



The Papua New Guinea
University of Technology

Academic Board

Research Committee

RESEARCH MANAGEMENT

Policies and Guidelines

2014

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FOREWORD

The Papua New Guinea University of Technology produced its first *Research Committee Guidelines* in 1986. The Guidelines were revised in 1994 with the aim to promote research activities in line with the Mission of the University. The following activities were emphasized for promotion of research.

- Monthly Research seminars
- Quarterly Research Newsletter: *Research NIUS*
- Short Term Research Fellowships
- Consideration and approval of Research Project grants
- Consideration and approval of Conference Funding for presentation of papers

The research activities mentioned above suffered a number of setbacks due to financial problems encountered by the University since the floating/devaluation since 1995 of the PNG currency Kina. In real terms, the State grant to the University at one stage was reduced to just about 50%. As a result, there has been high turnover of qualified academic staff, mainly expatriate. Some national staff also left the University for jobs in industry which offered better remuneration package. Consequently, Research NIUS was discontinued due to lack of contributions from academics, Short Term Fellow was not implemented due to shortage of fund, and research grants and conference funding were severely limited.

In pursuance of the strategic goal of scholarship character improvement of the University, research and postgraduate teaching activities were gradually improved since 2005 due to better State grant and more favorable exchange rate. Academic departments were encouraged to offer postgraduate programs including those based on research. Introduction of Graduate Assistantship Program (GAP) to encourage national staff to undertake postgraduate studies, and revision of research and conference funding are among some of the initiatives undertaken by the Research Committee since 2005.

The Research Committee has again reviewed the research policy document with the objective of promoting research activities leading to enhanced research culture in the University. The new policies stipulate development of a corporate research plan, mandatory research plans in all academic departments, promotion of departmental seminars, restoration of University Seminar series, increased upper limit of research funding for postgraduate research, allowing GAP scholars to attend in-country conferences, increased level of conference funding. In addition, academic departments will be required to identify research focus areas relevant to Papua New Guinea. Young researchers will be given training in research Methodology, proposal writing, scientific writing, etc.

The revised policy has been approved by the Academic Board

Professor M A Satter Ph D
Pro Vice Chancellor Academic &
Chairman –Research Committee 2013

PNG UNIVERSITY OF TECHNOLOGY

STRATEGIC RESEARCH PLAN 2013-2015

The PNG University of Technology (Unitech) was a technical college until it was elevated to the status of university in 1965. Unitech teaching activities continued to emphasize on skills training in various fields of engineering, technology, applied and natural sciences with the purpose of supplying manpower to local industries, businesses and government departments. As the university grows in terms of both the number of programs it offers and the student population, the need for postgraduate studies and research became more apparent. From 2005, one of the strategic goals of the university was the promotion of scholastic character through postgraduate studies and research. The tasks of promoting this strategic goal were vested with the Office of the Vice Chancellor.

Postgraduate studies have picked up well with 13 departments (out of 15) having PG programs at diploma, master and doctorate levels. Research activities are also picking up, but needs further promotion. Hence the needs for a strategic research plan. The plan will show a definite commitment of the university to promotion of research. It will be aligned to the Mission of the University, and the national Vision 2050. It will provide guidance to various departments and research centers.

Research may be defined as systematic and diligent search for new information. It may lead to 'discovery and interpretation of new facts or revision of accepted theories and laws or finding practical applications of new or revised theories and laws'. Research methodology may take the form of theoretical study or experimental investigation or a combination of both.

Strong research programs at the University will have synergy with teaching and learning at both postgraduate and undergraduate level leading to enhanced academic quality.

Unitech is now well suited to promote research because of its manpower strength of about 180 academics, 500 support staff and 3000 students. Being located in Lae, the industrial hub of PNG, the University has the advantage of close cooperation in research with a large number of industries, business organizations and government agencies. It has also a number of MOUs for cooperation with overseas universities.

Each of the academic departments and research centers will develop its sub-plan in alignment with University Research Plan. The sub-plans will be more specific to their academic disciplines.

The fields of research can be aligned with academic disciplines. Thus, research topics may include those from agriculture, forestry, applied chemistry, food technology, mining and mineral processing, drilling and exploration, architectural designs and heritage, energy and power supply, telecommunication, roads and highways, surface hydrology, disaster management, earthquake resistant design, downstream processing, culture and traditions, tribal integration, land issues, sociology, environmental sustainability, leadership development, promotion of SMEs, etc. Each academic department and research centre will have distinctive focus areas where research efforts will be directed.

Table 1 outlines the University research Plan for the next **three years**.

