



UP ALLIANCE OF CHEMICAL ENGINEERING STUDENTS

ACADEMIC EXCELLENCE • HOLISTIC GROWTH • HUMBLE SERVICE
ESTABLISHED 2005

JAMEL T. ALZOL
President

MELVIN M. DE LEON
Vice President for Internal
and External Affairs

YVES D. BONDOC
Vice President for
Organizational Assets

ANGELICA ARIEL U. MAWILI
Secretary

CORRINE JUNE T. DELORIA
Treasurer

JUAN MIGUEL O. PAMPLONA
Auditor

ROBERT JAN LOUIS C. ABAD
Public Relations Officer
for Internal Affairs

DAN PAUL J. LUCENA
Public Relations Officer
for External Affairs

CHRISTIAN JOSHUA G. DIO
Academics Committee Head

ALYANNA MARIAH DR. ARIAS
Membership Committee Head

SENIOR ADVISER
DR. JOVITA L. MOVILLON
JUNIOR ADVISER
ENGR. SHELAH G. RAMIREZ

for concerns, email us at
UPACHES@GMAIL.COM
like us
/UPACHES2005
follow us
@UPACHES 2005

November 19, 2015

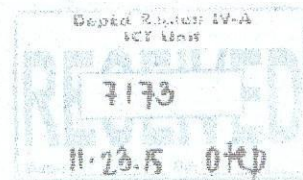
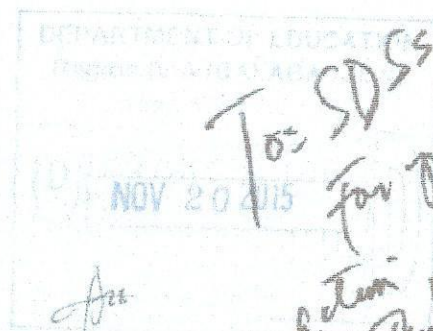
Dr. Diosdado M. San Antonio
Regional Director
Region IV-A CALABARZON
Department of Education

Warm greetings!

The **UP Alliance of Chemical Engineering Students**, known as **UP AChES** (ey-ches), is a socio-academic organization under the Department of Chemical Engineering, College of Engineering and Agro-Industrial Technology at the University of the Philippines Los Baños. The Alliance aims to promote true academic excellence in the field of Chemical Engineering, holistic growth, service and leadership in the industry and society, and the promotion of the Chemical Engineering profession.

As part of its continuing goals, the organization will be conducting an activity entitled, "**National Science and Youth Congress 2016**" on **February 20, 2016** at the **University of the Philippines Los Baños**. National Science and Youth Congress (NSYC) is an inter-highschool competition that celebrates today's young and innovative minds through quiz contest, science fair and symposium. This is an avenue for the high school students to showcase their scientific knowledge through art, literature and public speaking. This year, the awareness on food and water security will be discussed. NSYC celebrates the intellectual prowess of tomorrow's generation and is composed of three major events namely, **NSYC Symposium**, **Youth Greenovation** and **Mental Smackdown**.

This year's National Science and Youth Congress Symposium, with the theme "**Food and Water Security: A Pledge for the Future**" will discuss the issues on food and water security and will tackle solutions which the youth can offer. Highly capable and respectable experts are invited as speakers for them to share their expertise and insights to the youth.





2005

UP ALLIANCE OF CHEMICAL ENGINEERING STUDENTS

ACADEMIC EXCELLENCE • HOLISTIC GROWTH • HUMBLE SUPREMACY
ESTABLISHED 2005

JAMEL T. ALZOL
President

MELVIN M. DE LEON
Vice President for Internal
and External Affairs

YVES D. BONDOC
Vice President for
Organizational Assets

ANGELICA ARIEL U. MAWILI
Secretary

CORRINE JUNE T. DELORIA
Treasurer

JUAN MIGUEL O. PAMPLONA
Auditor

ROBERT JAN LOUIS C. ABAD
Public Relations Officer
for Internal Affairs

DAN PAUL J. LUCENA
Public Relations Officer
for External Affairs

CHRISTIAN JOSHUA G. DIO
Academica Committee Head

ALYANNA MARIAH DR. ARIAS
Membership Committee Head

SENIOR ADVISER
DR. JOVITA L. MOVILLON
JUNIOR ADVISER
ENGR. SHELAH G. RAMIREZ

for concerns, email us at
UPACHES@GMAIL.COM
like us
/UPACHES2005
follow us
@UPACHES 2005

