Carleton UNIVERSITY
Canada's Capital University

Arthur B. McDonald
Canadian Particle Astrophysics Research Institute

Engineering Project Manager at Carleton University in Ottawa, Ontario

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The SNOLAB group at Carleton University in Ottawa has an immediate opening for an Engineering Project Manager to lead the engineering efforts related to scientific projects in astroparticle and subatomic physics. Reporting to the Principal Investigator and working with the technical and scientific team, the Engineering Project Manager will oversee the development of experimental research equipment. The facility includes a large cryogenic cooling system providing distributed liquid-nitrogen cooling to stations within a cleanroom laboratory servicing custom detector systems utilizing liquified noble gases.

Key responsibilities include

- Oversight of an engineering and technical team in the conceptual and detailed design, fabrication, and commissioning of mechanical detector systems
- Defining and maintaining the project schedule; working with a financial administrator to define and maintain the project budget
- Prepare and provide monthly progress and summary reports as required
- Prepare results for presentation of technical details to collaborators
- Familiarity with relevant regulatory codes and standards in Ontario (eg TSSA) and preparation of documentation to secure approval for such designs
- Liaise with staff and outside agencies to stay aware of developments and foster collaborative design efforts
- Supervise junior technical and engineering staff; allocate procedures and provide guidance and consultation with respect to protocols and methods; delegate and oversee workload

Required qualifications and skills

- Minimum of a B.Eng. degree in mechanical engineering or equivalent, with P.Eng. designation and ability to stamp engineering drawings in Ontario
- Should have relevant design experience
- Experience and familiarity with project management
- Familiar with relevant Ontario codes
- Proficient in mechanical modelling and design software

- Familiar with fabrication and manufacturing processes
- Excellent oral and written communication skills; interpersonal and management skills
- Judgement, initiative, and foresight to design and implement novel ways of problem solving
- Supervisory and leadership skills to provide direction and instruction to junior staff and students
- Strong mechanical aptitude, ability to read and interpret instruments and data correctly
- Strong analytical and problem-solving skills to understand and solve problems encountered in design and development

Decision Making

- Allocate technical resources to meet the project's schedule
- Make recommendations regarding conceptual and detailed designs, including the manufacturing, testing and implementation of custom components
- Make suggestions regarding procedures and protocols, and adapt them as required to allow progress and efficiency
- Determine if content of a drawing is sufficient in details to produce prototypes

The position will be based at Carleton University in Ottawa and may involve travel to the SNOLAB facility in Sudbury (www.snolab.ca), the LNGS underground laboratory in Italy (www.lngs.infn.it) or the site of an underground argon extraction facility in Colorado, USA. Successful candidates will join the Carleton astroparticle physics research and technical team, described at physics.carleton.ca/apex.

The successful candidate will join our research team and will perform duties under the direction of the principal investigator. Safety training and on-the-job training for specific tasks will be provided. The position is for two years with possibility of renewal. Salary will be commensurate with the candidate's qualifications. Only those selected for an interview will be contacted. Please send a cover letter, a resume of education and experience, and a list with at least three references to:

Prof. Mark Boulay
Professor and Tier 1 Canada Research Chair
DEAP Project Director
c/o Joseph Snider – Financial Officer
joseph.snider@carleton.ca

Carleton University invites all qualified candidates to apply; however Canadian citizens and permanent residents will be given priority. Carleton University is committed to employment equity and diversity in the workplace and actively encourages all qualified women, visible minorities, aboriginal people, persons with disabilities, and persons of any sexual orientation or gender identity to apply.