



Department of Education
Region III
DIVISION OF ANGELES CITY
Jesus Street, Pulungbulu, Angeles City



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email address: angeles.city@deped.gov.ph

RELEASED

DEC 11 2017

DIVISION ADVISORY

No. 265, s. 2017

By DepED Angeles City
Division of City Schools

To: Heads of Public Secondary/Senior High Schools
From: OIC-Schools Division Superintendent
Subject: HIPNAYAN 2018: Explore, Innovate & Collaborate
Date: December 1, 2017

This is to inform all concerned that the Physics Society of Adamson University will conduct "HIPNAYAN 2018: Explore, Innovate & Collaborate" on January 13, 2018.

Attached is a letter from Ms. Nicole Jean L. Mercado, HIPNAYAN 2018 Spearhead, for reference and information.


LEILANI S. CUNANAN, CESO VI
Officer-in-Charge

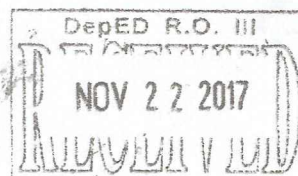
Office of the Schools Division Superintendent



PHYSICS SOCIETY OF ADAMSON UNIVERSITY

November 17, 2017

MR. MALCOLM S. GARMA, CESO V
OIC- Regional Director
Department of Education – Region III
D.M. Government Center, Maimpis,
City of San Fernando, Pampanga



Dear Mr. Garma:

Greetings in the spirit of St. Vincent de Paul!

We, The Physics Society of Adamson University (PSAU) is a recognized co-academic, nonpolitical, non-profit student organization of Adamson University. We are actively involved in promoting camaraderie, strengthening unity despite of diversity, enforcing analytical skills, and empowering the Vincentian leadership in and out the campus.

This coming January 13, 2018, we will be conducting our organizational related activity entitled **"HIPNAYAN 2018: Explore, Innovate & Collaborate"** which aims to celebrate and present the numerous Filipino breakthroughs in the field of Physics and how it serves as a tool for nation building. We are very much excited to have this event for this will enable us to give our target audience of **400-500 STEM Senior High School** students from different schools around Central Luzon, inputs on Physics and the Engineering field that may help them in choosing their college program.

In connection to this, we would like to request your good office to endorse the said activity particularly to the schools that offer Senior High School STEM program in Region 3. Your support would be of great help in achieving the goals of the said activity.

Attached with this letter is the **EVENT KIT** and other supporting documents for your reference. Should you have any queries please contact us at (0916) 226-5122, (0975) 098-0787 or (02) 524-2011 loc. 412 and look for Nicole Jean L. Mercado.

Thank you very much and we are looking forward to your support.


Respectfully yours,

NICOLE JEAN L. MERCADO
HIPNAYAN 2018 Spearhead
Vice President for Internal Affairs
Physics Society of Adamson University



PHYSICS SOCIETY OF ADAMSON UNIVERSITY

Checked by:


BERNNA MAE A. ECIJA

President

Physics Society of Adamson University

Noted by:


MR. ROBERTSON A. LABAN

Adviser

Physics Society of Adamson University


MR. WILLIAM BILL P. TURNBULL JR.

Chairperson

Mathematics and Physics Department

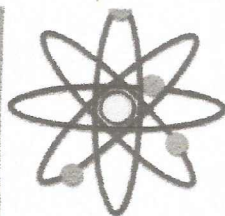
Adamson University


DR. MA. LIRIA D. DACANAY

Dean

College of Science

Adamson University



HIPNAYAN 2018
EXPLORE, INNOVATE & COLLABORATE
JANUARY 13, 2018 | ADAMSON UNIVERSITY

HIPNAYAN 2018

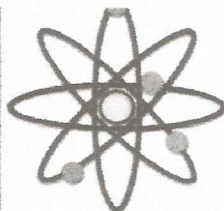
EXPLORE. INNOVATE & COLLABORATE.

