Tenure-Track Faculty Position in Mining Engineering
The Robert M. Buchan Department of Mining
Queen's University at Kingston, Canada
June 2022

Queen's University is situated on traditional Anishinaabe and Haudenosaunee Territory.

The Robert M. Buchan Department of Mining, Faculty of Engineering and Applied Science at Queen's University, invites applications for a **tenure-track faculty position at the rank of Assistant Professor, in the area of Energy Efficient Mining**. The preferred start date of the appointment is January 1, 2023.

Criteria:
The successful candidate must hold at least one degree in Mining Engineering (or a closely related field) and a PhD in a relevant discipline completed at the start date of the appointment. Relevant industrial experience is a significant asset.

The main criteria for selection are:

- Evidence of high-quality scholarly output that demonstrates potential for independent research leading to peer assessed publications and the securing of external research funding
- Strong potential for outstanding teaching contributions at both the undergraduate and graduate levels, and an ongoing commitment to academic and pedagogical excellence in support of the department's programs
- Evidence of an ability to work in an interdisciplinary and student-centred environment.
- Professional engineering licensure in Canada, or the eligibility to obtain licensure, is a requirement. Note that all forms of engineering licensure in Canada are considered acceptable (e.g., P.Eng., temporary engineering license, provisional engineering license, etc.).

The successful candidate will be expected to make substantive contributions through service to the department, the Faculty, the University, and/or the broader community. Salary will be commensurate with qualifications and experience.

Innovative, energy efficient mining systems will be crucial to addressing the challenges of climate change. Such a paradigm shift could mitigate the impacts of mining with respect to global energy consumption, as well as reduce operational costs. The field of *Energy Efficient Mining*

encompasses the enhancement, augmentation, and/or replacement of existing machines, processes, and systems within mining operations – with the aim of improving overall energy efficiency across the value chain. Tackling *Energy Efficient Mining* requires a holistic approach to mining operations and processes, encompassing blasting, fragmentation, ventilation, and other unit operations, along with related automated and intelligent systems.

Candidates for this position will be expected to conduct research relevant to *Energy Efficient Mining*, which could include, but is not limited to, applications in one or more of the following areas: blasting and fragmentation; mine ventilation; alternative, renewable, and novel energy sources; mine electrification; management and modeling of mine energy systems; mining methods and mine design for energy efficiency. Successful candidates for this position will be expected to have the capability to teach core courses across the spectrum of the mining engineering curriculum such as, but not limited to: blasting, ventilation, mine infrastructure and services, materials handling, and capstone mine design.

The primary academic appointment for this position will in the Robert M. Buchan Department of Mining (*Queen's Mining*). Cross-appointment to other relevant academic departments will be encouraged, depending on the area of expertise and research focus of the appointee.

Your Career with Queen's Engineering

Queen's University is one of Canada's leading research-intensive Universities. and *Queen's Mining* consistently ranks among the world's top Mining Engineering departments, with outstanding laboratory facilities and an unparalleled reputation for the quality of our graduates. In alignment with emerging societal and industry priorities, the department embraces an integrated systems approach to the mining project life cycle, thereby enabling more sustainable raw materials extraction that is safer and more effective, and which further mitigates social, environmental, and economic impacts. Several established faculty members have active research programs on a variety of themes related to the mining value chain, including Geostatistics, Blasting, Geomechanics, Mine Design, Mineral Processing, Extractive Metallurgy, Sustainability, and Intelligent Mining Systems. The department possesses world class laboratories for teaching and research in blasting, rock mechanics, mineral processing and extractive metallurgy.

Among our top priorities in the Faculty of Engineering and Applied Science is providing opportunities for early career academics to develop exceptional research and teaching contributions while fostering an inclusive environment where all faculty can thrive. Support for faculty to develop strong research programs includes Special Research Grant opportunities, grant writing workshops and review services, and one-to-one mentorship from experienced colleagues. To promote on-going teaching success, there is support for course development and delivery provided by the Queen's Centre for Teaching and Learning, the Engineering Teaching and Learning Team, the Department of Chemical Engineering and the Faculty of Engineering and Applied Science. Queen's Engineering is also committed to promoting equity, diversity, and inclusivity in Engineering, supported by the recent establishment of a Chair for Women in Engineering, the new Engineering Strategic Plan, and Engineering for Everyone.

