



## 2017 Hydro Research Awards Program Application Information

### **Important Dates:**

- All application materials must be received by midnight on March 15, 2017.
- Applicants will be notified of application status by April 15, 2017.
- Funds will be available to awardees starting as early as June 15, 2017.

### **About the Awards:**

The Hydro Research Foundation is pleased to solicit applications for the Hydro Research Foundation's Research Awards Program. The program is funded by a grant from the Department of Energy's Energy Efficiency and Renewable Energy Program. These awards are designed to allow outstanding early-career researchers to facilitate research related to conventional and pumped storage hydropower. Research undertaken by the Foundation and its participants seek to advance knowledge about hydroelectric technology including mechanical, electrical and controls engineering innovations, reliability standards and critical infrastructure protection, cyber security, efficiency improvements and environmental mitigation. Through this program the Foundation is promoting educational opportunities and information development related to hydropower. Innovation, creativity and forward-thinking research are encouraged.

The Foundation envisions that the selected researchers will eventually assume leadership roles in the hydroelectric field. Applicants are selected based on research vision, innovation, academic performance, potential for leadership and overall strength of their research proposal. Preference will be given to United States citizens but is open to ant student studying full-time at an accredited U.S. University.

Hydro Research Foundation Researchers will be awarded support one year of funding for masters, post-masters graduate research awards, or doctoral students for applied research in fields related to conventional and pumped-storage hydropower. Prioritized research topics of interest for research proposals can be found at [www.hydrofoundation.org](http://www.hydrofoundation.org). Select Research & Education to locate the 2017 Research Award Application and Instructions.

Award applicants must have completed a Bachelors degree by the date of this award and be a full-time graduate research student. Applicants must be able to complete their degree or research project by May 2018. An academic sponsor whose role is to encourage the continual development of the student will monitor each participant. The student's primary academic advisor for the research will be awarded \$2,000 annually into a university discretionary account, for aiding in, and supervising the

research. Advisors may also be invited to attend a hydro conference in conjunction with their role as an advisor.

The Foundation expects to announce awards by May 15<sup>th</sup>, 2017, for appointments beginning in June-September of 2017. Research awards typically include:

- A living stipend of up to \$18,000 annually.
- An annual tuition, fees, and university provided health insurance allowance of up to \$10,000.
- Travel costs to attend the annual Hydro Research Awards Roundtable in June 2017 and July 2018.
- Participants may be offered an internship position from industry partners that could result in permanent employment. The topics of interest document outlines topics that could have an internship opportunity.

#### **Eligibility and Award Terms:**

- Eligible applicant must have completed, at a minimum, a bachelor's degree by the start date of the research award.
- Applicant must be a full time student at a U.S. university in order to receive funding. Preference will be given to U.S. citizens.
- Applicant must be a full-time student who expects to complete their research by May of 2018.
- Applicant's research proposal must be related to conventional or pumped storage hydropower.
- Each selected applicant will be required to participate at the annual Hydro Research Roundtable over the next two years. The next conference is in Denver, CO June 25-30, 2017. The Hydro Research Foundation will cover travel expenses to attend and participate in the Roundtable.
- Some students will have the opportunity to participate in an internship with industry partners and this will be worked out during the award process with each selected participant and their advisor.
- Additionally, participants will be required to commit the research timeline as outlined in the proposal submitted and provide quarterly updates on research progress and satisfactory academic performance. The quarterly reports will be verified and signed by the participant's research advisor. During the course of the research award program, the participant must demonstrate progress toward finishing their degree and remain in good standing with their University. The Foundation expects that research will be completed and published by May 2018. If participants fail to complete their research within the timeframe in their proposal, it may lead to the Foundation seeking reimbursement of the awards made to the participant, who will be personally responsible for such reimbursement.
- Each research project once accepted will be reviewed by the National Environmental Policy Act (NEPA) compliance office and awards cannot be made to projects not in compliance with NEPA.