Youth Greenovation is an Inter- High School Science Fair that aims to bring out the great ideas from this generation's young minds - ideas which preserve and protect our environment through advancements and research in the scientific field. Part of this event is an On-The-Spot Poster Making contest, On-The-Spot Essay Writing contest, an Extemporaneous Speech contest, and the highlight of the occasion, The 2016 Youth Greenovation Science Fair and Exhibit.

Another major event under NSYC is the Mental Smackdown 2016, a quiz contest for high school students promoting healthy academic competition and scholastic sportsmanship among its participants.

With this, we would like to request for the issuance of DepEd Advisories (DAs) to announce the conduct of the said activity. This will be of great help in the advert of our campaign.

We would be very grateful to merit your unselfish support to our organization. Should you have questions regarding the activity, you may contact the **Overall Activity Head** at 09771882554 or the **President** at 09159778401. Thank you very much and more power!

Sincerely yours,

Roanne A. Adan

Roanne A. Adan
Overall Activity Head

Noted by:

Jamel T. Alzol
Jamel T. Alzol
President

Dr. Jovita L. Movillon
Dr. Jovita L. Movillon
Senior Adviser

Engr. Shelah G. Ramirez
Engr. Shelah G. Ramirez
Junior Adviser



UP ALLIANCE OF CHEMICAL ENGINEERING STUDENTS

ACADEMIC EXCELLENCE • HOLISTIC GROWTH • HUMBLE SUPREMACY
ESTABLISHED 2005

NATIONAL SCIENCE AND YOUTH CONGRESS 2016

Vision

National Science and Youth Congress (NSYC) envision the difference the youth can do in saving the environment through elevation of critical thinking, integration of science in daily life, and the innovation of technology in response to a changing society.

Mission

-To be an avenue for showcasing and developing the youth's innovative ideas in line with the Philippine environmental and technological competences.

-To bring out great ideas from this generation's young minds and elevate critical and creative thinking in the innovation of technologies.

-To increase the youth's involvement in preserving and protecting the environment through integrating advancements and research in the scientific community.

Rationale

The National Science and Youth Congress (NSYC) was formed to celebrate today's young and innovative minds through a quiz contest, a science fair, and a symposium. This is an avenue for high school students to showcase their scientific knowledge through art, literature, and public speaking. This year, the awareness on the food and water security in the country will be discussed to fuel the scientific minds of today's youth. NSYC celebrates the intellectual prowess of tomorrow's generation with the theme, **Food and Water Security: A Pledge for the Future.**

I. Mental Smackdown

The UP Alliance of Chemical Engineering Students established Mental Smackdown to provide an avenue for high school students to showcase their best wits. Mental Smackdown have been empowering morale and camaraderie among faculty, students and parents. Now on

its 10th Year, the Alliance brings you a no ordinary competition, offering challenges that will test the intellectual prowess and strategic skills of participants. The Alliance will extend its challenge to the next level with more stimulating questions and engaging mechanics.

Objectives

1. To promote excellence and camaraderie among High School students
2. To challenge the intellectual competence of participants
3. To empower morale and boost school pride
4. To provide an avenue for faculty, students and parents to work together

