



PROFESSOR

SCIENCE AND PLASMAS APPLICATION (AP 18-05)

INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE (tenure-track position)

CONTEXT AND SUMMARY

Institut national de la recherche scientifique (INRS) is the only institution in Québec (Canada) dedicated exclusively to graduate level university research and training. The influence of our faculty and students extends around the world. In partnership with the community and with industry, we are proud to contribute to the development of society through our discoveries and through the training of young scientists.

INRS would like to fill a new faculty position in the area of science and application of plasmas. The successful candidate will collaborate with the multidisciplinary research program at the INRS Énergie Matériaux Télécommunications Research Centre by contributing recognized expertise in plasma physics applied to materials synthesis, characterization and treatment.

MAIN DUTIES AND RESPONSIBILITIES

- Develop an original and innovative program of applied and fundamental research in plasma physics preferably (but not exclusively) oriented towards the following research areas:
 - Plasma interaction with organic matter (complex molecules, cells, tissues, cell treatment or destruction, reconstructive surgery, etc.)
 - Plasma for nanomaterials synthesis related to various fields of application (catalysis, energy conversion, photonic, 3D impressions, etc.)
- 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.
- 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

- Doctorate in physics, chemistry, materials science, engineering physics, chemical engineering or related fields, with specialization in experimental plasmas or assisted plasma processes.
- Relevant postdoctoral research experience would be an asset.
- Strong scientific publishing record illustrating originality and innovation.
- Ability to work in multidisciplinary teams and networks as well as in collaboration with representatives of various agencies.
- Aptitude for basic and applied research, as well as multidisciplinary teaching and mentoring at the masters and doctorate levels.
- Entrepreneurial qualities and demonstrated ability to secure external research funding.
- Preference will be given to junior candidates. However, outstanding senior candidates will also be considered.

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

In accordance with the collective agreement in effect 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 **October 15th 2018** indicating position number AP 18-05 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
concours@emt.inrs.ca

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.

WWW.INRS.CA

INRS
UNIVERSITÉ DE RECHERCHE
A RESEARCH UNIVERSITY

PROFESSOR

ULTRAFAST CHARACTERIZATION OF MATERIALS (AP 18-06)

INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE (tenure-track position)

CONTEXT AND SUMMARY

Institut national de la recherche scientifique (INRS) is the only institution in Québec (Canada) dedicated exclusively to graduate level university research and training. The influence of our faculty and students extends around the world. In partnership with the community and with industry, we are proud to contribute to the development of society through our discoveries and through the training of young scientists. INRS would like to fill a new faculty position in the area of Ultrafast Materials Characterization. The areas of expertise aimed at, but not limited to, are: time-resolved electron microscopy, electron microscopy, ultrafast electron diffraction, ultrafast characterization of materials, microscopy of irreversible phenomena, ultra-fast lasers and photonics and their applications in materials and biological sciences for various areas such as, for example, biomedical and energy.

MAIN DUTIES AND RESPONSIBILITIES

- 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.
- This position is incorporated within an environment where about forty professors-researchers undertake leading-edge research and training in diverse fields of sustainable energy, advanced materials, ultrafast photonics, telecommunication systems and nanobiotechnology.
- The Centre hosts unique major research infrastructure including the Advanced Laser Light Source and the Laboratory of Micro and Nanofabrication, comprising the Infrastructure of Nanostructures and Femtoscience (<http://lmn.emt.inrs.ca/EN/inf.htm>).
- This new position is intended to build a critical mass of expertise around a major \$15M addition, the Infrastructure for Advanced Imaging (IAI), awarded by the Canada Foundation for Innovation (CFI) in the 2012 competition. This infrastructure houses two time-resolved electron microscopes (for irreversible and reversible dynamics) and several sample preparation equipment, including a focused ion beam. As a whole, with the range of dynamic phenomena it can access, the IAI is a unique infrastructure worldwide.
- 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).
- 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, biology).
- An outstanding record of research accomplishments that will enable her/him to successfully develop a strong independent research program.
- Academic and technical expertise that are complementary to the existing faculty at EMT (<http://www.emt.inrs.ca/les-professeurs/mosaique/6>)
- 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

