

OFFICE OF THE VICE-PRESIDENT, ACADEMIC AND PROVOST

8888 University Drive, Burnaby, BC

TEL: 778.782.3925

vpacad@sfu.ca

Canada V5A 1S6

FAX: 778.782.5876

www.sfu.ca/vpacademic

MEMORANDUM

ATTENTION Senate DATE

April 30, 2014

FROM

Gord Myers, Acting Vice-President,

1/1 **PAGES**

Academic

RE:

City of Surrey-Powertech-NSERC Executive Industrial Research Chair in Energy Systems for

Smart Cities (SCUP 14-13)

At its April 16, 2014 meeting, SCUP reviewed and approved the Terms of Reference for the City of Surrey-Powertech-NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities.

SCUP reviewed the proposal for the naming of the City of Surrey-Powertech-NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities. The proposal is attached for the information of Senate.

Motion:

That Senate approve and recommend to the Board of Governors the Terms of Reference for the City of Surrey-Powertech-NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities.

- c: N. Rajapakse
 - E. Morantz



FACULTY OF APPLIED SCIENCES

OFFICE OF THE DEAN

8888 University Drive, Burnaby, BC

Canada V5A 1S6

TEL: 778.782.4724 FAX: 778.782.5802 rajapakse@sfu.ca www.fas.sfu.ca

MEMORANDUM

Jon Driver, Vice-President Academic ATTENTION

DATE

March 18, 2014

FROM

Nimal Rajapakse, Dean

PAGES 1/1

RE:

City of Surrey- Powertech-NSERC Executive Industrial Research Chair in Energy

Systems for Smart Cities

Background

The City of Surrey and Powertech Labs have agreed to co-fund an Industrial Research Chair in energy systems that will focus on research relating to planning, regulating, implementing and managing energy infrastructure and related sustainable energy technology for evolving cities in the 21st century. City of Surrey and Powertech Labs will each contribute \$500,000 to the Chair.

In recognition of City of Surrey and Powertech Labs' contribution, we propose the creation of the City of Surrey-Powertech-NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities.

I request that you submit the Terms of Reference for the City of Surrey-Powertech-NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities to SCUP and Senate for approval of creation and naming.

Thank you.

attached: Named Recognition Authorization - Chairs and Professorships form

Terms of Reference for Chair

Cathy Daminato, VP, Advancement and Alumni Engagement cc:

Anita Stepan, Director, Finance and Budget, VPA

Erin Geary, Director, Advancement Services and Donor Relations



Named Recognition Authorization - Chairs and Professorships

Pursuant to Section 4.2 of GP 35 Named Recognition of Buildings, Academic Endowments and Academic Units which states that Presidential approval together with the approval of the Dean, Vice-President, Academic, and Vice-President, Advancement & Alumni Engagement in consultation with the Senate Committee on University Priorities (SCUP) and Senate is required for the naming of Chairs and Professorships established in accordance with Policy A 10.06, Appointment of Specially Funded University Chairs, University Professors and Research Fellows, and Policy A 10.03, Endowments for Academic Appointments:

Donor Names: City of Surrey and Powertech Labs Inc.

Gift Details: Each donor will provide \$500,000 towards an Industrial Research Chair in energy systems. The Chair's research will focus on planning, regulating, implementing and managing energy infrastructure and related sustainable energy technology for evolving cities in the 21st century.

Proposed Named Recognition Details: In recognition of these gifts, SFU will name the Industrial Research Chair in the Faculty of Applied Sciences the City of Surrey - Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities.

Presidential, Vice-Presidential and Dean Approval:

I hereby approve the official naming of the City of Surrey - Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities.

Andrew Petter	Jon Driver
President and Vice-Chancellor	Vice-President, Academic
Date	Date
	wohn
Cathy Daminato	Nimal Rajapakse
Vice-President,	Dean, Faculty of Applied Sciences
Advancement and Alumni Engagement	
	18/3/2019
Date	Date
Senate Committee on University Priorities (SCUP) consultation held during	
session.	
Senate consultation held during	session.



