity being proposed.
 - b) Project Leader- refers to a project's principal researcher/implementer.
 - c) Implementing Agency- the Department/College/institution/organization of the Project Leader.
 - d) Cooperating Agency/ies refers to the agency/ies that support/s the project by participating in its implementation as collaborator, co-grantor, committed adopter of resulting technology, or potential investor in technology development.
 - e) Site/s of Implementation location/s where the project will be conducted. Indicate municipality, district, province, and region.
 - f) Project Duration specific dates that the project will be undertaken (month/year)
 - g) Total Project Cost reflects the necessary support needed for Personnel Services, Maintenance and Operations, Equipment. Specific HRDP/IDP program has different allowable expense items.
 - h) Funding Source specific funding source, including counterpart funds.
 - i) Project Description formally written declaration of the project and its idea and context to explain the goals and objectives to be reached and other relevant information that explains the need for the project and aims to describe the amount of work planned for implementation; refers to a simple explanation or depiction of the project that can be used as communication material.
 - j) Significance refers to the alignment to national S&T priorities, strategic relevance to national development and sensitivity to Philippine political context, culture, tradition and gender and development. VIII. Review of Literature Refers to the following: (a) related researches that have been conducted, state-of-the-art or current technologies from which the project will take off; (b) scientific/technical merit; (c) results of related research conducted by the same Project Leader, if any; (d) Prior Art Search, and; (e) other relevant
 - k) Objectives Statements of the general and specific purposes to address the problem areas of the project.
 - I) Methodology Discuss here the following: (a) variables or parameters to be measured and evaluated or analyzed; (b) treatments to be used and their layout; (c) experimental

- procedures and design; (d) statistical analysis; (e) evaluation method and observations to be made, strategies for implementation (Conceptual/Analytical framework).
- m) Technology Roadmap (if applicable) A visual document that communicates the plan for technology. It is a flexible planning technique to support strategic and long-range planning by matching short- and long-term goals to specific technology solutions.
- n) Expected Outputs (6Ps) Deliverables of the project based on the 6Ps metrics (Publication, Patent/Intellectual Property, Product, People Service, Place and Partnership, and Policy), defined as:
 - 1. Publications published aspect of the research, or the whole of it, in a scientific journal or conference proceeding for peer review, or in a popular form. There should be definite identification of target publications (journal name, article title, authors), even at the proposal stage. At the monitoring stage, the percentage completion should be standardized (manuscript prepared, submitted, under review, revised, accepted). At the project end, the acknowledgment by publisher of the article manuscript submission should be provided
 - 2. Policy science-based policy crafted and adopted by the government or academe as a result of the study. The kind of policy issuance/s should be identified (RAs, DAO, MC even city/muni ordinance if that is where it would be applicable) and should be written in a manner consistent with what these policies would look like. These should not be just white papers loosely circulated. It should be sent to target agencies/offices for consideration.
 - 3. People services people or groups of people, who receive technical knowledge and training. At the end of the project, the actual names of students involved should be indicated including degrees attained, papers written etc.
 - 4. Partnerships linkage forged because of the study. MOAs/MOUs and letters of support should be submitted as supporting evidence/s.
 - 5. Patents Patent/Intellectual Property- proprietary invention or scientific process for potential future profit. At the end of the project, the applications submitted to IPOPhil must be attached in the report.
 - 6. Product invention with a potential for commercialization.
- o) Work Plan specific activity to be undertaken per month to produce the promised results to attain the objectives of the project.
- p) Project Management details on both the technical and administrative side of the project should be clearly indicated, including the sustainability plan to ensure continuity of the project amidst financial, social and environmental risks, including post-project implementation, if applicable.
- q) Supplementary Files These include related information on the proposed program/project like, resumes or curriculum vitae, support letters from relevant agencies/organizations, market supply/demand projections, etc. These will also be submitted through the e-Proposals portal.
 - 1. Workplan describe specific activities and/or methods to be undertaken and estimated timeline for each task.
 - 2. Endorsement of the Head of Agency
 - 3. Endorsement of the Consortium Chairperson (for Consortium proposals)
 - 4. List of faculty and researches undertaken
 - 5. Letter of Intent/Letter of Cooperation from interested adopters of the project results (specifying role/s and monetary/in-kind contribution in the project)

F. PRE-PROPOSAL ASSISTANCE AND COMMUNICATION

DOST-PCIEERD Project Managers are available to provide appropriate assistance to potential applicants interested in competing for this Call for Proposals. This may include assistance to potential applicants in determining eligibility of the applicant or the applicant's proposed project for funding, questions about administrative issues relating to the submission of a proposal, and clarifications on the announcement.

A DOST-PCIEERD Project Manager will be assigned to each project proponent to provide guidance in the review/evaluation of the proposals. A notification will be issued to eligible entities whose proposals have been evaluated and recommended for funding.

For further inquiries on the specific program, the applicant my contact:

Human Resource Development Program

MARIE CHRISTIE B. SANTOS

Senior SRS
Human Resource and Institution Development Division
4th Level Science Heritage Building
DOST Complex, Gen. Santos Ave.
Bicutan, Taguig City
mbsantos@pcieerd.dost.gov.ph

Infrastructure Development Program

ROXANNE E. DELOS REYES

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roxanne.delosreyes@pcieerd.dost.gov.ph

All other questions or comments must be communicated in writing via electronic mail to:

GLENDA DORCAS T. SACBIBIT

Supervising SRS and Officer-in-Charge Human Resource and Institution Development Division 4th Level Science Heritage Building DOST Complex, Gen. Santos Ave. Bicutan, Taguig City gtsacbibit@pcieerd.dost.gov.ph

Commencement Period for Approved Project: The target commencement period for approved projects may start on 01 January 2021 or earlier depending on funding availability.