Table 1: Strategic Research Plan			
Goals and Actions			
Goals	Actions	Responsibility	Comments
1. Increase Research Project Funding	Increase Unitech grant allocation	SEM	
	Support competitive bids for OHE research fund	RC	
	Increase support for research of GAP scholars	SEM	
	Increase funding from Local & National Government Departments with a focus for development projects	Departments	
	Increase cooperation with international research funding agencies, universities, and organizations	Departments	
	Increase cooperation with local and national and multinational industries	Departments	
2. Improve infrastructure support for research	Improve IT services	ITS, SEM	
	Improve library services	Librarian/SEM	
	Increase budget for research equipment	SEM/Department	
3. Enhance Research Culture at Unitech	Encourage and reward publications in international journals	RC/SEM	
	Encourage membership of professional bodies	Departments	
	Encourage departmental seminars	Departments	
	Increase participation at national	Departments	

	and selected international seminars Launch a journal of science and technology Reduce teaching load of researchers Encourage PG programs across all departments Provide training in research proposal writing for competitive grants Provide training on research methodology Provide training on how to write research papers Encourage participation to Scicom courses	RC/SEM RC Departments Departments TLMU TLMU TLMU CDS	
4. Encourage Departmental Research Plans	Academic departments to prepare department-specific research plan Research Centres to prepare centre-specific research plan Encourage inter-departmental research cooperation	Academic Departments Research Centres Departments and research Centres	

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

THE RESEARCH COMMITTEE OF THE ACADEMIC BOARD.

TERMS OF REFERENCE

In order that research activities within the University may be encouraged, coordinated, funded and monitored efficiently, the Academic Board set up a Research Committee under the following terms of references:

- (a)** To promote and encourage research and development;
- (b)** To formulate an overall research policy and appropriate guidelines;
- (c)** To allocate funds for research and development within the University;
- (d)** To prepare an annual report on the research conducted by the University.

The Committee, while acting under the above terms of reference, wishes to ensure that all research activities within the University, and associations with other research bodies or individuals outside the University are coordinated through it, so enabling it to act as a clearing house for research information on national research policy, priorities, funding, other research being undertaken, etc., thus putting it in the best position for helping would be researchers to begin, continue and disseminate results of research.

To help in this, the Committee has formulated a set of Research Policies, (set out below) which is intended to both aid the Committee in its duties, and to help research workers to formulate research in its duties, and to help research workers to formulate research projects. There also follows a set of guidelines, to amplify the intention of the policy statements, and a list of research areas (by no means exhaustive) which are considered important, from the points of view of national priority, and the role of research within this University. Also attached are conditions for the use of research funds, and guidelines for the submission of research progress reports.

1. **RESEARCH POLICIES**

- (a) That the University be committed to an active policy of research **based on the identified research needs of Papua New Guinea**.
- (b) That duplication of research effort be minimized and the coordination of similar research projects be encouraged.
- (c) That research projects should preferably be of an applied problem solving nature as distinct from pure research activities.
- (d) That approved research projects will be financially supported as far as the committee's resources permit.
- (e) That the use of outside funds for approved research be encouraged.
- (f) That national staff and national post-graduate students be encouraged to participate in the research program and appropriate facilities and training made available.
- (g) That the documentation and dissemination of results from current and completed research, projects through seminars and conferences, external publications, theses, the University Report series, and the University Publications, be encouraged.
- (h) That the Annual Report of the Committee include where appropriate articles and abstracts describing research in the University.
- (i) That where University funds and/or facilities have been used in research, leading to the application for a patent, the University be a joint patentee on a suitable partnership basis with the research worker (s) and any other authorities involved.
- (j) The procedure of identifying research projects that will be funded by the University will be based on indicators such as funding received from external sources previously received; publication list; relevant to Papua New Guinea; likelihood of industry funding in future; interdisciplinary; research group stability and funding availability.
- (k) All the research projects be sent for peer review before being approved by the Research Committee.
- (l) The Research Committee reserves the right to award or refuse funding.
- (m) Where Research Committee funding is provided to purchase capital equipment it is made available on the understanding that the approved research has absolute priority in the use of that equipment.

2. **GUIDELINES FOR RESEARCH POLICIES**

- (a) "That the University be committed to an active policy of research consistent with the institutional mission statement and objectives. The identified research needs of Papua New Guinea are of paramount importance".

Part of the role of this University in the country and community is as a centre for research activities, a store for experimental data, a source of expert advice on technological matters; priority, in research, however, must be given to the needs of this country, as identified by current

manpower requirements and national development policy. To this end, information gained from research activities should lead to:

- (i) the reduction of inequalities in incomes and services in Papua New Guinea;
- (ii) increased income-earning opportunities of Papua New Guinea, and maximizing the growth of national income consistent with (i) above, either in the short or long term;
- (iii) the increase of social services directly available to Papua New Guineans;
- (iv) increased self-reliance, by reducing dependence on foreign technological expertise, manpower or imports;
- (v) a greater understanding of effective teaching and learning processes;
- (vi) a greater understanding of Papua New Guinea's cultural heritage.

Benefits from research should be given to small-scale artisan, service and business activity, and to using forms of social, political, and economic organization and technology appropriate to Papua New Guinea.

- (b) "That duplication of research effort be minimized and the coordination of similar research projects be encouraged".

With the relatively limited funds which it seems likely the University will have at its disposal for research in the future, it is essential that these funds be used to maximum advantage. Any duplication of research, either being done within the University or without, must be considered a waste of funds, and should be avoided. More interchange of information between this University and UPNG and Government departments is necessary. Reports of research undertaken here should be given widest possible circulation and other researchers in Papua New Guinea should be encouraged to inform the University of their work.

Often, however, the nature of a research project is such that two or more individuals (groups) can be usefully employed in different aspects of the one problem area. There is merit in grouping research under broad headings which may embrace the activities of several departments. Such Multi-disciplinary projects will be encouraged; they allow a clearer view of the broad direction of research efforts, and the overall benefits accruing.