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

In consideration of the mutual covenants and agreements hereinafter set forth and other good and valuable consideration, the sufficiency and receipt of which is hereby irrevocably and absolutely acknowledged, Simon Fraser University ("SFU"), City of Surrey, through its utilities ("the City"), and Powertech Labs Inc. ("Powertech") hereby agree to establish a Chair in Energy Systems for Smart Cities ("the Chair") as follows:

1. Name of Chair

The Chair will be known as the "City of Surrey-Powertech-NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities." Naming and funding provisions set out in this agreement are subject to SFU's normal policies and procedures for approval. The Chair will be based at SFU Surrey Campus.

A Junior Chair (the "Junior Chair") will be appointed to collaborate with the Chair and support his/her efforts to build a centre of excellence in sustainable energy systems. A current faculty member of the Faculty of Applied Sciences with expertise in energy systems applications for Smart Cities will be appointed as Junior Chair. The Junior Chair will be based at SFU Surrey Campus.

2. Purpose of the Chair

The Chair will be responsible for:

• Leading research that focuses on planning, regulating, implementing and managing energy infrastructure and related sustainable energy technology for evolving cities in the 21st century. These systems need to be: reliable, robust, dynamic, pervasive, kept in pace with evolving technology and society, flexible, supportive of advances in energy efficiency and energy markets. Energy systems will both drive change and need to be responsive to change. Research will span renewable energy generation, transportation, conservation, recapture, storage and utilization of both thermal and electrical energy within cities and the related technologies in alignment with the development of Smart Cities. Research may also include issues related to policies in the context of local government in British Columbia. In the context of Smart Cities, research will focus on cities as service providers and business operators as well as facilitators and regulators. Smart Grid, as an element of



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

Smart Cities, will also be in the scope of the research of the Chair, which would include such matters as integration of multiple, distributed, energy sources, reducing the cost of the "last mile" in terms of service, monitoring sensors, telecommunications linkages, building systems, control infrastructure and data analytics in support of system and energy use optimization;

- Leading an Advisory Group from industry, academia, government and other agencies to
 assist in creating an Economic Development Strategy for Surrey and a related Centre of
 Excellence in the area of sustainable energy systems in support of building a strong local
 industry sector in Surrey; and
- Actively contributing to training and teaching activities under the proposed Energy
 Systems Engineering Program at SFU with a view to establishing a steady stream of welltrained graduates to support the local industry sectors involved in all aspects of energy
 systems;
- The Chair will act as a bridge between industry and evolving research.

The Chair will have access to advanced laboratories at Powertech and will be encouraged to work with Powertech and City of Surrey as test beds for research and development activities in the context of the scope of the Chair's research.

The Chair holder qualifications, duties and responsibilities are described in more detail in Appendix A. The scope of the proposed Chair is broad. It is not expected that one person will cover all aspects of research mentioned in the chair description. For this reason, an expert in complementary areas will be identified for a Junior Chair position. It is also expected that the Chair will develop collaborations across SFU, funding partners, and relevant industries and organizations to augment the broad spectrum of expertise required to build a Centre of Excellence. The Junior Chair will focus on research involving sustainable energy technology and its application to municipal systems including the commercialization of technology.

3. Contributions to fund the Chair

3.1 The Chair will be established by a contribution of \$500,000 in the form of value-in-kind and/or cash from the City of Surrey, through its utilities. City of Surrey's contribution will normally be paid in equal instalments of \$100,000 per year over five years commencing after the signature of this Agreement and after the confirmation of