Mechanics

1. Each school can represent a maximum of two (2) teams. Each team should be composed of three core members (One Grade 8, One Grade 9 and One Grade Ten). Each team is given an option to include one Grade 7 student as a trainee.
2. Participants must download and fill out the Mental Smackdown 2016 Application form uploaded at www.nsyncph.weebly.com and submit it to nsyncph@gmail.com.
3. Registration fee is at 400php per team.
4. Mental Smackdown 2016 will be divided into three (3) rounds, namely, the Elimination Round, the Semi-Final Round, and the Final Round.
5. In the Elimination Round, all members of the team are required to take the written exam, the trainee on the other hand is given an option to take the exam or not. However, the final score for the elimination round will be determined from the average scores of the core members only. Scores of trainees will not be included in the computation but will be disclosed before the semifinal round. The exam consists of 100 questions from General Science, Biology, Chemistry, Physics, Mathematics and General Information. The elimination round is good for 90 minutes.
6. The number of teams that will proceed to the semifinal round will be announced before the elimination round.
7. The Semi-Final Round is a team versus team round. The core members are required to participate in this round, the trainee however is given an option to take part or not. This round will be divided into three levels namely, the Easy, Average and Difficult. Time allotment to answer each question will be 15 seconds, 30 seconds and 60 seconds for Easy, Average and Difficult, respectively. Questions in the Easy Round may be in the form of multiple choice or identification while questions in the Average and Difficult

Round may be in the form of multiple choice, identification or problem solving. Each question will come in random categories (General Science, Biology, Chemistry, Physics, Mathematics or General Information).

8. In the Semi-Final Round, points are assigned for each question answered correctly:

	Easy	Average	Difficult
Correct	1	3	5
Incorrect	0	0	-2
No Answer	0	-1	-3

Moreover, in each level, there will be at most two power-ups which the teams may opt to use. Before the start of the question equipped with power-ups, each team will be given time to decide whether they will use the power-ups or not. Each power-up applies to 2 consecutive questions. If a team chooses to use the power-ups, the corresponding points will be added to their score:

POWER-UP	EASY				AVERAGE				DIFFICULT			
	1 ST Q		2 ND Q		1 ST Q		2 ND Q		1 ST Q		2 ND Q	
	C	IN/N A	C	IN/N A	C	IN/N A	C	IN/N A	C	IN/N A	C	IN/N A
BOOSTER-BOOSTER	+	-2	+2	-2					+5	-5	+5	-5
BOOSTER-IMMUNITY					+3	-3	NA P	ND	+5	-5	NA P	ND

Q - QUESTION

C - CORRECT ANSWER

IN/NA - INCORRECT/ NO ANSWER

NAP - NO ADDITIONAL POINTS

ND - NO DEDUCTION

Power-ups for the second question will only apply if the team manages to get the correct answer for the first question. Teams that will not use the power-ups will receive points based on the standard pointing system.

7. Top five (5) teams who will get the highest scores will proceed to the Final Round. Ten (10) questions will be asked in random categories (General Science, Biology, Chemistry, Physics, Mathematics or General Information) to be answered within 60 seconds. In this round, the difficulty of the questions will not be categorized; thus, may come in random. In addition, no power-ups will be included in the questions.

8. At the start of the Final Round, the score accumulated by the top five (5) teams from the Semi-Final Round will no longer be included; meaning, all teams' scores will revert back to zero. Points assigned are equal for each question answered correctly.

9. For the Semi-Final and Final Round, each question will be flashed on the screen and will be read by the quizmasters twice. After the second (2nd) reading, the quizmasters shall say "go" – only then will the contestants be allowed to write their answer on the provided answer-boards. Automatically, the time allotted per question will begin with the word "go" by the quizmaster. A buzzer will signal the end of the time limit. The team must then stop writing and raise their answer-boards. **The final answer should be written legibly and encircled**, otherwise the answer will not be considered. The quizmaster shall read and verify the teams' answer. A team is not allowed to put down their answer-boards until the quizmaster had read and verified their answers.

10. After the Final Round, the team who gets the highest score will be automatically declared the Champion; and the second (2nd) and third (3rd) highest will be declared First Runner-Up and Second Runner-Up, respectively.

11. Should there be a tie among the teams, the contest continues to the Clincher Round to determine the Champion or the Runner-Ups as the case may be. The total number of points accumulated in the Final Round of the tied contestants will revert back to zero (0).