- (c) "That research projects should preferably be of an applied problem solving nature as distinct from pure research activities".

Projects, in which data-gathering, with no processing for intended solution of a problem, is the sole activity, are an area of low priority. Higher priority will be given to those projects which have the following characteristics.

- (i) A research project should be prompted by a problem rising directly from the development of technology in Papua New Guinea.
- (ii) The project should investigate a practical problem, with research findings directly and immediately applicable to a situation in Papua New Guinea.

- (iii) Useful effects of the eventual solution of the problem should be apparent at the time of approval.
- (iv) The problem should be well-defined, with the practical objectives of the research specifically and clearly defined.
- (d) "That approved research projects will be financially supported"

The Committee intends to make a commitment of continuing financial support for an approved project, for the period, and up to the amounts, originally approved, with the provision that regular reports are received and reasonable progress is being made (See the note below on "Guidelines for Research Progress Reports")

The Committee will thus make a provisional commitment on funds for future financial periods for continuing projects, subject to the money being available.

(e) "That the use of outside funds for approved research be encouraged".
Because of the limited funds available in the Research Fund, researchers are encouraged to search for possible suppliers of aid, outside the University. Departments should find out about possible sources in their fields both within and without PNG. Applications for funds should come through the Research Committee, for its support. Researchers seeking aid funding should liaise with the Office of the Vice Chancellor in formulating their proposal.

(f) "That national staff and national post-graduate students be encouraged to participate in the research program and appropriate facilities made available"

- (i) Funding allocation will be of priority to projects undertaken by junior National academics jointly with a senior academic.
- (ii) Funding allocation will be of priority to co-researchers who are national post graduate students of MPhil or Ph.D. carrying out research under the supervision of a qualified supervisor.

(g) "That the documentation and dissemination of results from current and completed research projects through seminars and conferences, external publications, theses, and the University Research Series, and the University Publications, be encouraged"

- (i) Preliminary results should be reported as soon as possible to give as wide a circulation of them as is considered desirable.
- (ii) The organization of regular research seminars is encouraged within the University to enable staff to be aware of research being undertaken by colleagues.
- (iii) Presentation of papers of importance at national and international conferences should be encouraged with financial support, in part or whole, from funds available to the University. Every endeavor should be made to obtain funding from external bodies.
- (iv) Reciprocal arrangements between staff of the University and research workers at other institutions, whereby a free exchange of information and results is established, is encouraged.

(h) "That the Annual Report of the Committee include, where appropriate, articles and abstracts describing research in the University"

- (i) Reports on research in progress will be included in the Annual Report of the Committee, to be called the Research Digest.

- (ii) **Only papers actually published in journals, or accepted for inclusion in international journals, or in the library research series** will be listed in the Annual Report. Abstracts of such papers will normally be given but should the research be considered of major importance the complete material (or a condensed version) may be included in the Annual Report.
- (iii) Wherever possible research should be reported in appropriate journals and an acknowledgement to the University stated for any assistance provided.
- (iv) Copies of published articles are to be kept in the library.
- (i) “That where University funds and/or facilities have been used in research, leading to the application for a patent, the University be a joint patentee on a suitable partnership basis with the research worker (s) and any other authorities involved”.
- (j) “The procedure of identifying research projects that will be funded by the University will be based on indicators such as funding received from external sources previously received; publication list; relevance to Papua New Guinea; likelihood of industry funding in the future; interdisciplinarity; research group stability and funding availability”
 - (i) Funding allocation will be of some priority consideration to researchers who have had some years of funding from the external sources.
 - (ii) A list of publications on the similar on-going project will be considered as a fair indicator for Research Committee funding.
 - (iii) Research projects relevant to benefiting Papua New Guinea, socially and economically will be considered as a fair indicator for Research Committee funding.
 - (iv) Researcher (s) ensuring the likelihood of aid funding from external sources and overseas funding will be considered as a fair indicator for Research Committee funding.
 - (v) Research projects that are interdisciplinary in nature will be assessed favorably for Research Committee funding.
 - (vi) Research groups that have co or joint researcher (s) who are/is Papua New Guinean citizen (s) will be favorably considered for funding by the Research Committee.
 - (vii) Applications for support from researchers who have previously made effective use of research committee funds will be encouraged.

3. RESEARCH PROMOTION STRATEGIES

- (a) Recognition of the University of Technology as a Centre of Research Excellence in one or more fields of intellectual inquiry.
- (b) Recognition of some members of staff of the University of Technology as researchers of international repute.

- (c) The training of Nationals for responsible and recognized academic positions in the University.
- (d) The training of Nationals for responsible senior technical and management positions in industries and Government.
- (e) Identify and support priority research areas according to the criteria and indicators outlined in the Policy Statement.
- (f) Establish linkages with industries within and outside PNG with the objective of obtaining financial and other support for various research activities in the University.
- (g) Establish linkages with other universities in order to expand the research horizon of a particular research activity, through joint research, staff exchanges and use of specialists facilities.
- (h) Secure the holding of International Conferences on the University campus.
- (i) Implementation of the University Research Journal; including the appointment of Chief Editor and Editorial Board.
- (j) Implementation of the University Research Series.
- (k) Research papers should be peer reviewed and the best journal paper should be awarded with K1,000.