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

- the grant from NSERC. The City of Surrey will also provide in-kind contributions such as office space, access to test beds, personnel, etc.;
- 3.2 A contribution of \$500,000 in the form of value-in-kind and/or cash from Powertech Labs Inc. Powertech's contribution will normally be provided in equal instalments of \$100,000 per year over five years commencing after the signature of this Agreement and after the confirmation of the grant from NSERC. Powertech will also provide in-kind contributions such as laboratory access, office space, technical support, etc.;
- 3.3 A cash contribution of \$250,000 from SFU. SFU's contribution will normally be paid in equal installments of \$50,000 per year over five years commencing after the signature of this Agreement and subject to NSERC approval of matching funds for contributions to the Chair;
- 3.4 \$1,000,000 from the Natural Sciences and Engineering Research Council of Canada (NSERC) subject to NSERC's acceptance of the City of Surrey and Powertech contributions as qualified matching contributions.
- 3.5 SFU will commit the resources for the continued development of the Chair's area of research, including, without limitation:
 - 3.5.1 SFU will conduct a national and international search for a Chairholder;
 - 3.5.2 SFU will apply for an NSERC matching grant through the NSERC Industrial Research Chair Program;
 - 3.5.3 The provision of laboratory and office space to the Chair in the Faculty of Applied Sciences at SFU Surrey Campus;
 - 3.5.4 SFU will appoint a current faculty member as Junior Chair following an internal faculty search in the Faculty of Applied Sciences.

4. Use of Funds

The contributions to establish the Chair will be used to:

- 4.1 Pay the salary and benefits of the Chair and a stipend of \$10,000 per annum to the Junior Chair;
- 4.2 Develop and disseminate new research initiatives;



City of Surrey - Powertech - NSERC Executive Industrial Research Chair in Energy **Systems for Smart Cities**

- 4.3 Provide salary support for graduate students, undergraduate students, post-doctoral trainee(s), technicians and other research personnel working under the direction of the Chair and Junior Chair and performing Eligible Research; and
- 4.4 Defray the reasonable travel and conference and other eligible (material, supplies, etc.) expenses of the Chair, the Junior Chair and research personnel in accordance with SFU policies.

5. Additional Funding

The Chair and Junior Chair will be expected to seek additional funding from national and international sources during the Term (as hereinafter defined) to support relevant research projects.

6. Eligible Research

It is mutually understood and agreed that any and all research undertaken or directly supervised by the Chair ("Eligible Research") will:

- be directed by the statement of purpose and the reach defined in paragraph 2, 6.1 "Purpose of the Chair," above, or in one or all of the areas relating to municipal energy systems or as otherwise agreed to by the advisory committee defined in paragraph 7.3, "Additional Undertakings" below, to permit the maximum research impact, to best fit with the local clusters of research excellence and to provide longterm economic benefits to the City of Surrey and the province; and
- 6.2 be directed to provincial, national and international research and collaboration in relevant fields.

7. Additional Undertakings

- 7.1 The Chair and Junior Chair will be subject to SFU's policies and procedures concerning Ethics in Eligible Research concerning humans and animals.
- 7.2 Every twelve (12) months the Chair and Junior Chair will be required to submit written progress reports to Powertech, City of Surrey and SFU disclosing the progress and results of any Eligible Research conducted under the Chair.
- 7.3 An advisory committee, composed of the Chair and Junior Chair, the Dean of Applied Sciences (Chair of the Committee), one member nominated by Powertech, one member nominated by City of Surrey, Associate Vice-President Research of SFU



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

and two SFU Faculty members appointed by the Dean, will normally meet twice yearly to review the progress of the Chair and Junior Chair and provide advice on future research directions. None of the members of the Advisory Committee will be paid for their service on the committee.

8. Warranties and Covenants

SFU represents and warrants that:

- 8.1 it is a legal entity with full right and authority in law and in fact to enter into this Agreement;
- 8.2 all amounts received hereunder will only be used for legitimate expenses incurred in the course of the Eligible Research, reimbursement of such expenses, or compensation for the performance of the activities described hereunder, and that receipt of such amounts is in all respects in full accordance with applicable laws, regulations and policies; and
- 8.3 all Eligible Research to be conducted hereunder will comply with all applicable laws, regulations and guidelines.