The Physics Society of Adamson University (PSAU) in partnership with the Adamson University Physics Department will be conducting its organization-related event on January 13, 2018 at Adamson University Grounds. The event will consist of a diversity of sub-events and competitions that will serve as an efficient platform to promote Physics and the Vincentian Education that Adamson University pioneers, which will cater to all Secondary and Tertiary representative students of selected public and private educational institutions all throughout Metro Manila, National Capital Region (NCR) and nearby provinces in *Region III and Region IV-A (CALABARZON)*. The aforementioned event includes *HIPNAYAN Symposium* which is a conference that will tackle the beauty of the science of Physics, *Invictus*: an inter-senior high school Physics quiz bee contest, *Rube Goldberg* making competition, a research fair, and *Spectacle*, an online photo essay competition.

Objective:

The over-all objective of the event HIPNAYAN 2018 is to nurture the interest of the youth in Physics, cultivate the innate intellectual talents that each of the participants possesses, and to supply them knowledge that they will be able to utilize in their future professions. Moreover, the event's objective also includes:

- To showcase the quality education offered by Adamson University which emulates the Vincentian core values Search for Excellence, Spirit of St. Vincent de Paul, Solidarity, Social Responsibility and Sustained Integral Development.
- To establish camaraderie between the participating educational institutions that will lead to possible innovative collaborations through the application of Physics.
- To propagate awareness amongst youth regarding the current state of the country in terms of technological advancements.
- To garner the interest and curiosity of the incoming college students that will urge them to take a degree that will eventually be an effective catalyst in the over-all progress of our nation.
- To serve as a training ground for the aspiring intellectuals of today



HIPNAYAN 2018
EXPLORE, INNOVATE & COLLABORATE
JANUARY 13, 2018 | ADAMSON UNIVERSITY

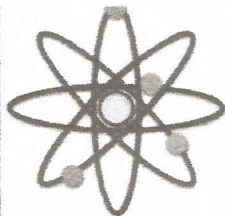
HIPNAYAN 2018

Explore, Innovate, & Collaborate

January 13, 2017 | Adamson University

PROGRAM OF ACTIVITIES

07:00 AM	Registration of Delegates
08:00 AM	Opening Program
08:10 AM	Welcome Remarks REV. FR. MARCELO V. MANIMTIM, CM University President
08:15 AM	Introduction of Keynote Speaker DR. MA. LIRIA DACANAY Dean, College of Science
08:20 AM	Keynote Address <i>The Role of Science and Technology in Nation Building</i>
09:00 AM	TALK 1 <i>Into the Space, A Primer on DIWATA, the 1st Philippine Microsatellite</i>
09:40 AM	Intermission
09:50 AM	TALK 2 <i>Gear Up: An Overview on the Development of Robotics in the Philippines</i>
10:30 AM	TALK 3 <i>HI-TECH: A Presentation on the Technological Advancements in AdU</i>
11:20 AM	Lunch
12:00 NN	Resume of Sub events SUBEVENT 1: INTER SENIOR HIGH SCHOOL PHYSICS QUIZ BEE SUBEVENT 2: RUBE GOLDBERG MAKING COMPETITION SUBEVENT 3: RESEARCH FAIR SUBEVENT 4: LABORATORY SKILLS COMPETITION
4:00 PM	Awarding Ceremonies
4:30 PM	Closing Remarks
5:00 PM	End of Program



REGISTRATION GUIDELINES

A. Requirements

The following requirements are needed in order to register for the event:

1. Registration Form

- Accomplish the registration form attached to this document or download the registration form available at our official PSAU Facebook Page (www.fb.com/PhysicsSocietyAdamson).
- Check all the information and make sure that they are correct before submitting the form.
- Duplication of Registration Form attach is allowed.
- Registration form can be sent via e-mail through secretariat.hipnayan2018@gmail.com or go directly to our office at 3rd Floor Physics Hall, OZ Bldg. Adamson University.
- In case of corrections, another form with **complete details must be submitted**. The prior submitted form will be disregarded.
- A confirmation message will be sent through e-mail and SMS once the registration forms are received.
- Another message will be sent when your registration is already secured.

2. Others

- All registered participants must bring their current school ID's and
- Proof of registration payment.

*For the **Research Fair**, only the **fifteen (15) teams** that will top the preliminary assessment of the submitted research papers will be qualified to proceed to the registration.

B. Registration Dates and Registration Rate

- Regular Registration: **November 15 to January 12, 2018**

Registration Rates are exclusive additional fees.

Registration fee

Php 100.00 / student

- The registration fee is inclusive of food and certificate with printed name.
- To reserve your slots, please settle at least 60% of the total amount of registration fee on or before the deadline.

