



DEPARTMENT OF ENERGY

COMPUTATIONAL SCIENCE GRADUATE FELLOWSHIP



The DOE CSGF is open to senior undergraduates and students in their first year of doctoral study.

The Department of Energy Computational Science Graduate Fellowship (DOE CSGF) provides up to four years of financial support for students pursuing doctoral degrees in fields that use high-performance computing to solve complex problems in science and engineering.

The program also funds doctoral candidates in applied mathematics, statistics or computer science who are pursuing research that will contribute to more effective use of emerging high-performance systems. Complete details and a listing of applicable research areas can be found on the DOE CSGF website.

APPLICATIONS DUE 1.15.2020

BENEFITS

- + \$37,000 yearly stipend
- + Payment of full tuition and required fees
- + Yearly program review participation
- + Annual professional development allowance
- + 12-week research practicum experience
- + Renewable up to four years

REVIEW ELIGIBILITY, FAQs & MORE AT: www.krellinst.org/csgf

This equal opportunity program is open to all qualified persons without regard to race, gender, religion, age, physical disability or national origin.



Office of Science



MATERIALS SCIENCE AND ENGINEERING

Faculty Positions – Open Rank

University of Illinois at Urbana-Champaign



The Department of Materials Science and Engineering (MatSE) at the University of Illinois at Urbana-Champaign is seeking to fill multiple tenured or tenure-track faculty positions in all ranks. We particularly seek candidates with research interests in two priority areas: (1) biological and biomedical materials and (2) metals, in both cases with an emphasis on experimental research. However, candidates with research interests in other areas of materials science and engineering are also encouraged to apply. Senior and mid-career faculty are encouraged to apply, but all qualified candidates will be considered. Faculty members in the department are expected to initiate and sustain a vigorous research program. Successful candidates are expected to demonstrate a strong commitment to undergraduate and graduate teaching, and to diversity, equity, and inclusion through research, teaching, and/or service endeavors. Please visit <https://jobs.illinois.edu> to view the complete position announcement and application instructions.

Applications received prior to November 15, 2019 will receive full consideration.

The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer.

Illinois is an EEO Employer/Vet/Disabled - www.inclusiveillinois.illinois.edu

Ph.D. FELLOWSHIP OPPORTUNITIES



The DOE NNSA SSGF program is open to senior undergraduates or students in their first or second year of graduate study.

The Department of Energy National Nuclear Security Administration Stewardship Science Graduate Fellowship (DOE NNSA SSGF) provides outstanding benefits and opportunities to U.S. citizens or permanent resident aliens pursuing a Ph.D. in stewardship science areas, such as properties of materials under extreme conditions and hydrodynamics, nuclear science, or high energy density physics.

The fellowship includes a 12-week research experience at Lawrence Livermore National Laboratory, Los Alamos National Laboratory or Sandia National Laboratories.

APPLICATIONS DUE 1.8.2020
www.krellinst.org/ssgf

Full list of benefits online.



The DOE NNSA LRGF program is open to U.S. citizens who are entering their second (or later) year of doctoral study.

The Department of Energy National Nuclear Security Administration Laboratory Residency Graduate Fellowship (DOE NNSA LRGF) gives students the opportunity to work at DOE NNSA sites while pursuing degrees in fields relevant to nuclear stockpile stewardship: engineering and applied sciences, physics, materials, or mathematics and computational science.

Fellowships include at least two 12-week research residencies at Lawrence Livermore, Los Alamos or Sandia national laboratories, or the Nevada National Security Site. Fellows are encouraged to extend these stays to conduct thesis research and other studies at the facilities.

APPLICATIONS DUE 3.4.2020
www.krellinst.org/lrgf

Full list of benefits online.

These equal opportunity programs are open to all qualified persons without regard to race, gender, religion, age, physical disability or national origin.



PROFESSOR NANOFABRICATION

(AP 18-07)

Institut national de la recherche scientifique (tenure-track position)

Context and summary

The Institut national de la recherche scientifique (INRS) is the only academic institution in Québec (Canada) dedicated exclusively to research and training at the graduate level. The influence of our faculty, researchers, and students extends worldwide. In partnership with the scientific community and the private sector, we are proud to contribute to societal development through our discoveries and through the training of young scientists.

INRS – Énergie Matériaux Télécommunications (EMT) Research Centre would like to hire a new faculty in the area of **Micro- and Nanofabrication**. The successful candidate will collaborate with multidisciplinary research teams at the INRS Énergie Matériaux Télécommunications Research Centre in the areas of (but not limited to) electron-beam lithography, nanometer pattern transfer including plasma etching techniques, and fabrication and characterization of micro- and nanosystems e.g. for applications in photonics, optoelectronics, energy conversion and storage, solid state lighting, chemical and environmental sensing, biosensing and biomedical engineering.

