

RESEARCH AND DEVELOPMENT POLICIES FOR NATIONAL PINGTUNG UNIVERSITY OF SCIENCE & TECHNOLOGY

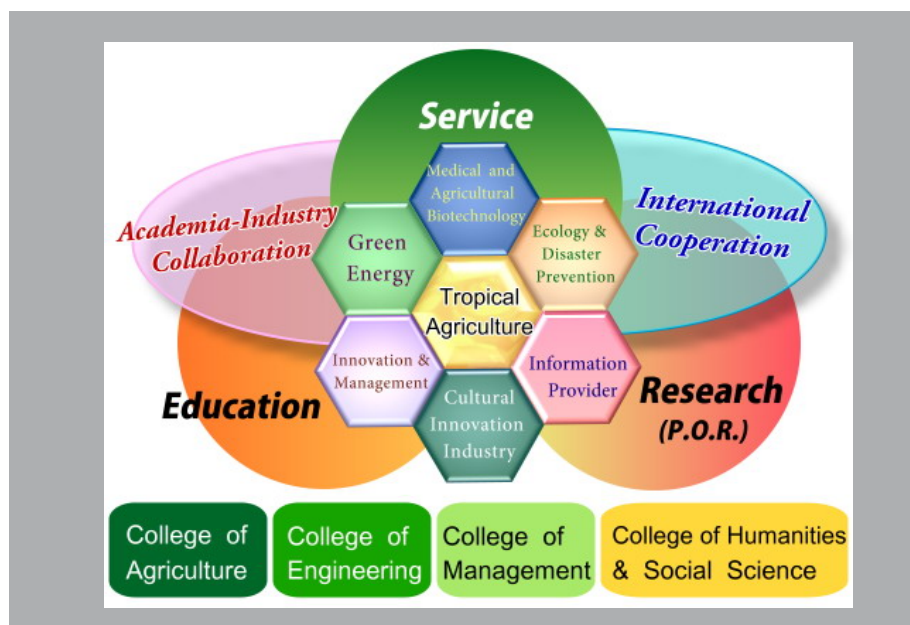
Introduction

National Pingtung University of Science and Technology (NPUST) grew out of the Institute of Agriculture. In order to conform to the trend of internalization, NPUST has reformed herself to a polytechnic university with Colleges of Agriculture, Engineering, Management, and Humanities and Social Sciences. The major education aims of NPUST are to specialize in tropical agriculture and to educate related professional manpower. The University does not only promote fundamental researches, but also devotes herself to industry-academia collaborations so as to educate talented students to acquire competencies of professionalization, internationalization, and spiritualization. On the basis of tropical agricultural R&D accomplishments, NPUST has formed a leading research team in this field.

Taskforces

The Office of Research and Development (ORD) of NPUST is divided into 2 Divisions, Research Development Division and Technology Collaboration Division, to jointly promote the tasks of research and development of the University. The Research Development Division is mainly in charge of research project management, re-

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search database construction, patent and technology transfer management, service center management, and incentive program promotion; the Technology Collaboration Division is in charge of technology service platform, local business incubation, industry-academia collaboration, National Science Council related business, enterprise special project, and personnel training. The

Ministry of Education and the Ministry of Economic has also financially supported the University to establish the Center for Regional Industry-academia Collaboration and the Innovation and Incubation Center, respectively, to motivate the work of regional industry-academia collaboration and newly established business incubation. The performance of the Center for Region-

al Industry-academia Collaboration was rated as A rank by the Ministry of Education. The survival ratio of newly established businesses in the Innovation and Incubation Center achieved as high as 100%. The achievements are remarkably successful.

Guiding Principles

Based on the research and development fortes of "tropical agriculture," the University has systematically developed the following 6 distinguishing research fields: including medical and agricultural biotechnology, green energy, ecology and disaster prevention, industry innovation and management, Information provider, and cultural innovation industry. The University also emphasizes "product oriented research (P.O.R.)" as the most important guiding principle for her research and development strategies.