C. Payment Details

Payments must be made on or before **January 12, 2018** not later than **3 o'clock** in the afternoon through **ML Lhuillier or Cebuana Lhuillier** or direct payments by dropping at Physics Department at Adamson University.

1. **For Direct Payments** The representative must bring at least One (1) **VALID ID**, the copy of your **REGISTRATION FORM** and look for any of the **AUTHORIZED PERSON** below:

a. Nicole Jean L. Mercado

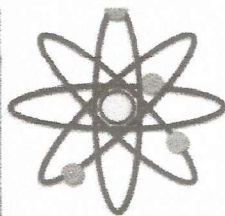
Event Organizer of HIPNAYAN, VP Internal PSAU

b. Bernna Mae A. Ecija

President, PSAU

c. Jeromalyn A. Palma

Treasurer, PSAU



HIPNAYAN²⁰¹⁸

EXPLORE, INNOVATE & COLLABORATE

JANUARY 13, 2018 | ADAMSON UNIVERSITY

d. Katrin Mae G. Decembrano
Associate Treasurer, PSAU

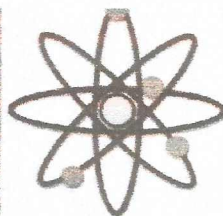
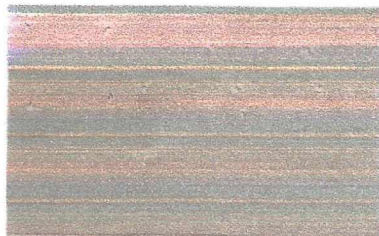
e. Eugenie Mhel S. Chavez
Secretary, PSAU

f. Marielle B. Fabros
Auditor, PSAU

***Direct Payments are ONLY applied during weekdays from 8AM to 5PM excluding Christmas Vacation and other legal holidays.**

For payments which will be done by ML Lhuillier or Cebuana Lhuillier, the procedures are as follows:

- a) Fill in the registration form.
- b) Scan and send it via email at secretariat.hipnayan2018@gmail.com
- c) Wait for the confirmation and instructions via text or call within 24 hours before paying the registration fee.
- d) Choose where you will make payments. (ML Lhuillier or Cebuana Lhuillier)
- e) Fill-in the form in which you will send money.
- f) It shall be addressed to **Jeromalyn A. Palma (Treasurer, PSAU)**.
- g) After making payments, you may now scan and send the deposit slip via email at physicssocietyada@gmail.com or via text messages the Event Participated /Control Number /Reference Number and the complete name of the sender, school name, and contact number of the sender to **Ms. Palma at 09064965472**.
- h) Until a text message is received from the school representative, the reservation of slots will not be acknowledged, even if you are already fully paid.
- i) A confirmation of message shall be made if we have successfully received the payment for the registration fee.
- j) The deposit slip or form will be presented upon registration at the registration booth.
Failure to present the Deposit slip or receipt WILL VOID your registration.
- k) A receipt from PSAU may be issued in exchange with the deposit slip or form.
- l) For more inquiries in registration, you may call the Physics Department Hotline at **524-20-11 loc. 412** during weekdays except on Christmas vacation and other legal holidays.



HIPNAYAN 2018
EXPLORE, INNOVATE & COLLABORATE
JANUARY 13, 2018 | ADAMSON UNIVERSITY

MECHANICS

RESEARCH FAIR

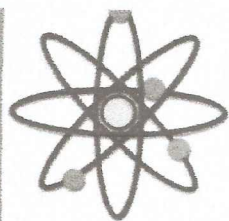
General Guidelines

1. Any research project, related to science, technology and engineering, of bona fide senior high school students who are currently enrolled in schools in the Philippines is qualified to join the HIPNAYAN 2018 Research Fair.
2. The research project must be a work of senior high school students coming from the same school.
3. Each participating team is limited to one (1) research entry only.
4. For the preliminary assessment of the research projects, only the first twenty five (25) entries will be evaluated by the panel. A confirmation email will be sent to the participants once their entry has been included in the cut off.
5. A maximum of fifteen (15) research entries will be chosen from the preliminary assessment to proceed for the project presentation on January 13, 2018, Saturday at the Physics Hall, 3rd Level, Ozanam Building, Adamson University.
6. Researchers of the chosen fifteen (15) entries will be notified through email on December 8, 2017 and should proceed with the registration procedures explained in the Event kit.
7. Any team proven with sufficient evidences to have committed research misconduct will be automatically disqualified.