9. Reporting

The Chair, in his or her capacity as an SFU Professor, will report to the Director of his/her academic unit in accordance with SFU policy. The same applies to the Junior Chair.

10. Appointment

- 10.1 As required by SFU policy (A 10.06), Appointment of Specially Funded University Chairs, University Professors and Research Fellows (Appendix B) the person engaged to perform the duties of the Chairholder will be appointed by the Simon Fraser University Board of Governors. Appointments to the Chair will normally be selected after a national and international search process.
- 10.2 The Chair will be an internationally recognized industry leader and researcher;
- 10.3 The appointment of the Chairholder will be for a five year term (the "Term") as required by NSERC guidelines and SFU policy (A 10.06), Appointment of Specially Funded University Chairs, University Professors and Research Fellows. The Chair may be reappointed as a Senior Industrial Research Chair subject to availability of funding and following the approval process required by SFU and NSERC.



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

10.4 The Junior Chair will be a current faculty member of the Faculty of Applied Sciences and will be appointed for a five year term that may be renewed at the discretion of the university after a review process subject to availability of funding. The appointment will be governed by SFU policy (A10.06).

11. Applicable Laws

This Agreement will be governed by and construed and enforced in accordance with the laws of the Province of British Columbia and the laws of Canada applicable herein.



Powertech Labs Inc.

Gift Agreement and Terms of Reference Simon Fraser University City of Surrey Powertech Labs Inc.

City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

This Agreement will take effect as of the date of the last signature, below. Approved By: Andrew Petter, President & Date Vice-Chancellor, Simon Fraser University Cathy Daminato, Vice-President, Date Advancement & Alumni Engagement, Simon Fraser University Mario Pinto, Vice-President, Date Research, Simon Fraser University Jon Driver, Vice-President, Date Academic, Simon Fraser University Date Jeff Arason, Manager, Utilities City of Surrey Don Stuckert, Chief Executive Officer Date



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

Appendix A: Job Description Qualifications:

- A PhD in Engineering or a closely related discipline
- Outstanding record in energy systems research relating to growing and dynamic cities and/or equivalent industry experience with substantial accomplishments and leadership role(s)
- Ability to attract funding to support a world-class research program with the aim of creating a Centre of Excellence in energy systems associated with growing and dynamic cities
- A solid track record of transforming research to practical applications and economic growth
- Proven leadership skills and a team builder
- Strong commitment to and preferably a proven record in graduate level teaching and supervision of trainees
- Excellent communication skills

Duties and Responsibilities:

- Establish and maintain a leading-edge research program in Energy Systems for growing and dynamic cities at SFU in close collaboration with the City of Surey and Powertech Labs Inc.
- Conduct innovative research that leads to the development of sustainable and economically sound energy models and sustainable energy technology for cities
- Attract significant funding for research and research infrastructure development from external agencies
- Develop national and international collaboration for research, training and education.
- Teach relevant courses and contribute to the training of highly qualified personnel (HQP)
- Develop and maintain a well-equipped laboratory to support research
- Participate in relevant university service activities
- Serve on appropriate committees of external organizations including government and community organizations, and contribute to the enhancement of the research profile of the City of Surrey and Powertech Labs Inc.
- Take a leadership role in technology commercialization and economic/business development related to energy systems



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

Appendix B: Policy A 10.06, Appointment of Specially Funded University Chairs, University Professors and Research Fellows. (Policy revision date April 1, 2005)

Principle: Endowments or other external funds may be used to create prestigious tenure-track academic appointments for noted scholars. Specific terms of reference for one of these appointments must be approved by Senate.

A. University Chairs

1. The purpose of university chairs is to attract, recognize and retain scholars who are acknowledged by their peers as being pre-eminent in their research fields.