The research and development policies of the University in next 6 years are as follows:

1. The ORD has integrated her Intellectual Property Taskforce, Center for Regional Industry-academia Collaboration, and Innovation and Incubation Center into a joint service counter, and aggressively participated in the promotion work of research achievements. The ORD has also made all efforts to advance the work of industry-academia collaboration globally, and mutually implemented the management and promotion of the intellectual properties of NPUST.
2. Up to 2008, NPUST has put forward more than NT\$20,000,000 of Administrative Affaires Fund to integrate her research capacity and initiate 9 distinguishing research centers, including the Center for Active Natural Products Development, Electronic Commerce Research Center, Emerging Compounds Research Center, Animal Vaccine and Adjuvant Research Center, Green Moto Vehicle Research Center, etc. to expand her specialties and unique features of tropical agricultural technologies.
3. NPUST has granted various incentive programs for faculty to participate research and development activities. Ongoing pro-

grams include Faculty Research Encouraging and Financially Supporting Program, Faculty Attending International Conference Financially Supporting Program, Newly Hired Faculty Initiating Research Financially Supporting Program, Achievements of Industry-academia Collaboration and Patent Application Financially Supporting Program, and Academic Journal Publication Rewarding Program. Prospective programs include Early Technology Transfer Program, Faculty Striking for Project Rewarding Program, etc.

4. NPUST has included industry-academia collaboration achievements into faculty evaluation program and faculty promotion program.

Research Objectives

In order to advance her national and international academia and research competitive capacity and extend herself to be a key institute for Asia-Pacific Agricultural Science and Technology researches, NPUST has set up her research and development goals as follows:

1. Continue to advance her academic achievements and world notability: Look forward to leap her Webometrics Ranking of World Universities to top 1500 in 3 years. Continue to move her ranking to top 1000 within 6 years. And forge ahead the goal of the ranking of Asia universities to top 100.
2. Elevate the case numbers of research projects and their funding: Maintain yearly growth rate at 5%. After 6 years, the yearly research projects and funding are expected to achieve 800 cases and NT\$800,000,000.
3. Enter the top 100 institutes who hold the greatest number of inventive patents: NPUST has put forward Administrative Affaires Fund to subsidize and award faculty's research achievements, inventive patent applications, and to help faculty to transfer and commercialize faculty's achievements in research to industry since 2005. Currently, the average yearly growth of inventive patent applications is approximately 20 cases. NPUST has entered the top 100 institutes who own the greatest application number of inventive patents since 2006.

When the applied inventive patents pass the inspection and obtain the patent licences, NPUST will enter the top 100 institutes who hold the greatest number of inventive patents.

4. Strengthen technology transfer of research achievements: Currently, NPUST processes her technology transfer of research achievements about 10 cases per year. The fee for the exploitation of the technology is between NT\$2,000,000 and NT\$10,000,000. NPUST will try to process her research direction analyses and patent portfolio planning more effectively, so the number of the technology transfer cases can double in 3 years and the license fee of technology transfer can reach 1% of total research budget.

5. Expand the services of industry-academia collaboration and micro-business incubation: The total funding (including the funding from National Science Council, Council of Agriculture, Ministry of Education, enterprises, juristic persons, and other organizations, but not from general government's commission projects) is expected to be NT\$100,000,000. The number of current incubation companies in the Innovation and Incubation Center is expected to reach 40. Intellectual property and technology transfer cases (including cases for regional alliance institutes) are expected to reach 25.

Prospective

The University was found since 1924. She is about to become a centennial university. In future, the University will endeavor herself to construct better teaching environments. Entirely improve teachers' teaching qualities and students' learning achievements. Open up global visions and connect to the world. Raise the world notability. When NPUST becomes a centennial university, the research achievements of NPUST can hopefully rival those of other comprehensive research universities nationally and internationally. Strive toward the aspiration of being among the top 100 universities of Asia.