

## Prospective graduate students and postdoctoral fellows

There are projects available for students at all levels. We are always looking for highly motivated scientists with interests in research projects at the interface of chemistry, biochemistry, and electrochemistry.

Potential projects include

- peptide gels and hydrogels
- chirality driven self-assembly
- differential phosphorylations
- phosphoproteomics
- tau/protein and tau/molecule interactions
- ATP derivatives
- Electrochemical surface sensors
- DNA surfaces and electrochemical properties

Check out the webpage of the University of Toronto

<https://www.chem.utoronto.ca>,  
<http://www.utscc.utoronto.ca/physsci/welcome-physical-environmental-sciences>,  
<http://www.chem-eng.utoronto.ca>

For more information on graduate studies in Chemistry, Environmental Sciences, or Chemical Engineering. Acceptance into our graduate programs is highly competitive but I would encourage all qualified and interested students to apply and contact me.

The City of Toronto is a vibrant diverse city that has something for everyone ([www.toronto.ca/](http://www.toronto.ca/)).

For those interested in a postdoctoral position in my group at the University of Toronto, funding can be obtained from the following organizations:

### Europe

[Marie Curie Outgoing Fellowships](#)

<http://ec.europa.eu/research/mariecurieactions/>

## **Pakistan**

[Higher Education Commission](http://www.hec.gov.pk/Pages/HECMain.aspx)

<http://www.hec.gov.pk/Pages/HECMain.aspx>

## **India**

[SERB Overseas Postdoctoral fellowship](http://serb.gov.in/fellowships.php)

<http://serb.gov.in/fellowships.php>

## **Canada**

For those interesting in applying for a highly competitive Banting Postdoctoral fellowship, please follow the link.

<http://banting.fellowships-bourses.gc.ca/en/home-accueil.html>

## **Characteristics of a successful application**

**The Applicant:** demonstrated leadership and impact on the field, has a significant number of publications and brings new knowledge to the institution

**The Proposed Research:** should significantly advance the knowledge base, aspect of novelty: “game-changing”, is part of a larger research context (applicant, supervisor, institution), has synergy with research environment

- Weighs risk vs. feasibility
- Considers wider impact: application of research, social impact
  
- Vagueness will not be rewarded: demonstrate concrete examples of research excellence and leadership.
- Communicate your research goal/plan with clarity, why it is important, what is its relevance and why it is feasible. Engage your reader; make your proposal “a pleasure to read”. The reviewers need to be convinced of its value so they can advocate for you at the review committee meetings.
- Tell a story: Write clearly, concisely with a beginning, middle and end; keep your reader in mind at all times; Use examples, metaphor, analogy to make difficult concepts accessible; use an active voice. Remember that it is most likely that reviewers will **not**

be experts in your field.

- Anticipate questions that may arise and address these explicitly in your narrative. Do not assume that reviewers know what you mean – you need to provide adequate background. Address the limitations of your work and how you will deal with them.
- Remember, it's a competition: distinguish your application from the rest; be persuasive, not just descriptive, you need to make an argument/build a case for funding. Keep in mind that the synergy between institution/supervisor and applicant is an important factor.
- To demonstrate this synergy, think about your research program in the environment of the host institution. Where are opportunities for collaboration? Where can you benefit from expertise the institution can offer (e.g. Canada Research Chairs in the field)? What is the unique expertise that **you** are bringing to this institution?

### **The Supervisor Statement**

- Speaks to research excellence of applicant
- Speaks to excellence of proposed research
- Speaks to aspects of synergy (with supervisor's research, research environment, institution)
- Explains added value of post-doc in research environment
- Demonstrates institutional commitment (professional development, funding...)
- Propels research leadership of applicant (supervisor biography, where are alumni now)

### **The Referee**

- Should be familiar with the applicant's research
- Should have interacted with applicant (research or leadership activities)
- One referee should be your PhD supervisor (if not, you need to explain to the committee why this is the case). You should also choose at least one referee who is independent (ie, not personally invested in your research program)
- When you choose a referee, consider the balance between public profile in the field and a referee who knows your research well.