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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 **October 15th 2018** indicating position number AP 18-06 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
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PROGRAM DIRECTOR


DIVISION OF MATERIALS RESEARCH
National Science Foundation

The Division of Materials Research (DMR) announces a nationwide search for senior-level researchers to serve as Program Directors in the **Biomaterials Program (BMAT)**, the **Electronic and Photonic Materials Program (EPM)**, and the **Metals and Metallic Nanostructures Program (MMN)**. Formal consideration of interested applications will begin August 1, 2018 and will continue until selections are made.

For additional information and how to apply, please refer to Employment Opportunities and the Biomaterials (BMAT), Electronic and Photonic Materials (EPM) and Metals and Metallic Nanostructures (MMN) Dear Colleague Letters at www.nsf.gov/materials.

Because NSF has a rotator program, there are often opportunities in diverse areas of materials research. Those interested are welcome to request further information from dmr-recruit@nsf.gov. For additional information on NSF's rotational programs, please visit: <https://www.nsf.gov/careers/rotator/>.

NSF is an equal opportunity employer committed to employing a highly qualified staff that reflects the diversity of our nation.



Assistant Professor


Theoretical Quantum Condensed Matter Physics

The Department of Physics and Astronomy at the University of Pennsylvania seeks applications from outstanding candidates for an appointment as Assistant Professor in theoretical quantum condensed matter physics. Appointment at higher rank can be considered in exceptional cases.

The successful candidate will develop an innovative research program on quantum phenomena in condensed matter that attracts the participation of students and creates collaborative links with other Penn scientists and engineers. The candidate should have a PhD degree in physics along with post-doctoral experience and will be expected to teach, to attract external research funding, and to contribute actively to the Laboratory for Research on the Structure of Matter.

Applicants must apply online at <http://facultysearches.provost.upenn.edu/postings/1404>. Required application materials include: curriculum vitae with a list of publications, a research statement, and a teaching statement. Applicants should submit the names and contact information for three individuals from whom we will request recommendation letters. Review of applications will begin no later than **November 1, 2018** and will continue until the position is filled.

The Department of Physics and Astronomy is strongly committed to Penn's Action Plan for Faculty Diversity and Excellence and to creating a more diverse faculty (for more information see: <http://www.upenn.edu/almanac/Volumes/v58/n02/diversityplan.html>). The University of Pennsylvania is an equal opportunity employer. Minorities/Women/Individuals with disabilities/Protected Veterans are encouraged to apply.



MATERIALS SCIENCE & ENGINEERING

TEXAS A&M UNIVERSITY

TENURE-TRACK FACULTY POSITION

Department of Materials Science and Engineering

The Department of Materials Science and Engineering at Texas A&M University invites applications for a tenured or tenure-track faculty position in the area of mechanical behavior of advanced structural materials. Although candidates at the assistant professor level are preferred, exceptionally well-qualified applicants will be considered for appointment at the rank of associate or full professor.

The successful applicant will have a unique opportunity to interface with growing interests and capabilities at the university in mechanical phenomena at very small scales (micro- and nano-) and how they influence and control macro-scale deformation and failure. Relevant expertise includes new mechanical testing methods, including those used at small scales, and advanced microstructural characterization techniques for examining deformation microstructures. The successful applicant will be required to teach, advise, and mentor graduate students; develop an independent, externally funded research program; participate in all aspects of the department's activities, and serve the profession. Strong written and verbal communication skills are required. Applicants should consult the department's website to review our academic and research programs (<http://engineering.tamu.edu/materials>).

REQUIRED EDUCATION AND EXPERIENCE
Applicants must have, at the minimum, an earned doctoral degree in materials science and engineering or a closely related engineering or science discipline.

