

MEMORANDUM

Faculty of Engineering

September 30, 2011

To: Engineering Faculty, Graduate and Undergraduate students (third and fourth year) - sent by Email.

Placed also on <http://www.uvic.ca/engineering/> under “Faculty dates and Deadlines”

From: Dr. A. Zielinski, Wighton Professor, 2009-12

Re: Wighton Engineering Product Development Fund – Spring 2012 Competition

The generous donation from the late Dr. J. L. Wighton has led to the establishment of the Wighton Engineering Product Development Fund. Awards from this Fund are administered by the Wighton Professor appointed by the Dean of Engineering. Applications will be accepted from regular faculty members acting as Project Leaders according to the enclosed Terms of Reference. The team may include graduate and undergraduate students from all Departments within the Faculty of Engineering. It can be part of undergraduate design-project courses such as ELEC/CENG/SENG499 or ENGR 400 or other design student initiatives. Student initiated projects are encouraged, but a proposal must be submitted through a faculty Project Leader.

Project proposals should be submitted electronically by Project Leaders to the Wighton Professor (adam@uvic.ca) in the form of an MS Word file or PDF file by **November 15, 2011**. The proposals received will be reviewed by an *ad hoc* committee of 3 to 4 persons that will include at least two Engineering Faculty and that will have student representation. Past allocations were in the range of \$1000 to \$5000 per project. The results of the competition are expected to be announced before December 15, 2011. Special accounts will be activated for winning projects. **The awards are eligible for matching funds from other sources.**

The application should contain (in brackets recommended maximum length – pages):

1. Summary (0.5)
2. Project description (3).
3. Participants including Project Leader (0.5)
4. Qualifications of participants related to the project (1)

5. Indication of need and potential market (1)
6. Budget (1)

The following criteria will apply to the proposals:

1. Must lead to a product or manufacturable object
2. Must include a market survey to confirm novelty (patents, Internet disclosures) and the need for the product
3. Desired – student or industry-initiated projects
4. Desired – direct social benefits (aids for the elderly, handicapped, technology for undeveloped countries)

Assessment will be based on:

1. Quality of application
2. Quality of participants

Past beneficiaries of the Fund will be considered again if they have submitted a report on the status of the past projects. Some additional initiatives meeting the spirit of donor's intentions might also be considered.

TERMS of REFERENCE (extracted from the Agreement dated December 13th, 1993)

1. OBJECTIVES

For many years the U.S. and Europe have led the world in basic research, as measured for example by Nobel prizes in Physics, Chemistry and Medicine. A number of countries have not participated in this effort, but instead have been active in developing and marketing new products derived from this endeavor. In fact, they have derived more benefit from the fruits of research than those countries that undertook it in the first place. Canadians have also had many good ideas over the years. In general though, the ideas have not led to products built by Canadians for sale on world markets. Far too often, the ideas have aided product development in other countries, and Canadians have ended up importing products at premium prices. Ways must be found to garnish more value from these ideas and inventions.

The Wighton Engineering Product Development Fund supports activities in the Faculty of Engineering at the University of Victoria that result in devices or systems that have a potential for reversing this trend. By emphasizing the "D" in R&D, the Fund focuses the attention of students and faculty members on the design and manufacturing processes that convert ideas into products, and, hence, is expected to yield a number of beneficial devices and products. Of equal importance is the development in both faculty and students of an appreciation for the requirements of production-oriented design.

Though it is not a strict requirement, the Fund gives preference to projects with a direct social benefit, such as aids for the elderly and the handicapped, or appropriate technology for underdeveloped countries. Again, having participants gain an understanding of the needs of those less fortunate than themselves is as important as the resulting devices.

2. ELIGIBLE ACTIVITIES

Activities supported by the Fund are organized as projects. To be eligible for support, a project must be planned to result in a physical or manufacturable object. A study, simulation or computer program, unless it is a marketable product, is in itself not sufficient as an objective. The Fund is also appropriate for support of the development stage of the faculty member's research, when prior research results are to be prepared for commercial exploitation. Typically, the results are engineering prototypes, though production prototypes are also eligible. In the latter case, the project team must have identified the manufacturing process to be used, including testing methods, and must have estimated the production cost. Each project should include a market survey to confirm the need for the device and to verify the initial functional specifications. Although project teams may be as small as two persons, they normally consist of several undergraduate or graduate students, plus a faculty supervisor. Student-initiated projects are encouraged. Typical projects span one or two terms but longer projects are possible.

3. ELIGIBLE EXPENDITURES

The Fund is intended to supplement, not replace, University funding. All expenditures will be within the context of an approved project, against an approved project budget. Eligible expenditures include parts, equipment and labor. Labor may incorporate the work of an undergraduate or graduate student working full time on the project, typically during a co-op work term. Normally, students work on the project for course credit or on a part time basis while in an academic term and are not paid. Time spent by technicians or full time research assistants is also allowable, provided it is a relatively small part of the overall effort and is for specific tasks in support of the main student effort. Budgets for individual projects differ, but are usually in the range of \$2,000 to \$10,000.

4. OPERATION OF THE FUND

The Wighton Professor for Engineering Product Development is responsible for the operation of the Fund and the promotion of its interests among faculty and students. The Wighton Professor is appointed by the Dean for a renewable three-year term. Faculty of Engineering faculty members or students may submit proposals to the Wighton Professor up to two weeks before the start of any term. The Professor, with two other faculty members and a student representative, decide whether to fund a proposal, and at what level, by the first week of the new term. All proposals should include an initial functional specification of the device or system, with supporting arguments, as well as the project budget and schedule, identification of the desired end result and the makeup of the project team. Only suitable projects are funded, and not all the funding available is necessarily allocated. The Wighton Professor is also responsible for project monitoring.

All projects must provide a Final Report and demonstration of the device or system to the Professor. If the project spans more than one term, the Project Leader must provide a term-end Interim Report. The Wighton Professor will not be a Project Leader, though he or she may act as the faculty supervisor for student projects. Contentious issues are resolved by the Dean.