4. CONDITIONS FOR THE USE OF RESEARCH FUNDS

- (a) Research funds are allocated by the Research Committee for use by a specific person (s) on a specific project. They should not be used for other activities or on research projects other than the one approved.
- (b) Research funds will normally be allocated in the form of amounts for travel, consumables, equipment and research personnel. The amount allocated for one of these items should not be transferred to another without the permission of the Committee.
- (c) Each approved research project will be given a project number and the amount allocated will be held against this number. Claims against the allocation for a project should be made by means of purchase orders countersigned by the Chairman of the Committee. The project number should be given on the purchase order.
- (d) The amount allocated to each project for travel is intended to cover all per diem expenses.
- (e) Research funds for travel with Air Niugini should be converted to Miscellaneous Charge Orders. Any Air Niugini tickets bought from research funds and not used within a month of issue should be returned to the Committee and, after a journey, the stubs or tickets should be passed to the Chairman of the Committee. No further travel will be authorized until either the tickets or ticket stubs are returned.
- (f) Recipients of research funds will be required to provide written reports on their research when requested to do so by the Committee.
- (g) Postgraduate research funding will be sent direct to Principal Supervisor (s) and not to students.

- (h) Conference funding will not be considered for staff during the first twelve (12) months of employment with the University but encouraged to apply for research funding.
- (i) The Committee will consider conference funding only for projects funded by the Committee and undertaken at Unitech.

(See Appendix I for further guidelines)

5. GUIDELINES FOR RESEARCH PROGRESS REPORTS

- (a) In the case of research projects wholly or partially funded by the University's internal research funds, progress reports to the Research Committee must be made by the recipient.
- (b) Progress reports are to be made at intervals of one semester throughout the total period of the project (whether or not its entire program period is funded by University research funds).
- (c) On completion of the project a final evaluation report is to be submitted to the Research Committee following the same format and covering the same topics as the progress reports but reporting on the whole program period.
- (d) Progress reports are to be submitted to the Executive Officer Research Committee, prior to each mid-semester break following the commencement of the project until its completion. Failure to submit a progress report by a recipient may result in discontinuation of funds.
- (e) The final evaluation report is to be submitted on or before the Friday of the first week after the mid-semester break following the completion of the project. Failure to submit by a recipient present on campus during that week will result in automatic ineligibility for future internal research funds.
- (f) Adequate notice (normally a period of one month) should be given to the Research Committee if a project is to be suspended or terminated before its completion. The Committee will then require an evaluation report to be submitted.
- (g) Report should be organized in detail so as to be easily understood when read in conjunction with the original proposal. This will enable actual performance reported by recipients to be compared with performance targets stated in the proposal.
- (h) Reports should state changes in research strategy, methodology, personnel, program and budget necessitated by current conditions, or report adequate progress as stated in the proposal.
- (i) If delays or increases in budget have resulted, the underlying problems (e.g. of funding, personnel, the supply of materials or equipment, etc.) should be outlined.
- (j) Reports should include a general overview of progress and lists of interim results, achievements, publications arising from the project and detailed expenditure to date. Indication should also be given of the progress of relationships with other institutions and organizations.
- (k) Reports should conclude with any requests (for carry-over of funds, etc.) necessary to be made to the Research Committee.

“Agreed and approved by the Research Committee on 5th March, 1991” with amendments, 15th June 1994.

6. IMPORTANT RESEARCH CRITERIA

- (a) Research proposed should be original and not duplication which also display quality in terms of relevance and applicability.
- (b) Research has not been published already or presented elsewhere.
- (c) Research proposed must be a focused area relevant to Papua New Guinea.
- (d) External cooperation in terms of consultation or funding should be established for the proposed research.
- (e) Research proposed should involve Postgraduate students.
- (f) Research proposed should always display team-work.
- (g) Both Research and/or conference papers be peer reviewed.
- (h) Outstanding Research papers shall be awarded with a Certificate of Research Excellence with a cash prize of K1000.
- (i) For multiple authors cash prize will be awarded as follows:
 - (i) Single author will take 100 percent.
 - (ii) Two authors will take at the ratio of 60 to 40 percent.
 - (iii) Three authors will take at the ratio of 50 to 30 to 20 percent.
 - (iv) Four authors will take at the ratio of 40 to 30 to 20 to 10 percent.
- (j) Upon the basis of this criteria the Committee awards researchers annually basing on quality and the quantity of publication done by a researcher within a year.
- (k) To be considered for this award, the interested candidates apply for awards in a letter expressing interest with the following documentation;
 - (i) Formal Approval of publication by the Editor or Editorial Board
 - (ii) Sample of the research paper on the Journal
 - (iii) Rating of the paper in the Journal

7. RESEARCH ETHICS

(Reference: Adopted from David B. Resnik, J.D., PhD (2011). *What is Ethics in Research and Why is it Important?* National Institute of Environmental Health Science, United States of America: <http://www.niehs.nih.gov/research/resources/bioethics/whatis/downloaded> on 6th November, 2013)

The following practices must be avoided at all times during research undertakings at Unitech and that violation of the same deemed deviation from ethical and acceptable research conducts that lead to forfeiture of research funding or disciplinary actions:

- (a) Publishing the same paper in two different journals without telling the editors or the Research Committee.
- (b) Submitting the same paper to different journals without telling the editors or the Research Committee.
- (c) Not informing a collaborator such as students, funding body or colleague or the University of your intent to present a paper or publish or to file a patent in order to make sure that you are the sole inventor.
- (d) Including a colleague as an author on a paper in return for a favour even though the colleague did not make a serious contribution to the paper.
- (e) Using an inappropriate statistical technique in order to enhance the significance of your research.
- (f) Conducting a review of the literature that fails to acknowledge the contributions of other people in the field or relevant prior work.
- (g) Stretching the truth on a grant application in order to convince reviewers and the Research Committee that your project will make a significant contribution to the field.
- (h) Overworking, neglecting, or exploiting graduate or post-doctoral students in the research undertaking.
- (i) Promising a student a better grade for sexual favours or questionable and intimate relationships.
- (j) Making significant deviations from the research protocol approved by the Research Committee in relation to scope and the financial status of the research.
- (k) Tampering progress reports and acquittals of funding after attending conferences and carrying out research.
- (l) Making unauthorized copies of data, papers, or computer programs

8. RESEARCH ETHICAL PRINCIPLES

The following is a rough and general summary of some ethical principles that various codes address: (Shamoo A and Resnik D. 2009. Responsible Conduct of Research, 2nd ed. (New York: Oxford University Press)).

(a) Honesty

Strive for honesty in all scientific communications. Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data. Do not deceive colleagues, granting agencies, or the public.

(b) Objectivity

Strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research where objectivity is expected or required. Avoid or minimize bias or self-deception. Disclose personal or financial interests that may affect research.

(c) Integrity

Keep your promises and agreements; act with sincerity; strive for consistency of thought and action.

(d) Carefulness

Avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities, such as data collection, research design, and correspondence with agencies or journals.

(e) Openness

Share data, results, ideas, tools, resources. Be open to criticism and new ideas.

(f) Respect for Intellectual Property

Honor patents, copyrights, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission. Give credit where credit is due. Give proper acknowledgement or credit for all contributions to research. Never plagiarize.

(g) Confidentiality

Protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

(h) Responsible Publication

Publish in order to advance research and scholarship, not to advance just your own career. Avoid wasteful and duplicative publication.

(i) Responsible Mentoring

Help to educate, mentor, and advise students. Promote their welfare and allow them to make their own decisions.

(j) Respect for colleagues

Respect your colleagues and treat them fairly.

(k) Social Responsibility

Strive to promote social good and prevent or mitigate social harms through research, public education, and advocacy.

(l) Non-Discrimination

Avoid discrimination against colleagues or students on the basis of sex, race, ethnicity, or other factors that are not related to their scientific competence and integrity.

(m) Competence

Maintain and improve your own professional competence and expertise through lifelong education and learning; take steps to promote competence in science as a whole.

(n) Legality

Know and obey relevant laws and institutional and governmental policies.

(o) Animal Care

Show proper respect and care for animals when using them in research. Do not conduct unnecessary or poorly designed animal experiments.

(p) Human Subjects Protection

When conducting research on human subjects, minimize harms and risks and maximize benefits; respect human dignity, privacy, and autonomy; take special precautions with vulnerable populations; and strive to distribute the benefits and burdens of research fairly.

(q) Ethical Decision Making in Research

Proposal for a scientific oath as the following be indicated in the Research Committee Application form and signed by the researcher to abide by every research ethical principles.

“I will conduct my activities as a researcher with integrity and honesty; I will use my scientific knowledge and skills for the benefit of humanity and for a sustainable development; I will show respect for animals and nature; I will act in accordance with research ethics, and I will not allow considerations based on ideology, religion, ethnicity, prejudices or material advantages to overshadow my ethical responsibility as a researcher”

(r) Research must promote peace.

(s) Research must create a security that is mutual for individuals, groups and nations. Research must not violate international conventions which are meant to ensure peace.

9. GOOD RESEARCH ETHICAL PRACTICES

The next guidelines pertain to how research ethics may be exercised through good research practices.

- (a)** The researcher and the research institution are responsible for exercising honest research practices. Integrity, honesty and accountability are the fundamental demands of research ethics. Research must not conceal, misrepresent or falsify anything, whether in regard to the planning, execution or reporting of the research. In accordance with the Research Ethics Law, cases of doubt may be presented to the Research Committee for Investigating Integrity in Research.
- (b)** Fraud, however, must be distinguished from common mistakes in research, in that fraud implies a deliberate intent to misrepresent reality. Researchers who discover or are made aware of mistakes in their research must admit the mistake, rectify it and ensure that the consequences of the mistake are minimal. It is also dishonest to present as a result something the researcher knows or should know lacks empirical or theoretical substantiation, or to fail to present important new knowledge. Each researcher has an independent responsibility to not accept fraudulent research practices, either on behalf of him-or herself for others. The researcher has a responsibility to respect the research results of others and to cite relevant works conscientiously. Plagiarism by all means should not be tolerated.
- (c)** The researcher is responsible for critically assessing whether his or her research could potentially benefit society, either directly or indirectly. The researcher is independently responsible for the research being either directly or indirectly beneficial to society, and for ensuring that it does not cause damage. The researcher therefore has a duty to be critical when selecting research topics and research strategy.
- (d)** The researcher as a peer reviewer must follow the following rules: i) The researcher must abstain from acting as a reviewer if he or she has been involved in a contentious dispute with the given author, or is directly involved in a collaborative or competitive relationship with the author. ii) The researcher must, when necessary, state the limits of his or her competence.
- (e)** When conducting research, the researcher must follow national and international regulations on ethics and safety.
- (f)** Good research practice entails that national laws and regulations are adhered to, both at home and abroad. It also entails that the researcher should carefully consider whether it is ethically defensible to follow foreign laws and regulations if such laws are of a different ethical standard than in the individual's home country.
- (g)** Even though openness is a deep-seated norm in research, there are also areas where there is a need to guarantee the research subjects' anonymity. This pertains in particular to cases where the personal information is sensitive and may have unfortunate consequences for the research subjects.