2. Criteria for Appointment

2.1 Senior Chairs

A candidate for a senior University Chair will normally be an established scholar who would merit the rank of full professor. This could include an individual with appropriate academic credentials whose career experience has been outside a university setting. He or she must have earned national and international recognition as being pre-eminent in her/his area of expertise. He or she will have demonstrated a continuing commitment to the support and development of emerging scholars. He or she must have been recognized by her/his peers in the discipline through the receipt of grants, awards and/or other honors.

2.2 Junior Chairs

A candidate for a junior University Chair will be a scholar at the rank of assistant or junior associate professor who has a record of scholarly achievements well beyond that normally expected of a faculty member in that rank and who, based on his/her accomplishments to date, has the clear potential to make an extraordinary contribution to her/his discipline.

3. **Appointments**

3.1 Term of Appointment

Appointment of a faculty member to a University Chair will normally be for a minimum period of 5 years and a maximum period of 10 years and may be renewed. A faculty member who is appointed to a University Chair is expected to fulfill the expectations of her/his academic rank under A 11.02, and also to carry out a defined role as holder of the University Chair – for example, fostering growth in a particular sub-discipline.



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

- **3.2.1** Nominations to appoint an individual as a University Chair that have the demonstrated support of the Department must first be approved by the Dean with the advice of the Chair of the Department in which the appointment would be made. The Dean may approve a nomination of a current faculty member or a new appointee.
- **3.2.2** Once a nomination has been approved, a recommendation for appointment of a current faculty member as University Chair should come forward to the Dean in the same manner as a promotion with the support of the Departmental/Faculty Tenure Committee (see A. 11.01) or of some other similarly constituted committee.
- **3.2.3** Once a nomination has been approved, a recommendation for appointment of a new appointee as University Chair should come forward to the Dean as described in A 10.01, except that, for a senior Chair, 6 letters of reference should be included, rather than 3, along with a recommendation from the Departmental/Faculty Tenure Committee.
- **3.3** The Vice-President, Academic will review the recommendations forwarded by the Dean and will forward to the University Appointments Committee:
 - a. the recommendation of the Vice-President, Academic on the appointment;
 - b. the proposed allocation of available income between salary supplement and research support;
 - c. the term of the appointment;
 - d. any arrangements regarding salary supplement or research support upon termination of the award.
- **3.4** After considering the recommendation for appointment, the University Appointments Committee will either recommend the candidate for appointment or refer the matter back to the Department Chair with specific recommendations for further action.
- **3.5** The recommendation of the University Appointments Committee and the Vice-President, Academic, with the supporting documentation provided by the Dean and the Department will be forwarded to the President and to the Board of Governors for approval, following the normal procedure for Category A appointments.
- **3.6** If the University Appointments Committee cannot be convened because of time constraints, the President may proceed without the recommendation of the Committee, but



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

the Committee will receive a report from the President on the action taken, the reasons and recommendations upon which that action was based.

- **3.7** Twelve months before the end of an appointment, the Vice-President, Academic, in consultation with the Dean and the Chair of the Department, will decide whether the University Chair will remain in the same academic area or whether it will be assigned to another area in keeping with the Senate-approved terms of reference. When a donor or funding agency has specified a particular area for an appointment, it may not be moved.
- **3.8** If the University Chair is to remain in the same area and if the incumbent is eligible for reappointment, the Department will consider whether the current holder of the Chair should be reappointed. Both a re-appointment and an appointment of a new individual will follow the appointment process outlined in 3.2 to 3.6 above except that the requirement for letters of reference in the case of a reappointment may be waived by the Dean.

4. End of an appointment as a University Chair holder

- **4.1** When an appointment as a University Chair holder ends, unless other provisions have been set out in the letter of appointment, the salary supplement and research grants provided by the source of the special funding will end, and the faculty member's salary will revert to the academic salary level without the supplement.
- **4.2** The appointment as University Chair will not continue when the faculty member leaves his/her academic position at Simon Fraser University.