Preliminary Assessment

1. All interested research groups of senior high school students should submit a soft copy of their full-length research paper for the preliminary assessment.
2. The research paper must include the title of the project, abstract of the research, statement of the problem, significance of the study, hypothesis, scope and limitations and methodology of the study, Data and results, conclusion, etc.
3. Participants can access the sample research paper posted on the Facebook page of **HIPNAYAN 2018** to determine the format of the research paper.
4. All research papers must be saved as a PDF file with a file name of:
HIPNAYAN_2018-Research_(last names of researchers)_(name of the school).pdf
5. The PDF file of the accomplished research paper together with the scanned school ID's of the researchers shall be submitted to secretariat.hipnayan2018@gmail.com on or before **December 1, 2017** with the subject line:
HIPNAYAN 2018 RESEARCH (NAME OF SCHOOL)

Ex. HIPNAYAN 2018 RESEARCH ADAMSON UNIVERSITY



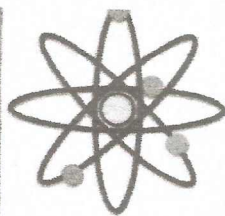
6. A confirmation email will be sent to the students once their research paper has been included in the cut off.
7. The criteria for judging for the preliminary assessment will be as follows:

Research Title	20%
Significance of the Study	30%
Content	35%
Technicality	15%
	100%
8. The fifteen (15) teams that will top the preliminary assessment will be notified on **December 8, 2017** through email and will proceed to the Registration and Project Presentation.

Project Presentation

1. The fifteen (15) finalists should proceed to the registration procedures specified in the Event Kit of HIPNAYAN 2018 on or before **January 12, 2018**. Failure to register will result to the disqualification of their entry.
2. All finalists must prepare visual aids which presents the overview of the whole research paper. The said visual aids as well as the output of the research project shall be exhibited on the day of the HIPNAYAN 2018. Stands will be provided for each team.
3. The exhibit of the research projects will be held at the Physics Hall of the Ozanam Building of the Adamson University on **January 13, 2018**. Participants are expected to wear their respective school uniforms during the presentation.
4. All teams will be given time to prepare for their project presentations before the on-site final judging.
5. Participants are expected to stay with their entry while the evaluation of the research projects is on-going.
6. The judges of the Hipnayan 2018 Research Fair will give 15 minutes to each teams to briefly discuss their full research study.
7. The Criteria for Judging for the Project Presentation will be as follows:

Presentation	20%
Mastery	30%
Content	35%
Innovativeness	15%
	100%
8. The top three teams will be awarded as **1st PLACE**, **2nd PLACE**, and **3RD PLACE** respectively.
9. The decisions of the panel of judges are final and irrevocable.