12. In the Clincher Round, as many questions will be asked. Each question is assigned five (5) points. The contestant who will accumulate 15 points first would be declared the winner. Should another tie occur after the third (3rd) Clincher question, questions will be asked until a team gets an advantage over the other.

13. Protests can be made by the duly registered teacher-coach of the team or any member of the participating teams. These should be referred to the Board of Judges immediately, before the quizmasters read the next question.

14. The Top Three (3) winners will receive the following **Prizes**.

1st Place – Certificate, Medal, Trophy and 15000 pesos

2nd Place – Certificate, Medal and 7000 pesos

3rd Place – Certificate, Medal and 5000 pesos

15. The decision of the Board of Judges is final and irrevocable in all questions/protests.

II. National Science Youth Congress Symposium

The Symposium serves as an avenue for the youth to learn and discuss the different issues in different fields of study. Highly capable and respectable experts are invited as speakers for them to share their expertise and insights to the youth. This year, the symposium aims to tackle food and water security and how it could be a key to fast-tracking the nation towards sustainable development. Following the talk is an integrating activity regarding the said discussion.

Objectives

1. To provide highly capable and respectable experts an avenue in which to share their views and knowledge to the youth
2. To allow students to actively participate and be involved in a fun and incentive driven forum between the students and the speakers
3. To raise the youth's awareness concerning the country's food and water security issues and tackle solutions the youth can offer.

Registration

The Participant must download and fill out the Registration form uploaded at www.nsyncph.weebly.com and submit it to nsyncph@gmail.com.

Registration fee is at 100php per participant .

III. Youth Greenovation

Youth Greenovation is an Inter- High School Science Fair that aims to bring out the great ideas from this generation's young minds - ideas which preserve and protect our environment through advancements and research in the scientific field. It also focuses on the youth's awareness to the present condition of our environment and their involvement to make a change. Part of this event is an On-The-Spot Poster Making contest, On-The-Spot Essay Writing contest, an Extemporaneous Speech contest, and the highlight of the occasion, The 2016 Youth Greenovation Science Fair and Exhibit.

Objectives

1. To bring out the great ideas from this generation's young minds;

2. To increase youth's involvement in preserving and protecting the environment through advancements and research in the scientific field; and
3. To enhance critical and creative thinking in the innovation of technologies.

Mechanics

ON-THE-SPOT POSTER MAKING CONTEST

1. The Participant must download and fill out the Youth Greenovation Poster Making Contest 2016 Application form uploaded at www.nsyncph.weebly.com and submit it to nsyncph@gmail.com.

2. Registration fee is at 200php per participant (inclusive of one meal).

3. On the event proper, participants must place their piece/artwork on a one-eighth (1/8) illustration board, to be provided at the event proper.

4. Participants may only use the provided colored markers as medium for their poster.

5. Participants are given two (2) hours to work on their poster.

6. The poster must show relevance to the given theme.

7. Deductions will be given for not following directions.

8. The Criteria for Judging will be the following:

Creativity	30%
Relevance to the theme	35%
Coherence	20%
Overall Impact	15%
TOTAL	100%

9. The Top Three (3) winners will receive the following Prizes.

1st Place – Certificate, Medal, and 3000 pesos

2nd Place – Certificate, Medal

3rd Place – Certificate, Medal

10. The Contest Proper will be on February 20, 2016 (Saturday) at the University of the Philippines Los Baños. The exact venue will be announced through email on the first week of January.

11. Deadline of entries is on December 18, 2015.

12. Judges' decision will be final and irrevocable.

ON-THE-SPOT ESSAY WRITING CONTEST

1. The Participant must download and fill out the Youth Greenovation Essay Writing Contest 2016 Application form uploaded at www.nsyncph.weebly.com and submit it to nsyncph@gmail.com.
2. Registration fee is at 200php per participant (inclusive of one meal).
3. On the event proper, participants are given one (1) hour and thirty (30) minutes to work on their essay.
4. Essays should be written in English – minimum of 500 words but not more than 750 words.
5. The essay must show relevance to the given theme.
6. Deductions will be given for not following directions.
7. The Criteria for Judging will be the following:

Organization of ideas	15%
Relevance to the theme	20%
Coherence	15%
Content	30%
Grammar	15%
Neatness	5%
TOTAL	100%

8. The Top Three (3) winners will receive the following Prizes.
 - 1st Place – Certificate, Medal, and 3000 pesos
 - 2nd Place – Certificate, Medal
 - 3rd Place – Certificate, Medal
9. The Contest Proper will be on February 20, 2016 (Saturday) at the University of the Philippines Los Baños. The exact venue will be announced through email on the first week of January.
10. Deadline of entries is on December 18, 2015.
11. Judges' decision will be final and irrevocable.