The Centre hosts the unique major research Infrastructure of Nanostructures and Femtoscience (<http://lmn.emt.inrs.ca/EN/inf.htm>), which comprises the Advanced Laser Light Source, the Laboratory of Micro and Nanofabrication, and the Infrastructure for Advanced Imaging. The new faculty will work in an environment where about forty professors-researchers undertake leading-edge research and training in diverse areas of sustainable energy, advanced materials, ultrafast photonics, telecommunication systems and nanobiotechnology.

Main duties and responsibilities

- Develop an original and innovative program.
- Secure external funding from a variety of funding agencies, both provincial and federal, also involving various partners from the public and private sectors whenever needed/pertinent. Potential sources of funding include the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Fonds québécois de la recherche sur la nature et les technologies (FQRNT).
- The candidate is expected to establish collaborations with research teams already in place, while developing or maintaining partnerships with groups outside the EMT research center. The ability to develop partnerships with the private sector is particularly valuable.
- Participate in teaching and training at the graduate level (both M.Sc. and Ph.D. students), as well as supervising post-doctoral fellows and research personnel.

Requirements

- A doctoral degree in a relevant discipline (physics, materials science, engineering, chemistry).
- An outstanding record of research accomplishments that will enable her/him to successfully develop a strong independent research program.
- The aptitude for teaching and supervising graduate students and other trainees.
- The ability to work in a multidisciplinary team and within research networks.
- The ability to collaborate with industrial partners.

Working language

French is the official language at INRS. Fluency in English is required. Candidates whose native language is not French are encouraged to apply. The Centre will provide them with all the resources necessary to facilitate their learning of the French language.

Workplace

Institut national de la recherche scientifique (INRS)
Centre Énergie Matériaux Télécommunications
1650, boulevard Lionel-Boulet, Varennes (Québec) J3X 1S2 CANADA
Varennes is located on the South Shore of Montreal.

Salary

Salary and benefits are in accordance with the current collective agreement at INRS.

How to apply

Interested applicants should send their application including a complete curriculum vitae, a copy of their three most significant publications, a three page summary of their research interests, a statement of teaching experience and philosophy, and the names and contact information of three referees, before **January 24th 2020** indicating position number AP 18-07 by e-mail at concours@emt.inrs.ca or by mail to:

Director

Institut national de la recherche scientifique (INRS)
Centre Énergie Matériaux Télécommunications
1650, boulevard Lionel-Boulet, Varennes (Québec) J3X 1S2 CANADA



**Institut national
de la recherche
scientifique**

INRS subscribes to an equal access employment program and an equity employment program. The Institute invites women, visible minorities, ethnic minorities, natives and people with disabilities to apply. Priority will be given to candidates with Canadian citizenship or permanent resident.

INRS.CA

Become an **MRS**[®] Congressional Science and Engineering Fellow

Decisions made by Congress, regulatory agencies and local government have profound effects on the way in which science is conducted. By keeping decision makers well informed on the current affairs of the scientific community, MRS Congressional Science and Engineering Fellows ensure the right choices are being made. Now's your time to make a difference!

The Materials Research Society offers materials scientists two exciting opportunities to participate in, and contribute to, the federal policymaking process, while learning firsthand about the intersection of science and policy.

During your year as a Fellow you will:

- ▶ contribute widely to the effective use of materials science knowledge in government
- ▶ broaden awareness about the value of scientist- and engineer-government interaction among society members and within government
- ▶ have significant freedom to follow specific topics and issues that interest you

Help **improve the interface** between science and legislative decision making.

Advocate for policies that will facilitate the discoveries of the future.

Play a crucial role as you **educate the public** about the benefits of science.

To learn more about the MRS Congressional Science and Engineering Fellowship Program and how you can apply, visit mrs.org/congressional-fellows.

Applications for the 2020–2021 MRS Congressional Science and Engineering Fellowship Program are posted on the MRS website.

Deadline for submission is January 3, 2020.

The MRS Congressional Science and Engineering Fellowship Program is an invaluable experience, but don't just take our word for it. Our past Congressional Fellows explain it best!

"Academia taught me how to think, but the MRS Congressional Fellowship taught me how to get things done. Never have I had such leverage, such opportunities to comingle with dignitaries, to structure agreements and broker deals, as I did in that year. I learned how to navigate past armies of secretaries shielding a VIP, enlist military support for a project, take a rough idea and make it law, to fashion an event into a sound bite and then watch it propagate across the news. I learned to take data and present it in such a way that it gravitated, almost of its own accord, all the way up to the Vice President of the United States. These are skills anyone, who is going anywhere, can use."

Merrilea Mayo Founder, Mayo Enterprises, LLC

MRS Congressional Fellow 1998–1999
Office of Senator Lieberman

"At the end of the fellowship year I found that I was enjoying 'doing' science policy more than just teaching about it, and I ended up staying on in Rep. Honda's office as a member of the staff where I remained for over a decade. I would not have had that opportunity without the Congressional Fellowship. I encourage anyone who wonders about how federal policies are developed or wants to have a greater role in that process to apply to be a Congressional Fellow."

Eric Werwa Legislative Director
Congresswoman Lucille Roybal-Allard

MRS Congressional Fellow 2001–2002
Office of Congressman Mike Honda