



Visiting Professional and Peer Review Program

The Wind Energy Institute of Canada (Institute) has established the Visiting Professional and Peer Review Program (VPPP) to enhance and recognize the contribution of professionals in the field of wind energy.

There are two ways to participate in the VPPP program

1. By visiting the Institute
2. By having the Institute peer-review the participants' technical document

The VPPP for visitors to the Institute is designed for:

- Professionals who are beginning their careers and are seeking to gain more experience
- Mid-level professionals who find themselves with newly added job responsibilities
- Academics who are seeking experience in industry during their sabbaticals to ensure the relevance of their research to the wind industry

The goal of all activities at the Institute is to advance the development of wind energy across Canada through research, testing, innovation, and collaboration. The Institute's laboratory includes:

- Five 2 MW wind turbines equipped with condition monitoring systems
- Test bed for energy storage system (currently holds a 111.5 kW/223 kWh battery energy storage system)
- 109 kW solar PV array with 33% - 66% split of monofacial/bifacial PV panels
 - 25% of panels are equipped with optimizers
- Substation
- 275 kW diesel generator
- Supervisory control and data acquisition (SCADA) system
- Small wind turbine inventory and test bed
- 80 m met mast compliant with IEC 61400-12-1: Power performance measurements of electricity producing wind turbines, equipped with
 - Wind direction and speed sensors at multiple heights
 - 80 m temperature, relative humidity, and air pressure sensors
 - Ice detector
 - Pyranometer
- Climate monitoring facility
 - Compliant to IEC 61724-1: Photovoltaic system performance – Part 1: Monitoring
 - Cameras to allow viewing of solar array surface, ground cover, and ocean ice cover
 - Weather station, which allows identification and quantification of precipitation
 - Snow depth gauge
 - Rain gauge

- Weather sensors to measure air temperature, relative humidity, vapour pressure, barometric pressure, wind, solar radiation, precipitation, and lightning strike (count and distance)
- OSISoft PI Data and Event Infrastructure

Research areas the Institute is currently pursuing include:

- Grid integration of renewable energy
- Service life estimation
- Improving understanding of our wind and solar resources

VPPP participants who visit the Institute can work side-by-side with the Institute's experienced staff on projects that are of interest to the Institute and the participant. VPPP participants will enhance their skills and knowledge through access to the Institute's state of the art facilities; discourse with Institute staff; and connections to the wider Canadian and global wind energy network. Participating in this program gives visiting professionals the opportunity to make a significant difference to the development of wind energy in Canada and to further enhance their own careers in wind energy.

An additional way by which professionals and academics can interact with the Institute staff in this program is through the Institute's peer review of scholarly articles, reports, presentations, proposals, and white papers. As research becomes more interdisciplinary, it is becoming more difficult for any one person to understand all aspects of a research project. Moreover, it is important for academic authors to ensure that their research is relevant to industry. The Institute has a multi-disciplinary team with considerable experience in all aspects of wind energy as well as close ties to industry. They offer a timely peer-review process that can boost the quality of documents before it takes its next step.

Eligibility

Professionals eligible for this program may be from public and private organizations, including industries, universities, research institutions, government, utilities, and system operators.

All applications under this program will be considered whether they are for one week or for more than one year. If the applicant is eligible for Natural Science and Engineering Research Council's Scholarships, Work Smarts, or other funding opportunity, the Institute will work with the applicant towards receiving this funding.

Nomination Process for Visiting the Institute

Candidate submits a letter of application to the Institute's Scientific Director, which should include:

- Candidate's CV
- Plan of engagement
- Reasons for interest in VPPP program
- Current area of professional or academic endeavor

Process for Submitting a Document for Peer Review

- Author submits document title and abstract/summary to the Institute's Scientific Director along with the desired timeline
- If the Institute decides to peer review the document, the Candidate sends the Scientific Director the full document

Management Responsibilities:

For visiting the Institute, the nomination will be reviewed by the Scientific Director, who will then make a recommendation to the CEO. Applications must be approved by the CEO. Upon

approval, the Scientific Director will send an offer letter to the candidate stating the terms of the appointment and, in turn, will request a letter of acceptance from the candidate. Any questions about the VPPP program should be directed in the first instance to the Scientific Director.

For peer review of a document, the Scientific Director will review the title, abstract/summary, and timeline and decide whether the Institute has the expertise and time to adequately review the document. If the Institute will review the full document, the Scientific Director will send the author a contract guaranteeing confidentiality and the completion date. The Scientific Director will then assign a team of the Institute's staff to carry out review of the document. A full report of recommendations, suggestions, and comments will be delivered to the author by the agreed-upon date.