10. TOP RESEARCH AWARD

(a) Top three (3) Research Papers will be awarded cash prize annually, accompanied with Certificate of Excellence in Research:

- (i) First K1,000
- (ii) Second K750
- (iii) Third K500

GUIDELINES AND NOTES ON THE COMPLETION OF THE APPLICATION FORM

- 1. The Research Committee considers applications for assistance with conference expenses from full-time members of the staff of the University. Entries should be typed clearly and all statements should be accurate and brief.**
- 2. In allocating funds for Conferences outside Papua New Guinea, the Research Committee will adopt the following guidelines:**
 - (a) Staff will not receive funds if he has received funds in the previous calendar year.
 - (b) Staff will not receive funding for more than one conference in one calendar year.
 - (c) For International Conferences, funding will not normally be provided for more than one person from the same department to attend the same conference.
 - (d) A person must make a substantial contribution (which will normally be interpreted by the Research Committee as the formal oral presentation of a paper) to be eligible to receive funds. Research Committee may obtain peer review report on the proposed conference paper.
 - (f) All expenses will be paid for members of staff on national salary scales.
 - (g) Members of staff attending conferences to abide by the Cost – Sharing principle of Research Committee contributing 70% of the total cost, 20% percent from the applicant's department and 10% from the applicant.
 - (h) All applicants will be expected to seek outside funding to supplement or replace the contribution made by the University.
 - (i) All application forms must be signed and counter signed by the applicant (s) and his/her head of department respectively.
 - (j) All application forms from a head of department must be signed by the head of that department and countersigned by the Vice Chancellor respectively.
- 3. In allocating funds for a Conference within Papua New Guinea, the Research Committee will adopt the following guidelines:**
 - (a) The funds are available for attendance at conference, seminars and workshops within Papua New Guinea.
 - (b) Research Committee funding for any one Conference will be extended to no more than two members of the same department.
 - (c) A member of staff will not normally be subsidized for more than two internal conference trips in the same academic year.
 - (d) The applicant should be able to demonstrate that he will make a significant contribution to the proceedings (e.g. present a paper at the conference).
 - (e) All application forms must be signed and countersigned by the applicant (s) and his/her head of department respectively.

- (f) All application forms from a head of a department must be signed by the head of that department and countersigned by the Vice Chancellor respectively.
- (g) Funding will be extended to support one person only in the case of papers with joint authorship.

4. Specific Points: “relating to the Application Form”.

- (a) Under 2, each application should deal with one conference only. Under 2.4 and 2.5 give details if the duration of your stay will be different from the duration of the conference.
- (b) Under 8, be sure to give full details of any other financial assistance, including departmental, applied for or obtained.
- (c) Under 11, give details of your relevant publications, reports, unpublished papers etc., during the last five years in the area covered by the conference.
- (d) Under 13, please note that the application should be forwarded to the Executive Officer, Research Committee through the appropriate Head of Department. The Head of Department is requested to make detailed comments but may not decline to forward it to the Executive Officer, Research Committee for consideration.

5. Application Procedure.

The completed application form should be sent to the Registrar (for the attention of Secretary to the Research Committee) who will arrange for it to be considered by the Committee.

6. Conference Reports.

Recipients for conference expenses funds are required to submit a report to the Research Committee through the Head of their Department on the conference attended and their participation in it. Also, the recipients will present his or her paper to Research Seminar Series.

APPENDIX II

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY **THE RESEARCH COMMITTEE** **APPLICATION FOR RESEARCH FUNDS**

REF. NO.:

INSTRUCTIONS TO APPLICANTS:

- a) This application must be typed. Handwritten, Incomplete and late applications will not be considered.
- b) Completed application must be supported by appropriate documentary evidence including:
 - i) Detailed Research Proposal
 - ii) Letter of Confirmation by Research Partners and collaborators.
 - iii) Evidence of the Head of Department support.
- c) Postgraduate students' application be submitted by Principal Supervisors.
- d) Application Forms should also be submitted to the Executive Officer of the Committee in an electronic or digital copy.