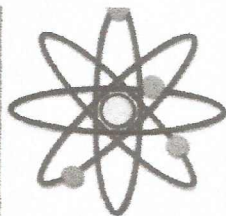


HIPNAYAN 2018
EXPLORE, INNOVATE & COLLABORATE
JANUARY 13, 2018 | ADAMSON UNIVERSITY

INTER SENIOR HIGH SCHOOL PHYSICS QUIZ BEE

General Guidelines

1. Open to all bona fide senior high school students. Only registered teams are allowed to participate on the event proper.
2. Maximum of 3 members per team.
3. Each respective school can only send a maximum of three (3) teams.
4. Registered teams of the same university/school/institution will be named as such:
SCHOOL_TEAMNUMBER.
5. Late participants will be automatically disqualified.
6. Questions and problems will be based on the reference book: **UNIVERSITY PHYSICS 13TH EDITION by Young and Freedman**. The included topics will be:
 - a. Units and Measurements
 - b. Vectors
 - c. Kinematics
 - d. Newton's Laws
 - e. Work and Energy
 - f. Center of Mass, Momentum, Impulse and Collisions
 - g. Rotational Equilibrium and Rotational Dynamics
 - h. Gravity
 - i. Periodic Motion
 - j. Temperature and Heat
 - k. Ideal Gases and Laws of Thermodynamics
7. Three judges will be present to solve disputes and inquiries regarding the quiz bee questions and problems.
8. **Only the participants for that round are allowed to call a protest.** Protests must be made before the next question is read or projected. Protests submitted after the specified time shall not be entertained. The protest should be addressed to the judges of the event. Furthermore, the decisions of the judges are final and irrevocable.
9. The quiz bee will be divided into three parts: **ELIMINATION, QUIZ PROPER, and FINAL ROUND.**
10. **ELIMINATION ROUND**
 - a. All participants (every member of a team) will be subjected to a written test for the elimination round.
 - b. The written test is a 30-item multiple choices test. It will run for an hour.
 - c. The score of the members of each team will be added and will be ranked to determine the teams going to the next round.
11. **QUIZ PROPER**
 - a. The quiz proper will be divided into **EASY** (10 questions), **AVERAGE** (10 questions), and **DIFFICULT** (10 questions) rounds.
 - b. All teams will be provided with boards and markers for this round.
 - c. Each team will have a facilitator to be assigned by the event organizers with the purpose of checking their answers.



- d. Questions will be read by the quiz master and will also be presented using a projector.
- e. Questions will be in either problem solving or multiple choices format. **Round your answers to the nearest hundredths (two decimal places) unless specified otherwise or the answer is a whole number. Round only your FINAL answers. Inclusion of units will be strictly observed.**
- f. Teams may answer only when the quiz master says "GO" after reading the question and choices.
- g. The point system of this round will be: **EASY** (2 point each), **AVERAGE** (4 points each), and **DIFFICULT** (8 points each).
- h. Incorrect, misspelled and no answer is equivalent to zero (0).
- i. Scores will be tabulated and computed in a cumulative manner.
- j. Winners will be announced after the confirmation of the tabulation by the judges.
- j. Ties shall be decided by a clincher round before the announcement of the final five.

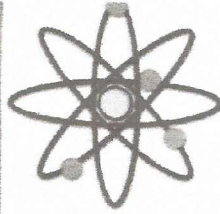
12. FINAL ROUND

- a. TO BE DISCUSSED AT THE VENUE

13. TIEBREAKERS

- a. Teams who are tied in the top five ranks will be subjected to a clincher round.
- b. The tied teams will be given a question in the same format with the questions during the quiz proper.
- c. The team that gets the correct answer shall be declared as the ranking team.
- d. All other teams in the lower rank will be adjusted accordingly.

- 14. The top three teams will be awarded as **1st PLACE**, **2nd PLACE**, and **3RD PLACE** respectively.



RUBE-GOLDBERG MACHINE MAKING CONTEST

General Guidelines

1. The HIPNAYAN 2018 Rube Goldberg Machine Making Contest is open to all bona fide senior high school students.
2. The participants must be in teams consisting of a maximum of five (5) members coming from the same senior high school.
3. Each respective school can only send a maximum of three (3) teams.
4. Each participating teams should finish their machines and any other additional requirements within the allotted three-hour period.
5. Indigenous materials will be provided by the facilitators. Furthermore, teams must use all of the supplied materials in their machines. The following materials will be provided to each team:

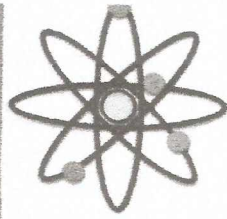
- 1 set of dominoes
- 3 funnels
- 1 bag of marbles
- 2 Toy Cars
- 3 meters of string
- 2 small buckets
- 1 pieces of balloons
- 1 roll of toilet paper
- Screws
- Hammer and Nails
- Compact Discs
- Coins
- Paper Clips
- Sheets of Paper
- Plastic Bottles
- Popsicle Sticks
- 1/8 illustration boards

However, participants may bring a maximum of five (5) materials which are supplementary to their planned machine.

6. The final product must be accompanied by visual aids which will display the tabulated step-by-step process and the brief description of all essential information about the machine.
7. The visual aids must be done prior to the event proper.
8. Any team proven with sufficient evidences to have violated any rule will be automatically disqualified.

Rules and Regulations

1. A single action must start the machine such as such as pressing a button, letting go of a marble, cutting a string, removing a barrier, etc. Any other additional human actions which will assist the completion of such process are prohibited once the machine has already started.