B. University Professors

1. The purpose of university professorships is to attract, recognize and retain excellent faculty in all ranks.

2. Criteria for Appointment

A candidate for University Professor will be a scholar of any rank whose scholarly achievements are clearly superior relative to others of that rank and who will foster the growth of her/his discipline at Simon Fraser University and increase its profile within the broader academic community.

3. Appointment

3.1 Appointment of a faculty member to a University Professorship will normally be for a minimum period of 5 years or a maximum period of 10 years, and the appointment may be renewed. A faculty member who is appointed to a University Professorship is expected to



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

fulfill the expectations of a faculty member of their rank and may also be required to carry out a defined role as holder of the Professorship – for example, fostering growth in a particular sub-discipline.

- **3.2.1** Nominations to appoint an individual as a University Professor Chair that have the demonstrated support of the Department must first be approved by the Dean with the advice of the Chair of the Department in which the appointment would be made. The Dean may approve a nomination of a current faculty member or a new appointee.
- **3.2.2** Once a nomination is approved, a recommendation for appointment of a current faculty member as University Professor should come forward to the Dean in the same manner as a promotion with the support of the Departmental/Faculty Tenure Committee (see A.11.01) or some other similarly constituted committee.
- **3.2.3** Once a nomination is approved, a recommendation for appointment of a new appointee as University Professor will come forward to the Dean as described in the Academic Appointments Policy (A10.01), except that 6 letters of reference should be included, rather than 3, along with a recommendation from the Departmental/Faculty Tenure Committee.
- **3.3** The Vice-President, Academic will review the recommendations forwarded by the Dean and will forward to the University Appointments Committee:
 - a. the recommendation of the Vice-President, Academic on the appointment;
 - b. the proposed allocation of available income between salary supplement and research support;
 - c. the term of the appointment;
 - d. any arrangements regarding salary supplement or research support upon termination of the award.
- **3.4** After considering the recommendation for appointment, the University Appointments Committee will either recommend the candidate for appointment or refer the matter back to the Department Chair with specific recommendations for further action.
- **3.5** The recommendation of the University Appointments Committee and the Vice-President, Academic, with the supporting documentation provided by the Dean and the



City of Surrey - Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

Department will be forwarded to the President and to the Board of Governors for approval, following the normal procedure for Category A appointments.

- **3.6** If the University Appointments Committee cannot be convened because of time constraints, the President may proceed without the recommendation of the Committee, but the Committee will receive a report from the President on the action taken, the reasons and recommendations upon which that action was based.
- **3.7** Twelve months before the term of the appointment ends, the Vice-President, Academic, in consultation with the Dean and the Chair of the Department, will decide whether a specially funded Professorship will remain in the same academic area, or whether it will be assigned to another area. When a donor has specified a particular area for an endowment, the appointment may not be moved.
- **3.8** If the Professorship is to remain in the same area, the Department will consider whether the current holder of the Professorship should be reappointed. Both a re-appointment and an appointment of a new individual will follow the appointment process outlined in 3.2 to 3.6 above, except that the requirement for letters of reference in the case of a reappointment may be waived by the Dean.

4. End of an appointment as a University Professor

- **4.1** When an appointment as a University Professor ends, unless other provisions have been set out in the letter of appointment, the salary supplement and research grants will end, and the faculty member's salary will revert to the academic salary level without the supplement.
- **4.2** The appointment as a University Professor will not continue when the individual leaves his/her academic position at Simon Fraser University.

C. Research Fellows

- 1. Research Fellowships are designed to recruit entry-level scholars of exceptional promise.
- 2. The Vice-President, Academic will assign undesignated Research Fellowships to Faculties on an annual basis. Faculty Deans will determine who is to be appointed as a Research Fellow.
- 3. Normally, Research Fellows will be appointed to one-year terms.



City of Surrey – Powertech - NSERC Executive Industrial Research Chair in Energy Systems for Smart Cities

4. The available income from the endowment will be used by the Research Fellow for expenses associated with the Fellow's research program.

Interpretation

Questions of interpretation or application of this policy or its procedures will be referred to the President, whose decision will be final.