1. PROJECT DETAILS:

(a) TITLE:

(b) GENERAL AREA OF RESEARCH

(c) OBJECTIVES OF PROJECT

2. RELEVANCE:

JUSTIFY THE RELEVANCE OF THIS PROJECT TO PNG

3. DETAILS OF APPLICANT:

(a) NAME OF TEAM LEADER

(b) DEPARTMENT

(c) POSITION

(d) RESEARCH EXPERIENCE IN THE GENERAL AREA
(ATTACH LIST OF PUBLICATIONS)

4. TEAM STRUCTURE:

- (a) *(LIST MEMBERS OF RESEARCH TEAM, INDICATING NATIONAL STAFF REGISTERED FOR POSTGRADUATE RESEARCH STUDIES WITH AN ASTERIX)*

- (b) LIST DEPARTMENTS COLLABORATING ON THIS PROJECT:

5. EXTERNAL COLLABORATION AND FUNDING:

- (a) WILL THIS RESEARCH BE CONDUCTED IN COLLABORATION WITH AN EXTERNAL AGENCY?

YES

☐

NO

☐

IF YES, SUPPLY DETAILS:

- (b) ARE EXTERNAL SOURCES OF FUNDING AVAILABLE?

YES

☐

NO

☐

IF YES, SUPPLY DETAILS:

6. METHODOLOGY, TIME SCALE AND PUBLICATION:

- (a) DETAILS OF RESEARCH METHODOLOGY

- (b) EXECUTION SCHEDULE AND EXPECTED DATE OF COMPLETION FOR LONG TERM PROJECTS INDICATE MEASURES TAKEN TO ENSURE SUSTAINABILITY:

- (c) HOW WILL THE WORK BE PUBLISHED?

INTERNATIONAL REFEREED JOURNAL

☐

NATIONAL REFERRED JOURNAL

☐

CONFERENCE PROCEEDINGS

☐

DEPARTMENTAL MONOGRAPH

☐

OTHER (DESCRIBE)

☐

7. PREVIOUS PROJECTS:

LIST ALL PREVIOUS PROJECTS FUNDED BY RESEARCH COMMITTEE AND/OR EXTERNAL AGENCIES WHILST AT PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY AND INDICATE CURRENT STATUS (I.E. COMPLETED SATISFACTORILY OR IN PROGRESS). IN THE CASE OF PROJECTS IN PROGRESS, AN EXPECTED COMPLETION DATE IS REQUIRED:

8. JUSTIFICATION FOR FUNDS REQUESTED:

EXPLAIN IN DETAIL WHY EACH ITEM IS REQUIRED AND HOW IT WILL BE USED. PROVIDE A SUMMARY ON THE NEXT PAGE:

(a) STAFF:

(b) TRAVEL:

(c) CONSUMABLES:

(d) MAINTENANCE & OPERATING EXPENSES

Budgetary Item	Quantity	Unit	Unit Cost	Total Cost	Remarks
A. STAFF:					
1.					
2.					
3.					
B. TRAVEL:					
1.					
2.					
3.					
C. CONSUMABLES:					
1.					
2.					
3.					
D. MAINTENANCE & OPERATING EXPENSES:					
1.					
2.					
3.					
GRAND TOTAL					

9. ATTESTATION:

I..... of certify that I will conduct my activities as a researcher with integrity and honesty; I will use my scientific knowledge and skills for the benefit of humanity and for a sustainable development; I will show respect for animals and nature; I will act in accordance with research ethics, and I will not allow considerations based on ideology, religion, ethnicity, prejudices or material advantages to overshadow my ethical responsibility as a researcher and to the best of my knowledge and belief, the details filled in this document correctly describes myself, my qualification, my experience and my research undertaking. I understand that any willful mis-statements described herein may lead to my disqualification or forfeiture of my funding if allocated to me for this project.

SIGNATURE: **(APPLICANT)**

DATE:

10. RECOMMENDATION OF THE HEADS OF DEPARTMENT:

(a) DO THE DEPARTMENTS HAVE THE CAPACITY TO CARRY OUT THIS PROJECT?

YES

☐

NO

☐

(b) DOES THIS PROJECT HAVE YOUR APPROVAL AND SUPPORT?

YES

☐

NO

☐

IF NO, GIVE REASONS

(c) DO YOU AGREE TO HAVE THE WORK CARRIED OUT IN YOUR DEPARTMENTS?

YES

☐

NO

☐

IF NO, GIVE REASONS

(d) OTHER COMMENTS IN SUPPORT OF THIS APPLICATION/INCLUDING LOCATION OF EQUIPMENT OF PROJECT; AFTER COMPLETION.

(e) SIGNATURES OF DEPARTMENT HEADS CONCERNED:

..... **Date:**

..... **Date:**

..... **Date:**

Conditions for the Use of Research Funds

1. Research funds are allocated to staff members solely to enable the research project outlined on the application form to be undertaken.
2. Research funds will be allocated as specified amounts for personnel emoluments, travel, consumables and equipment. Transfer between heads requires approval as follows:
 - a) up to and including K100 on the written authorization of the Chairman of the Research Committee.
 - b) over K100 by the Research Committee.
3. Each approved research project will be given a project number which will be specified on all purchase orders or claims submitted for approval.
4. All purchase orders or claims must be submitted to the Bursar for approval.
5. Research funds for air travel may not be converted to miscellaneous charges orders. Unused air tickets must be returned to the Accountant.
6. Research funds may not be carried forward from year to year.
7. Recipients of research funds are required to provide up-to-date progress reports and a final report upon completion of the project together with complete statements of expenditure to the Executive Officer of the Committee. Reports should be submitted in accordance with the Guidelines for Research Progress Reports available from the Executive Officer.
8. The Research Committee will not consider any application for new funds if reports are not submitted as set out under 7 above.
9. The Research Committee will not consider hand-written applications.