### **Application Instructions:**

A complete application packet consists of:

1. Application Form
2. Proposal for Research
3. Copy of Transcript (unofficial)
4. Copy of GRE scores (unofficial)
5. Resume
6. Supporting Documents (if applicable)
7. Two reference forms, at least one of which is academic sent separately from application packet (directions on this form can be found under the references tab under the research awards menu)
8. Letter of Support from University Department on University letterhead (sent separately from application packet)

### **Application Packet:**

Applications should be reviewed by research advisor prior to submittal. Applications must be received by March 15<sup>th</sup>, 2017. All application information needs to be submitted in English. Applications will only be accepted electronically and need to be submitted to [secureapp@hydrofoundation.org](mailto:secureapp@hydrofoundation.org). **The application packet needs to be sent in one document; formatted as a .pdf file.** References and the University letter of support need to be sent electronically from the references' professional email account and should also be submitted to [secureapp@hydrofoundation.org](mailto:secureapp@hydrofoundation.org). The reference form can be downloaded from the website under the Research Awards Program page in the 2017 application and instructions area.

### **Application Form:**

The application form is available online in a word document format and should be filled out and saved into the .pdf application packet.

### **Proposal For Research:**

The research proposal should not exceed two single-spaced pages. If citations and references can be included on a third page of the proposal and do not count towards the two-page limit. The proposal should be clear to an interdisciplinary selection committee. The proposal should be included in the application packet and not sent separately. The proposal should include the following elements:

- Proposed research and vision of the research scope;
- What research topic(s) this relates to;
- Why the research is relevant to hydropower;
- Methods or approaches to be used;
- A specific work plan with milestones and dates of completion; and
- Why the research and University are a good match for the proposed research.

### **Transcripts:**

Please scan and include unofficial copies of your transcripts to your application packet when submitting. If you are selected, an official paper copy will be required.

**GRE Scores:**

Please scan and include in your application packet a copy of the results from your Graduate Record Exam.

**Resume:**

Please include a resume to your application packet when submitting.

**Supporting Documents:**

Please include in your application packet supporting documents including any of the following: Projects, Abstracts, or Publication Cover Pages. Please note the Foundation cannot review finished thesis work or long publications. Please limit submission of each supporting document to under 5 pages.

**Reference Forms:**

The Foundation requests two reference forms which are available online at [www.hydrofoundation.org](http://www.hydrofoundation.org) on the 2017 Research Awards Application and Information page. The references should be from your proposed advisor, and at least one other academic individual. This is different from the university letter of support which is explained below. Reference forms should be submitted from the reference provider to [secureapp@hydrofoundation.org](mailto:secureapp@hydrofoundation.org).

**University Letter of Support:**

Each applicant needs to have the department at their University to provide a letter of support. These letters are used to demonstrate the support from the university department to the selection committee and to the Department of Energy.

The letter of support should be submitted to the Foundation on the University letterhead with the following information: Name of applicant, statement of support for proposed research, university contribution information, letter writers contact information and signature. The letter must clearly outline what in-kind support the University will be providing and the dollar value of that support. The following University Contribution Worksheet is provided to help outline potential areas of contribution, but not all apply to the proposed research and is not required to use this format. This is just a guide to provide ideas on what support the applicant would be receiving. Letters can be submitted to: [secureapp@hydrofoundation.org](mailto:secureapp@hydrofoundation.org).

**University Contribution Worksheet:**

Values should be for the life of the research project and verifiable from university records.

**Type of Contribution:**

	Type of Item	Value	Cost Basis- i.e.- current fair market value, actual cost
Office Supplies			
Laboratory Supplies			
Workshop Supplies			
Classroom Supplies			
Computer			

Computing Capability			
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	Type of Item	Hourly Usage Rate	Hours Being Used	Total Value
Equipment Usage				
Buildings				
Loaned Equipment- Note the value of loaned equip. shall not exceed its fair rental value				
Laboratory Space				

	Time in Hours Towards Project	Hourly Rate	Total Contribution
Advisor Time			
Administration Services			

If this funding had gone through the grants or sponsored programs department at your university what would have the facilities and administration rate been?

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