2. The machine must include at least ten (10) consecutive steps. And also, a minimum of three (3) simple machines must be present on the machine.
3. Incorporation of any live animals in the process is strictly prohibited.
4. Steps which require electricity must be powered by batteries.
5. No combustible fluids, explosives, open flames, or hazardous materials are allowed.
6. All machines should be patently safe. Any dangerous and destructive process included in the machine is grounds for disqualification.
7. After the completion of the machine, participants should call the attention of the facilitator to conduct safety measures on the machine. An approval from the authorities is required in order to proceed to the contest proper.
8. All machines must run for no longer than 5 minutes; every succeeding second after the allotted time will be deducted to the total score.

Sample Tabulated Step-by-Step Process

Number of Steps	Action	Reaction
1	A ball crashes into dominoes	Dominoes tumble
2	Dominoes tumble	Mousetrap snaps
3	Mousetrap snaps	Woodblock is launched into cup
4	Wood fall into cup	Switch is pressed

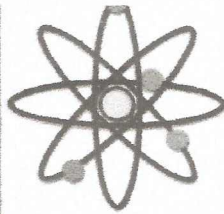
Step 1. A ball crashing into a set of dominoes transfers its momentum to the dominoes.

Step 2. The falling dominoes trigger a mouse trap

Step 3. The mouse trap launches a block of wood into a cup

Step 4. The extra weight in the cup presses down on an electrical switch completing a circuit.

Step 5. The completed circuit turns on a fan which pushes a sail boat in a trough.



HIPNAYAN
EXPLORE, INNOVATE & COLLABORATE
JANUARY 13, 2018 | ADAMSON UNIVERSITY

REGISTRATION FORM

Date: _____

Name of School: _____

School Address: _____

Contact Number: _____

INTER-SENIOR HIGH SCHOOL QUIZ BEE

Team No. 1

MEMBER 1:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 2:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 3:

Name: _____

Contact #: _____

E-mail: _____

Signature

Team No. 2

MEMBER 1:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 2:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 3:

Name: _____

Contact #: _____

E-mail: _____

Signature

Team No. 3

MEMBER 1:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 2:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 3:

Name: _____

Contact #: _____

E-mail: _____

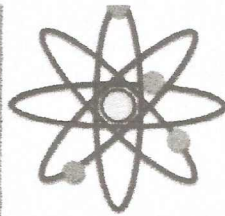
Signature

Teacher In-charge:

Contact #:

E-mail:

Signature:



RUBE-GOLDBERG

Team No. 1

MEMBER 1:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 2:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 3:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 4:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 5:

Name: _____

Contact #: _____

E-mail: _____

Signature

Team No. 2

MEMBER 1:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 2:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 3:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 4:

Name: _____

Contact #: _____

E-mail: _____

Signature

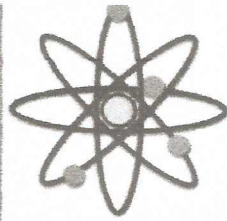
MEMBER 5:

Name: _____

Contact #: _____

E-mail: _____

Signature



HIPNAYAN 2018
EXPLORE, INNOVATE & COLLABORATE
JANUARY 13, 2018 | ADAMSON UNIVERSITY

RUBE-GOLDBERG

Team No. 3

MEMBER 1:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 2:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 3:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 4:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 5:

Name: _____

Contact #: _____

E-mail: _____

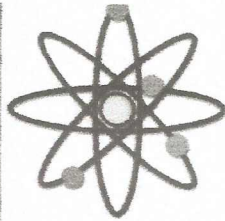
Signature

Teacher In-charge:

Contact #:

E-mail:

Signature:



HIPNAYAN²⁰¹⁸
EXPLORE, INNOVATE & COLLABORATE
JANUARY 13, 2018 | ADAMSON UNIVERSITY

RESEARCH FAIR

REPRESENTATIVES:

MEMBER 1:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 2:

Name: _____

Contact #: _____

E-mail: _____

Signature

MEMBER 3:

Name: _____

Contact #: _____

E-mail: _____

Signature

OTHER MEMBER (IF ANY):

Name: _____

Contact #: _____

E-mail: _____

Signature

Name: _____

Contact #: _____

E-mail: _____

Signature

Name: _____

Contact #: _____

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E-mail: _____

Signature

Teacher In-charge:

Contact #:

E-mail:

Signature