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY
THE RESEARCH COMMITTEE
APPLICATION FORM FOR FUNDS FOR CONFERENCE EXPENSES

Please read the attached notes before completing this form.

1. PERSONAL DETAILS:

- 1.1 NAME: _____
- 1.2 DEPARTMENT: _____
- 1.3 POSITION: _____

2. CONFERENCE DETAILS:

- 2.1 TITLE: _____
- 2.2 SUBJECT MATTER: _____
- 2.3 ORGANISING BODY: _____
- 2.4 DATES/DURATION: _____
- 2.5 LOCATION: _____

3. REASONS IN SUPPORT OF APPLICATION:

- 3.1 In what way is the Conference relevant to your interest?

- 3.2 How will your attendance benefit your Department and the University?

4. CONTRIBUTION TO THE CONFERENCE:

- 4.1 What will be your contribution?

5. PREVIOUS UNIVERSITY SUPPORT:

5.1 Have you previously received University funds for Conference Attendance?

NO

☐☐

YES (Give details and dates)

6. CONFERENCE ATTENDANCE IN PREVIOUS YEAR:

6.1 Have you attended other Conferences in the past 12 months?

NO

☐☐

YES (Give details)

7. OTHER FINANCIAL ASSISTANCE:

7.1 Give full details of other financial assistance applied for or obtained (including Departmental).

8. FUNDS APPLIED FOR:

NON – CITIZEN STAFF - detail travel costs from Port Moresby for overseas Conference.

CITIZEN STAFF - full details of travel costs, registration fees, accommodation costs, etc as appropriate.

9. PUBLICATIONS:

9.1 List your publications relevant to the Conference.

10. ATTESTATION:

I hereby attest that any funds received will be applied for the purposes detailed above.

10.1 **SIGNATURE:** (Applicant) Date:

11. RECOMMENDATION (HEAD OF DEPARTMENT):

11.1 Recommendation:

APPROVED ☐

NOT APPROVED ☐

11.2 Will Departmental funds be available:

NO ☐

YES ☐ Specify

11.3 Will other members of the Department be attending?

NO ☐

YES ☐

11.4 **SIGNATURE:** (Head of Dept.) Date:

12. NOTES ON THE COMPLETION OF THE APPLICATION FORM:

12.1 The Research committee considers applications for assistance with conference expenses from full-time members of the staff of the University. Entries should be typed clearly and all statements should be accurate and brief. If more space is required under a particular item, please use that available on Page 3 and extra sheets as necessary.

- 12.2 In allocating funds for Conferences **outside Papua New Guinea**, the Research Committee will adopt the following guidelines:
- (a) A person will not receive funding for more than one conference in one calendar year.
 - (b) A person will not normally receive funds if he has received funds in the previous calendar year.
 - (c) Funding will not normally be provided for more than one person from the same department to attend the same conference.
 - (d) A person must give a paper or make some other substantial contribution to be eligible to receive funds.
 - (e) Only staff whose research is funded by the Committee be eligible to attend conferences.
 - (f) Members of staff attending conferences should abide by the Cost – Sharing principle of Research Committee contributing 70% of the total cost, 20% from the applicant's department and 10% from the applicant.
 - (g) Where departmental business is concerned in a person's attendance at a conference, departments will be expected to make a contribution of funds.
 - (h) All applicants will be expected to seek outside funding to supplement or replace the contribution made by the University.
- 12.3 In allocating funds for Conferences **within Papua New Guinea**, the Research committee will adopt the following guidelines:
- (a) The funds are available for attendance at conferences, seminars and workshops within Papua New Guinea.
 - (b) Only staff whose research is funded by the Research Committee be eligible to attend conferences.
 - (c) Conferences may be attended by more than one member of the same department.
 - (d) A member of staff will not normally be subsidized for more than one internal conference trip in the same academic year.
 - (e) The applicant should be able to demonstrate that he will make a significant contribution to the proceedings (e.g. present a paper at a conference).
- 12.4 Specific points:
- (a) Under 2, each application should deal with one conference only. Under 2.4 and 2.5 give details if the duration of your stay will be different from the duration of the conference.
 - (b) Under 8, be sure to give full details of any other financial assistance, including departmental, applied for or obtained.
 - (c) Under 11, give details of your relevant publications, reports, unpublished papers etc., during the last five years in the area covered by the conference.

- (d) Under 13, please note that the application should be forwarded to the Registrar through the appropriate Head of Department. The Head of Department is requested to make detailed comments but may not decline to forward it to the Registrar for consideration.

12.5 Application procedure:

The completed application form should be sent to the Registrar (for the attention of the Secretary to the Research Committee) who will arrange for it to be considered by the Committee.

12.6 Conference reports:

Recipients of conference expenses fund are required to submit a report to the Research Committee through the Head of their Department on the conference attended and their participation in it.