

# **NOTIFICATION FOR POSOCO POWER SYSTEM AWARDS (PPSA)-2018**

**Call for Applications - 1<sup>st</sup> September to 31<sup>st</sup> October 2017**

**The POSOCO Power System Awards (PPSA) rewards fresh Doctoral/Masters research accomplishments in power system (and related fields) from all the educational institutions offering PG in power systems and related fields in the country**

Power System Operation Corporation Limited (POSOCO), a Government of India Enterprise under Ministry of Power ensures Integrated Operation of Regional and National Power Systems of the country to facilitate transfer of electric power within and across the regions and trans-national exchange of power with Reliability, Security and Economy.

POSOCO Power System Awards (PPSA) has been constituted by POSOCO in partnership with the Foundation for Innovation & Technology Transfer (FITT), IIT Delhi to encourage excellence and innovative research in the area of power systems and its related fields.

**Two categories of awards are being instrumented-**

**1. Doctoral Category- 15 awards**

**2. Masters Category- 15 awards**

**(Cash prize of Rs. 1,00,000/- each)**

**(Cash Prize of Rs. 40,000/- each)**

## **POSOCO Power System Awards (PPSA) -2018**

PPSA is a joint initiative of Power System Operation Corporation (POSOCO) and Foundation for Innovation & Technology Transfer (FITT), IIT Delhi. The award is being funded by POSOCO and FITT will function as its nodal agency to implement the program.

### **1) Objective**

The objective of the PPSA program is to reward the research excellence and recent innovative accomplishments in power system and related fields in all the technical institutions of the country.

The Award aims to-

1. Discover innovations in Power System.

2. Reward excellence in the Power System & related fields.
3. Motivate students to undertake further research & innovation in the Power System.
4. Collect and disseminate successful technologies for possible industry adoption.

Collaboration and exchange of knowledge between Industry and Academia is of utmost importance for the country's future. POSOCO, is a knowledge oriented organization with strong ties to academic institutions. POSOCO, through the platform of PPSA is looking to encourage research in the field of power system, particularly low frequency oscillations and its detection, analysis and mitigation, stability limits, transfer capability assessment for inter-area transfers, transmission pricing, ancillary services, imbalance pricing and market auction design. POSOCO also encourages and supports research in emerging areas like renewable energy integration and storage, forecasting and balancing and big data analytics.

In endeavor to foster industry-academia partnership, POSOCO will share pertinent data / relevant information with researchers if required. Research in the above mentioned fields is encouraged and submissions are welcome.

## **2) Award Category & Beneficiaries**

There are two categories of awards Master and Doctoral. The faculties can be a part of research team only as mentor/guide/adviser to students.

There will be fifteen awards for PPSA-Doctoral category with Rs.1,00,000/- cash prize to each project along with certificates. Similarly, there will be fifteen awards under PPSA-Masters' category with a cash prize of Rs. 40,000/- per shortlisted project. The prize money will be shared by the student team members only.

## **3) Participating Institutes & Colleges**

PPSA-2018 is open to all the institutions and colleges offering PG program in Power Systems and related fields.

## **4) Eligibility Criteria & Submission Guidelines**

Eligibility criteria for submission are:-

1. Applications relevant to power system and related fields are eligible to apply.
2. Only recently accomplished projects/research work/innovations are eligible for entry.
3. For Master category, only those who have been awarded degree in 2017 are eligible for participation.
4. For Doctoral category, those who have completed 3 years of the program or submitted their thesis or awarded degrees in 2017 are eligible for award.

## 5) Submission Guidelines

1. Applicant(s) may submit as an individual and (or) team, and no upper cap for the team size.
2. Team may comprise members from multidisciplinary and academic years. Faculty may be included in the team, but their role is restricted to advisory/mentoring/guide level only.
3. In case of IP involvement, applicant/team has to take approval or furnish “**No Objection Certificate/Letter**” from principal advisor/co-inventors/research colleagues, if they are not part of team.
4. The application form must be furnished with all the details in the prescribed format (**Annexure-I**). Incomplete application form will lead to disqualification.
5. Submission of application must be made over email to-[ppsa2018@gmail.com](mailto:ppsa2018@gmail.com))
  - Here candidates applying for the Doctoral category must keep the subject of the mail as- “**APPLICATION FOR DOCTORAL CATEGORY- POSOCO POWER SYSTEM AWARDS (PPSA) - 2018**”
  - Candidates applying for the Master category must keep the subject of the mail as- “**APPLICATION FOR MASTER CATEGORY- POSOCO POWER SYSTEM AWARDS (PPSA) - 2018**”
  - All the applications and supporting documents must be submitted on or before 31<sup>st</sup> October, 2017. Applications received after the due date will not be accepted.

## 6) Evaluation criteria

Each nomination will be evaluated on the basis of following criteria like:

- Intellectual Property: IPR associated with the project.
- Theoretical soundness: To check student's ability to understand fundamentals of the problem (the mathematics, the algorithms, the proofs of theorems etc.)
- Practical application: To check if the research work/ thesis work have practical application in short run or long run. To check if a commercial product can be developed out of the research work.
- Novelty: To check, if the work done has already been existing in prior art.
- Outcome: To check, if there are international journal papers, patents based on work carried out.
- Toughness/ challenge: Some projects may have humongous amount to work but problem is not challenging. Some projects may have small quantum of work but the problem is challenging (technically, implementation wise etc).
- Presentation: To check ability of student to be able to present work in a lucid manner. For this, thesis as well as attached ppt should be referred to.