EXTEMPORANEOUS SPEECH CONTEST

1. The Participant must download and fill out the Youth Greenovation Extemporaneous Speech Contest 2016 Application form uploaded at www.nsyncph.weebly.com and submit it to nsyncph@gmail.com

2. Registration fee is at 200php per participant (inclusive of one meal).
3. On the event proper, the participants are given three (3) minutes to deliver their speech.
4. The speech must show relevance to the topic/issue to be given two (2) minutes before the participant deliver the speech.
5. The Criteria for Judging will be the following:

Organization of Ideas	15%
Relevance to the Theme	20%
Content	30%
Delivery and Presentation	20%
Use of Language: Grammar, Diction	15%
TOTAL	100%

6. The Top Three (3) winners will receive the following Prizes.
 - 1st Place – Certificate, Medal, and 3000 pesos
 - 2nd Place – Certificate, Medal
 - 3rd Place – Certificate, Medal
7. The Contest Proper will be on February 20, 2016 (Saturday) at the University of the Philippines Los Baños. The exact venue will be announced through email on the first week of January.
8. Deadline of entries is on December 18, 2015.
9. Judges' decision will be final and irrevocable.

YOUTH GREENOVATION SCIENCE FAIR AND EXHIBIT

1. The objective and significance of the project should be aimed towards "Green Innovation", that is, projects which give importance to the environment and have possible solutions to the destructive impacts of climate change.
2. Each team must consist of at most three (3) members who are certified and the bonafide researchers of the said project. Registration fee is at 500php per project (inclusive of one meal for each team member).
3. The Science Fair consists of two (2) categories, namely the Green Life Category and the Green Technology Category.

A. The Green Life Category consists of projects related to the following field of study:

Animal Sciences
Biochemistry

Cellular and Molecular Biology
Environmental Management
Plant Sciences
Microbiology
Medicine and Health

B. The Green Technology Category consists of projects related to the following field of study:

Chemistry
Computer Science
Earth Science
Electrical and Mechanical Engineering
Materials Engineering
Bioengineering
Energy and Transportation

4. Forms and Research Paper Format

A. The following forms must be filled out and submitted together with the research paper:

Youth Greenovation Science Fair 2016 Application Form*
Youth Greenovation Science Fair 2016 Certification of Project*
Youth Greenovation Science Fair 2016 Certification as Project Adviser*
Youth Greenovation Science Fair 2016 Abstract Form*

*Forms may be downloaded at www.nsyncph.weebly.com.

B. The Research Paper must be type written on a 8.5" x 11" document, font must be Times New Roman, font size must be 12, and to be submitted in a PDF format with the file name "GLife_NameOfSchool" for the Green Life category and "GTech_NameOfSchool" for the Green Technology category. The paper must bear the following parts of the research*:

a. Title/School/Researchers (First Page Heading)

i.e.

Characterization of Microorganisms Using Natural Metabolic Frequencies: Harnessing Its Potential in Detecting Infestations Among Agricultural Crops and Commercial Goods in Storage

University of the Philippines Los Baños

Marinay, Richael Anne Hienet DR., Sy, Jenesis Carlo S.

b. Introduction (will start after the title)

c. Background of the Study

d. Significance of the Study (must pertain to green innovation; its role in the changing world and the environment)

e. Statement of the Problem

f. Statement of Hypotheses

g. Summarized Review of Related Literature (maximum of 2 pages)

h. Materials and Methods (provide necessary pictures; also present an experimental flowchart)

i. Results and Discussion

j. Conclusion and Recommendation

k. Bibliography/Citations

*Deductions will be given for not following the given format.

