



# PHILIPPINE PHYSICS SOCIETY (PPS)

## PHYSICS FAIR

### INVESTIGATORY PROJECT CATEGORY

#### Introduction

The Physics Fair Investigatory Project Category aims to develop appreciation for and involvement in research endeavors with physics content. Among the students, it serves as an instrument for honing research skills. Teachers, too, who are testing research waters will find participation in this activity rewarding.

#### Requirements for Participation and Mechanics of Event

1. An experimental investigatory project with physics content must have been undertaken prior to the Physics Fair. Effective Physics Fair 2015 and beyond, if a project is undertaken by a team, the team shall not exceed two members.

2. Three hard copies of the research report must be submitted to the PPS President or his authorized representative not later than the first day of the Annual National Physics Seminar-Convention. Participants must email PPS ([philippinephysics@yahoo.com](mailto:philippinephysics@yahoo.com)) the abstract of the research report not later than one month before the starting date of the seminar-convention.

3. The research report must contain the following sections: (a) statement of the problem, (b) theory, (c) methodology, (d) data, results, and analysis, and (e) conclusion. Other sections like scope and limitation, significance of the study, definition of terms, review of literature, recommendation, etc. may be added. Illustrations and pictures that add clarity to the presentation are encouraged.

4. The Board of Judges, composed of a chairman and two members, will be constituted by the PPS President from PPS members who have considerable research experience and publications and teaching and mentoring experience.

5. Entries will be based on the following:

Research Report = 85%

I. Statement of the Problem = 10%

Among others, clear and specific

ii. Theory = 20%

Among others, completeness as foundation for project, logic of development and extent of understanding of theory in consonance with educational level of participant(s)

iii. Methodology = 20%

Among others, logical, complete, and thorough

iv. Data, Results and Analysis = 25%

Among others, completeness, reliability, accuracy, level of analysis, logic, and awareness of limitations

v. Conclusion = 10%

Among others, answers completely and clearly the problem, and

assesses well inadequacies, limitations, and soundness

Oral Presentation and Defense = 15%

- i. Clarity, Conciseness, Posters, Presentation Aids = 5%
- ii. Mastery = 5%
- iii. Ability To Answer Questions = 5%

6. Honors will be awarded on the basis of the ratings, rounded off to the unit's place.

First Merit Award for entries where  $\text{Rating} \geq 90\%$

Second Merit Award for entries where  $85\% \leq \text{Rating} < 90\%$

Third Merit Award for entries  $80\% \leq \text{Rating} < 85\%$

Certificates of Participation will be given to non-winning entries.

7. There shall be no monetary awards/prizes.

8. If an investigatory project is undertaken by a team, the team shall not exceed two members.

Effective Physics Fair 2015 and beyond, a penalty of 11% per excess member shall be deducted from the entry's rating.

Score Sheet

IP Entry #: \_\_\_\_\_ Title: \_\_\_\_\_ Award: \_\_\_\_\_

	Judge 1	Judge 2	Judge 3	Final Rating
<u>Research Report</u> = 85%				
Statement of the Problem = 10% Among others, clear and specific				
Theory = 20% Among others, completeness as foundation for project, logic of development and extent of understanding of theory in accordance with educational level of participant(s)				
Methodology = 20% Among others, logical, complete, and thorough				
Data, Results and Analysis = 25% Among others, completeness, reliability, accuracy, level of analysis, logic, and awareness of limitations				
Conclusion = 10% Among others, answers completely and clearly the problem, and assesses well inadequacies, limitations, and soundness				
<u>Oral Presentation and Defense</u> = 15%				
Clarity, Conciseness, Posters, Presentation Aids = 5%				
Mastery = 5%				
Ability To Answer Questions = 5%				
TOTALS				

Signatures:

\_\_\_\_\_  
Judge 1

\_\_\_\_\_  
Judge 2

\_\_\_\_\_  
Judge 3

PPS Physics Fair – Investigatory Project Category  
SUMMARY OF EVALUATION

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Entry Number	TITLE	CONTESTANT(S)	COACH(ES)	Rating	Award

Signature over printed name:

\_\_\_\_\_  
Chairman                                  Member                                  Member

## EXHIBIT CATEGORY

### Introduction

This event aims to encourage physics teachers to produce teaching aids like apparatus, visuals, videos, etc. Physical/material displays are expected. Off-classroom and field activities, as learning activities, may also be included if properly documented.

### Mechanics

1. The project may be undertaken by an individual or a team. If the project is undertaken by a team, the members should not exceed three. If the members of the team exceed three, a penalty of 2% per excess member shall be deducted from the entry's preliminary rating to obtain the Final Rating.

2. An abstract of the exhibit must be emailed to PPS ([philippinephysics@yahoo.com](mailto:philippinephysics@yahoo.com)) or to the President ([gerardomaxino@yahoo.com](mailto:gerardomaxino@yahoo.com)) at least one month before the start of the seminar-convention.

3. A brochure of the exhibit must be prepared and submitted to the PPS President during the first day of the seminar-convention. The display should preferably be prepared on or before the first day of the seminar-convention. Information regarding the place for exhibit may be obtained from the Convention Director.

4. Evaluation of entries will be based on the following:

- a. Brochure – 20 points  
Clarity of aim, relevance to physics research and/or physics teaching in the Philippine setting, description of exhibit
- b. Display – 40 points  
Quality, quantity, functionality, learner-friendliness
- c. Replicability – 20 points  
Ease of production by others
- d. Oral presentation – 20 points  
Clarity, content, organization, interest generation  
May be done on site or another designated venue, at the discretion of the judges.

5. Honors will be awarded on the basis of the ratings, rounded off to the unit's place.

First Merit Award for entries where Final Rating  $\geq 90\%$

Second Merit Award for entries where  $85\% \leq$  Final Rating  $< 90\%$

Third Merit Award for entries  $80\% \leq$  Final Rating  $< 85\%$

Certificate of Participation for entries where Final Rating  $< 80\%$

6. There shall be no monetary awards/prizes.

Score Sheet

EXHIBIT #				
TITLE [Keyword(s) only]				
CONTESTANTS AND SCHOOL				
Brochure = 20% Clarity of aim, relevance to physics research and/or physics teaching in the Philippine setting, description of exhibit				
Display = 40 % Quality, quantity, functionality, learner-friendliness				
Replicability = 20% Ease of production by others				
Oral presentation = 20% Clarity, content, organization, interest generation				
TOTALS				
Less: Number of excess members x 2 ( ____ x 2 = ____)				
Final Rating				
AWARD				

Signature of Judge: \_\_\_\_\_

PPS Physics Fair – Exhibit Category  
SUMMARY OF EVALUATION

Page \_\_\_\_ of \_\_\_\_ pages

Entry Number	TITLE	CONTESTANT(S)	COACH(ES)	Rating	Award

Signature over printed name:

\_\_\_\_\_

Chairman

Member

Member