The University is situated on the traditional territories of the Haudenosaunee and Anishinaabe, in

historic Kingston on the shores of Lake Ontario. Kingston's residents enjoy an outstanding quality of life with a wide range of cultural, recreational, and creative opportunities. Queen's historic campus is located in the heart of the vibrant Kingston community in the Thousand Islands region of South Eastern Ontario. Queen's is positioned centrally with respect to three major metropolitan areas: Toronto, Montreal, and Ottawa. People from across Canada and around the world come to learn, teach, and carry out research at Queen's University. Faculty and their dependents are eligible for an extensive benefits package including prescription drug coverage, vision care, dental care, long term disability insurance, life insurance and access to the Employee and Family Assistance Program. You will also participate in a pension plan. Tuition assistance is available for qualifying employees, their spouses and dependent children. Queen's values families and is pleased to provide a 'top up' to government parental leave benefits for eligible employees on maternity/parental leave. In addition, Queen's provides partial reimbursement for eligible daycare expenses for employees with dependent children in daycare. Details are set out in the Queen's-QUFA Collective Agreement. For more information on employee benefits, see Queen's Human Resources.

Additional information about Queen's University can be found on the Faculty Recruitment and Support website. Visit Inclusive Queen's for information on equity, diversity and inclusion resources and initiatives.

The University invites applications from all qualified individuals. Queen's is strongly committed to employment equity, diversity and inclusion in the workplace and encourages applications from Black, racialized/visible minority and Indigenous/Aboriginal people, women, persons with disabilities, and 2SLGBTQ+ persons. All qualified candidates are encouraged to apply; however, in accordance with Canadian immigration requirements, Canadian citizens and permanent residents of Canada will be given priority.

To comply with federal laws, the University is obliged to gather statistical information as to how many applicants for each job vacancy are Canadian citizens / permanent residents of Canada. Applicants need not identify their country of origin or citizenship; however, all applications must include one of the following statements: "I am a Canadian citizen / permanent resident of Canada"; OR, "I am not a Canadian citizen / permanent resident of Canada". Applications that do not include this information will be deemed incomplete.

Prospective candidates should be aware that the Queen's University Policy Regarding Mandatory Vaccination Requirements for In-person University Activities requires **ALL** Community Members, including those holding faculty appointments, be Fully Vaccinated against COVID-19 prior to participating in any In-person University Activities. This is a condition of employment for all employees who are required to attend University Property to perform their employment responsibilities. Individuals who cannot be vaccinated due to **substantiated grounds** (medical and other protected grounds under the Ontario Human Rights Code) **may ask the University to validate the exemption** and request an accommodation in these rare circumstances. If approved, they will be subject to additional health and safety measures.

In addition, the impact of certain circumstances that may legitimately affect a nominee's record of research achievement will be given careful consideration when assessing the nominee's research

productivity. Candidates are encouraged to provide any relevant information about their experience and/or career interruptions.

A complete application consists of:

- a cover letter (including one of the two statements regarding Canadian citizenship / permanent resident status specified in the previous paragraph);
- a current Curriculum Vitae (including a list of publications);
- a statement of research interests;
- a statement of teaching interests and experience (including teaching outlines and evaluations if available);
- a statement of commitment to – as well as ideas and any experience on how to ensure equity, diversity, and inclusivity in scholarly activities; and
- the names and contact information of three referees.

Review of applications will begin on October 1, 2022, and applications will continue to be accepted until the position is filled. Applicants are encouraged to send their application package electronically as PDFs to Julie Sharrard at julie.sharrard@queensu.ca with the subject line "Application for the Energy Efficient Mining Faculty Position", although hard copy applications may be submitted to:

Dr. Julian M. Ortiz,
Associate Professor and Head
The Robert M. Buchan Department of Mining
Queen's University
Goodwin Hall, Room 354
Kingston, ON, Canada K7L 3N6

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs. If you require accommodation during the interview process, please contact Julie Sharrard in the Robert M. Buchan Department of Mining at julie.sharrard@queensu.ca.

Academic staff at Queen's University are governed by a Collective Agreement between the University and the Queen's University Faculty Association (QUFA), which is posted at Collective Agreements / LoU's / MoA's | Faculty Relations Office (queensu.ca) and at http://www.qufa.ca.