## **7) Evaluation Process**

The PPSA applicants will undergo two stage, independent evaluation by two different committees constituted. In the first round of evaluation (pre-screening), a 3-member committee will shortlist candidates from both the Doctoral and Masters' category.

In the second round of evaluation, an expert committee will finalize 15 awardees from Doctoral category and 15 awardees from the Master Category.

### **Pre-screening Committee**

The pre-screening committee will constitute of 3 members, which will include faculty members from IITD and POSOCO or Govt. institutions. This screening committee will shortlist 50 candidates in each category (Doctoral & Master) for the final stage of evaluation. This number of shortlisted candidates for the second round may vary depending upon the suitability of the applications received.

### **Evaluation by Seven Member Expert Committee**

For the second round of evaluation, there will be an expert committee comprising of seven members from academia, industry and govt. body. This second round of evaluation will be for 3 days at NLDC & IITD. The 50 shortlisted Doctoral applicants who will appear for the evaluation at Regional Load Dispatch Centers (RLDCs) will be given to and fro travel reimbursement (3AC train fare/ Bus fare). For the purpose of screening, the Doctoral students will have to appear in person at their nearest RLDC as per their zone selected in their application form. Failure to this will lead to disqualification.

All administrative activities relating to the final stage of evaluation at the different RLDCs will be handled by the representatives from RLDCs/POSOCO.

Masters candidates do not have to appear at the RLDCs for the second round of evaluation. For the Master category, ppts of the 50 shortlisted candidates will be screened and assessment will be done on the basis of the evaluation criteria (stated above point 6) by the experts.

## **8) Awards Disbursement**

The results for PPSA 2018 will be declared during January, 2018. The list of awardees will be displayed in the POSOCO website: <http://posoco.in/> & FITT website: <http://fitt-iitd.org/> and <http://fitt-iitd.in/>. All the applicants are requested to check these websites on regular basis.

After the declaration of results (i.e., notification in FITT/POSOCO website); an award ceremony will be organized in February, 2018. Here, all the awardees of PPSA-2018, in Master & Doctoral category will be invited to IITD for the award function. FITT will reimburse travelling expenditure (3AC train fare/ Bus fare) to these candidates.

**Annexure-I**

**Application Form POSOCO Power System Awards (PPSA- 2018)**

**Name:** \_\_\_\_\_ **Gender (Male/Female):** \_\_\_\_\_

**Institution Name:** \_\_\_\_\_ **Nationality:** \_\_\_\_\_

**Zone (East / West / North/ South):** \_\_\_\_\_ **Category (Master/ Doctoral):** \_\_\_\_\_

**Stream:** \_\_\_\_\_ **Year of Admission:** \_\_\_\_\_

**Master/ Doctoral Academic Year:** \_\_\_\_\_ **Year of Passing:** \_\_\_\_\_

**Email:** \_\_\_\_\_ **Telephone/ Mob No:** \_\_\_\_\_

**Corresponding Address:** \_\_\_\_\_ **Permanent Address:** \_\_\_\_\_

**Team Members & Contact Details:**

Student Name	Department & year	Roll No	Email	Tele/Mob no

**Faculty Adviser/Mentor/Guide Details:**

Faculty Name	Department	Position	Email	Tele/Mob no

**\*Project title:**

**\*Project Abstract:** (Summary of the initiative in 100 words)

**\*Project Description:** (10 pages, covering following points)

1. What was the situation before the initiative/project/research began? (What was the problem/opportunity you identified?). Describe the situation before the initiative began. What major problems and issues needed to be addressed? Provide with the prior-art in literature as well as practices followed in industry at the time of initiation of the project.
2. What is the initiative/project/research about? (What was the Solution/Approach you adopted to address the identified problem/opportunity?). Summarize what the initiative is about, Intellectual Property and Innovations associate with it and how it solved the problem.
3. What was the methodology and strategies used to implement the initiative/project/research? Provide a summary of the main objectives and strategies of the initiative, technological and managerial tools used.
4. What were the key benefits resulting from this initiative/project/research? Describe the results, achievement(s) implemented; how the impact was measured, quantitatively and qualitatively, and how it will benefit to power sector /industry, any immediate industrial applications?
5. What were the key development and implementation steps and the chronology?
6. What resources were used for the initiative and constrains confronted? Specify what were the financial, technical and human resources' costs associated with this initiative.
7. Is the initiative sustainable and transferable? Describe how the initiative is being sustained (for example in terms of financial, social and economic, cultural, environmental, institutional and regulatory sustainability). Describe whether the initiative is being replicated or disseminated at the national and/or international levels and/or how it could be replicated.
8. Way forward/future plan of the project you envisioned? Describe future plan and opportunity you want to take it forward as venture, technology transfer, advance research & industry application etc.
9. List the credentials/recognitions/national & international representations made through the project, it may in terms awards, publications, patents, technical presentations, Showcase/demonstration etc.

10. How did you come to know about PPSA -2018?

**\*Power Point Presentation:** (10 slides only)

**Please Note:** *Fields marked in \* are mandatory, to be filled up by each applicant failure to which will lead to disqualification.*

**Declaration:** *I hereby declare that all the above information furnished herein is true to my knowledge.*

*I, further undertake that my candidature for PPSA-2018 will be cancelled in case the above declaration is found to be false at any stage of selection.*

**Date:**

**Signature of Candidate:**

**Place:**