TO APPLY
Applicants should submit one merged pdf file that contains a cover letter, curriculum vitae, teaching statement, research statement, and a list of four references (including postal addresses, phone numbers and email addresses) by applying for this specific position at https://tamus.wd1.myworkdayjobs.com/en-US/TEES_External/job/College-Station-TEES/Assistant--Associate-or-Full-Professor-in-Materials-Science---Engineering_R-008073. Full consideration will be given to applications received by **October 31, 2018**. Applications received after that date may be considered until position is filled. It is anticipated the appointment will begin Fall 2019.

Texas A&M Engineering is all Equal Opportunity/Affirmative Action/Veterans/Disability employers committed to diversity. It is the policy of these members to recruit, hire, train and promote without regard to race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, or gender identity.



RESEARCH FELLOWS

International Center for Young Scientists (ICYS) National Institute for Materials Science (NIMS)

The International Center for Young Scientists (ICYS) of the National Institute for Materials Science (NIMS) is now seeking a few research fellows who have passion to conduct innovative materials research based on their original idea. ICYS research fellows are expected to pursue high quality research with their initiatives using the most advanced facilities in NIMS.

ICYS offers a "Melting Pot" environment mixing different materials research fields and cultures. The common language in ICYS is English. Clerical and technical support in English will be provided by the ICYS staff. An annual salary of approximately 5.35 million yen will be offered depending on the qualifications and performance of the research fellow. An additional research grant of 2 million yen per year will be supplied to each research fellow. The initial contract term is two years and may be extended by another year depending on one's performance.

All applicants must have obtained a PhD degree within the last ten years. Applicants should submit an application form, including a research proposal to be conducted during the ICYS term, CV Header, CV with a list of publications and patents (be sure to attach the header), a list of DOI of journal publications following our instructions, and PDF files of three significant publications, to the ICYS Recruitment Desk by **September 27, 2018 JST**. The format for application form and CV header can be downloaded from our website. For more details, please visit our website at:

ICYS Recruitment Desk
National Institute for Materials Science
<http://www.nims.go.jp/icys/recruitment/index.html>



Our Next Breakthrough IS YOU Lawrence Postdoctoral Fellowship The Opportunity to Bring your Brightest Ideas to Life

We know that you are already working hard to solve important research questions. But do you want to take your skills to the next level and apply them to solving the nation's most pressing problems in national security? The Lawrence Livermore National Laboratory (LLNL) has openings available in the Lawrence Fellowship Program that will allow you to do just that. We want you to apply for this prestigious fellowship, which offers you the freedom to conduct the independent, self-directed, cutting-edge research that you have always dreamed about. Fellowships are awarded to applicants with extraordinary talent, credentials, leadership potential and a track record of research accomplishments. Is that you?

Successful Fellows will propose and subsequently perform creative research in an area that is relevant to the mission and goals of LLNL. Broad topic areas include: Physics, Applied Mathematics, Computer Science, Chemistry, Material Science, Engineering, Environmental Science, Atmospheric Science, Geology, Energy, Lasers and Biology. You will be able to participate in experimental or theoretical work at LLNL and will have access to LLNL's extensive computing facilities and specialized laboratory facilities. The duration of the Fellowship is up to three years. The salary is \$9,476/mo.

Please refer to the following web page <http://aptrkr.com/1255151> for eligibility requirements and instructions on how to apply. When applying and prompted, please mention where you saw this ad. The deadline for applications is October 1, 2018. LLNL is operated by the Lawrence Livermore National Security, LLC for the U.S. Department of Energy, National Nuclear Security Administration. We are an equal opportunity employer with a commitment to workforce diversity.

LLNL is an affirmative action / equal opportunity employer.

www.mrs.org/careers-advancement



Career Central

**MRS Career Central is a one-stop shop
for all your career development needs.**

Hosted on our Career Central website, **the MRS Job Board is FREE to job seekers**, serving as the first place to turn to find job openings in the materials science field. The Job Board allows quick and easy access to hundreds of industry-specific job listings, anonymous resume posting and job-alert options to meet your specific needs.

Career Fairs at MRS Spring and Fall Meetings continue to serve as forums to expand your career or your company—providing on-site job interviews, mentoring sessions, resume critiques and mock interviews.