C. Entries, together with the other requirements, must be submitted to nsycph@gmail.com. Categorization of entries is final. Deadline of submission is on December 18, 2015.

5. Confirmation and Qualification

Six (6) judges will evaluate the submitted projects. The top 75% finalists (based on average grade, subject to change without prior notice) for each category who will qualify in the event proper will be determined based on this grading system:

I. Content (Presentation of Ideas, Writing Skills and Thoroughness)

Introduction and Background of the Study	5%
Significance of the Study	5%
Statement of the Problem and Statement of the Hypotheses	5%
Review of Related Literature	5%
Materials and Methods	10%
Results and Discussions	10%
Conclusion and Recommendation	10%

II. Significance and Impacts

Benefits to the environment and local community	15%
Resourcefulness	10%
Educational Contribution	15%
Critical Thinking	10%

TOTAL: 100%

A confirmation email will be sent to the Finalists on the first week of January, right after the judges finished evaluating the said projects.

6. Contest/Exhibit Proper

All qualifiers/finalists must prepare a 3 feet by 5 feet tarpaulin print out of their project, actual project, and a PowerPoint presentation for the exhibition on February 20, 2016 at the University of the Philippines Los Baños. The tarpaulin must be on portrait orientation. The exact venue for the contest proper will be announced in the confirmation emails.

Criteria for Judging - Contest Proper (Green Life and Green Technology)

The winners of each category will be chosen based on the following criteria:

- | | |
|--|-----|
| I. Creativity and Resourcefulness | 30% |
| A. Creative ability in presenting the problem; in the approach to solve the problem; in the analysis and presentation of data; in the use of equipment | |
| B. Innovative design/idea shown | |
| C. Intelligence and imagination in finding ways/means to undertake the project | |
| II. Scientific Thought and Greenovation Goals | 30% |
| A. Scientific Thought | |
| B. Clear and unambiguous statement of the problem | |
| C. Well-defined objectives/procedures | |
| D. Clearly-recognized/delineated variables | |
| E. Adequate data to support conclusions | |
| F. Greenovation Goals | |
| G. Clear and relevant objectives | |
| H. Economically feasible solutions | |
| I. Significant improve over previous alternatives | |
| J. Potential contributions/Practical value | |
| III. Thoroughness | 15% |
| A. Familiarity with scientific literature in the studied field | |
| B. Awareness of other approaches or theories | |
| C. Appropriateness of methodology | |
| IV. Research Skill | 15% |
| A. Use of laboratory equipment/innovative resources | |
| B. Appropriate, orderly, and effective presentation of data | |
| C. Clear and thorough discussion of the project | |
| V. Documentation, Presentation, and Writing Skills | 10% |
| A. Clear, orderly, and effective presentation of the project | |
| B. Presentation of skills | |

C. Clear and thorough discussion of projects

D. Clarity and conciseness of explanation pertaining to important aspects of project

TOTAL: 100%

7. Three (3) winners for each category will be chosen. The winners will receive the following Prizes:

1st Place - Certificates, Medals, and 10,000 pesos

2nd Place - Certificates, Medals, and 3,000 pesos

3rd Place - Certificates, Medals, and 2,000 pesos

8. During the event/contest proper, the Researcher/s should be present together with their Adviser. In case that the Adviser is not present as an official guardian of the students, an endorsement letter of the alternate guardian must be presented, signed by the Principal or Science and Technology Department Head.

Programme

Time	Mental Smackdown	Symposium	Youth Greenovation
7:00-8:30	Registration		
8:30-9:30	Opening Program		
9:30-9:40	Briefing, Preparation, Mechanics per event		
9:40-11:30	Elimination Round	Defense of Science	Symposium Proper
11:30-12:00		Projects, Science Fair, Judging	
12:00-1:00	Lunch Break		
1:00-4:00	MS Semi-Final Round and Final Round		
4:00-5:00	Awarding and Closing Ceremony		