Additional Professional Development sessions or workshops are also offered at MRS Meetings and may include:

- ◆ Preparing for Your Next Job Interview
- ◆ Negotiating a Job Offer
- ◆ Essentials of Getting Your Work Published
- ◆ How to Use Your Social Media to Connect with Your Colleagues and the Press

For additional information, visit
www.mrs.org/careers-advancement.





FACULTY POSITIONS

Materials Science and Engineering

The School of Engineering and Applied Science at the University of Pennsylvania initiated a period of substantial growth in 2015 including four new hires in the Department of Materials Science and Engineering. The department is continuing this exciting multi-year hiring effort by seeking multiple tenure-track assistant professors. Exceptional applicants for tenured associate and full professor positions may also be considered.

The primary hiring focus is the research area of **materials for health**, along with a secondary focus on **functional materials**. Exceptional applicants in other areas of materials science and engineering may also be considered. Additional descriptions of these focus areas and Penn Engineering's strategic plan are available at <http://www.mse.seas.upenn.edu/faculty-staff/>.

Review of applications will begin immediately with a target deadline of **November 1, 2018**.

Applications must be submitted online and include a cover letter, a curriculum vitae, a research statement (limit 5 pages), a teaching statement, and contact information for 3-5 references who could provide letters of recommendation. The cover letter should summarize the applicant's (i) scientific and teaching accomplishments, (ii) vision for their research program specifically at Penn, and (iii) approach to contributing to a diverse and inclusive learning environment.

The University of Pennsylvania is an affirmative action/equal opportunity employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of race, color, religion, sex, sexual orientation, gender identity, creed, national or ethnic origin, citizenship status, age, disability, veteran status, or any other characteristic protected by law.

The National Academies of SCIENCES • ENGINEERING • MEDICINE

Jefferson Science Fellowship

The National Academies of Sciences, Engineering, and Medicine is pleased to announce a call for applications for the 2019 Jefferson Science Fellows (JSF) program. Initiated by the Secretary of State in 2003, this fellowship program engages the American academic science, technology, engineering and medical communities in the design and implementation of U.S. foreign policy.

Jefferson Science Fellows spend one year at the U.S. Department of State or the U.S. Agency for International Development (USAID) for an on-site assignment in Washington, D.C. that may also involve extended stays at U.S. foreign embassies and/or missions.

The fellowship is open to tenured, or similarly ranked, academic scientists, engineers, and physicians from U.S. institutions of higher learning. Applicants must hold U.S. citizenship and will be required to obtain a security clearance.

The deadline for applications for the 2019-2020 program year is **October 31, 2018**. To learn more about the Jefferson Science Fellows program and to apply, visit www.nas.edu/jsf.

The Jefferson Science Fellows program is administered by the National Academies of Sciences, Engineering, and Medicine and supported by the U.S. Department of State and the United States Agency for International Development.



USAID
FROM THE AMERICAN PEOPLE

Where should I publish?

MRS Advances

MRS Advances reports snapshots of work in progress on key materials topics identified by MRS Meeting programming.

Accepts Contributed Articles and Invited Review Articles

mrs.org/mrs-advances

MRS Communications

MRS Communications publishes materials research that is impactful, urgent, and of broad interest to the materials community.

Accepts Research Letters and Prospective Articles—forward-looking authoritative assessments of specific topics

mrs.org/mrc

JMR Journal of MATERIALS RESEARCH

JMR publishes advances in new materials and novel functionalities and development of performance improvements relative to state of the art.

Accepts full-length Research Articles and Reviews

mrs.org/jmr

MRS ENERGY & SUSTAINABILITY

MRS E&S addresses broad perspectives in energy and sustainability as they relate to the impact of materials research on society.

Accepts Review Articles by proposal or invitation; other article formats may be considered

mrs.org/energy-sustainability-journal

MRS Bulletin

MRS Bulletin provides thematic materials overviews, research news, industry and policy developments, and MRS and materials community news and events.

Accepts Overview Articles by invitation or proposal

mrs.org/bulletin

Five distinct options. One publishing partnership.



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